





Kanaana Hou Church, 1907. Photo courtesy of Hawai'i State Archives.

Public involvement and consultation efforts were ongoing throughout the process of preparing this draft general management plan/environmental impact statement (GMP/EIS). Public involvement methods included Federal Register notices, news releases, public meetings and workshops, invited presentations at partner and special interest group meetings, discussions at Kalaupapa NHP Advisory Commission meetings, newsletter mailings, and website posting. This chapter provides information about each public involvement period and summarizes public comments received by the NPS during each phase.



Public meeting announcement on community board outside Paschoal Hall. NPS photo.

Public Scoping

Prior to the formal scoping period, the planning team met with numerous agencies, organizations, and individuals to provide an overview of the planning process and to answer questions and listen to concerns.

Formal public scoping for the development of Kalaupapa National Historical Park's general management plan occurred between March 11, 2009 and July 15, 2009. The National Park Service (NPS) announced the public scoping period and invited public comment through newsletters, correspondence, press releases, public workshops, informal meetings, NPS websites, and a *Federal Register* notice. NPS staff produced and mailed Newsletter #1: Public Scoping to approximately 800 individuals and entities on the NPS's mailing list. Agencies, organizations, governmental representatives, and native Hawaiian groups were sent letters of invitation to attend the public workshops or individual meetings. Press releases were distributed to local and regional news media.

The project was launched on the NPS Planning, Environment, and Public Comment (PEPC) website, <http://parkplanning.nps.gov/kala>, which provided information about Kalaupapa NHP's GMP and an online method for public comments. A Notice of Intent to prepare a general management plan and environmental impact statement for Kalaupapa NHP was published in the Federal Register on March 11, 2009 (Vol. 74, No. 46, pp. 10611-10612) and in the State of Hawai'i Office of Environmental Quality Control's "The Environmental Notice" on March 23, 2009. The public was invited to submit comments by regular mail, e-mail, fax, online, and at public workshops.

Public Workshops and Written Comments

The NPS held 12 public workshops on the islands of Molokai, O'ahu, Maui, Kaua'i, and Hawai'i in April and May of 2009 to provide an opportunity for the public to learn about the general management planning project and to offer comments. Nearly 400 people attended the public workshops and provided comments, and the NPS received 65 written responses. After the meetings, the notes were posted at <http://parkplanning.nps.gov/kala> and analyzed.

Table 6.5 Public Workshops and Attendance

Location	Date	Attendance
Kalaupapa, Molokai: McVeigh Social Hall	April 20, 2009	27
Kalaupapa, Molokai McVeigh Social Hall	April 21, 2009	27
Kahului, Maui Maui Arts and Cultural Center	April 22, 2009, AM	25
Kahului, Maui Maui Arts and Cultural Center	April 22, 2009, PM	21
Honolulu, O'ahu Bishop Museum	April 23, 2009	82
Honolulu, O'ahu Bishop Museum	April 24, 2009	64
Kapa'a, Kaua'i Kapa'a Public Library	April 27, 2009	14
Waimea, Kaua'i West Kaua'i Technology and Visitor Center	April 28, 2009	10
Kaunakakai, Molokai Mitchell Pauole Center	April 29, 2009, AM	51
Kaunakakai, Molokai Mitchell Pauole Center	April 29, 2009, PM	40
Kailua-Kona, Hawai'i Kona Outdoor Circle	May 26, 2009	4
Hilo, Hawai'i Mokupāpapa Discover Center	May 27, 2009	16
Total		381

Comments, both through public workshops or written correspondence, were received from the following organizations, affiliates, and elected officials:

Aka'ula School
 Arizona Memorial Museum Association
 Blessed Damien Catholic Parish
 County of Maui
 County of Maui Planning Department
 Damien/Marianne Commission
 Danny Mateo, Council Chair, County of Maui
 Department of Hawaiian Home Lands
 Department of Health
 Department of Land and Natural Resources
 Department of Transportation
 Division of Forestry and Wildlife
 Hale Mōhalu Hospital
 Hawai'i Conference United Church of Christ
 Historic Hawai'i Foundation
 Hui Ho'opakele Aina
 Hui Kako'o 'Aina Ho'opulapula
 Hui Malama I Na Kapuna O Hawai'i Nei
 International Association for Integration, Dignity and Economic Advancement
 Ka 'Ohana O Kalaupapa
 Kaahumanu Society
 Kaua'i Community College
 Ke Kula Niihau O Kekaha
 KMKK Radio
 Kuha'o Business Center
 Malu 'Aina
 Maui Historical Society
 Maui Tomorrow
 Mazie Hirono, Congresswoman, 2nd District
 Molokai Community Service Council
 Molokai Dispatch
 Kalaupapa Guided Mule Tour
 Molokai Police Department
 Molokai Visitor Association
 Na Ala Hele Hawai'i Trail and Access Program
 Office of Hawaiian Affairs

Peacemaker School
 Royal Order of Kamehameha
 Shrine and Museum of Blessed Marianne Cope
 Sisters of Sacred Hearts
 Sisters of St. Francis
 Sisters of St. Francis of the Neumann Communities
 St. Catherine Church
 St. Michael Church
 State of Hawai'i
 The Nature Conservancy
 U.S. Department of Interior, Office of Inspector General
 University of California, Berkeley
 University of Hawai'i, Hilo
 Waimea High School
 Waiola Church

Summary of Public Scoping Comments

The following description incorporates both the public workshop comments and the written comments received by the NPS through July 15, 2009. All comments received have been reviewed and were considered for the preparation of this GMP/EIS.

Respect for Kalaupapa's People and Culture

Most public comments emphasized the need to mālama i ka'āina in a manner that shows respect for the peninsula's people, stories, and way of life. This includes not only recent or living residents with Hansen's disease, but also the thousands who lived and died here in earlier times. The presence of these ancestors, combined with the patients' faith and aloha despite terrible suffering, makes Kalaupapa an especially sacred place.

A key issue identified by patients, families, and the general public is the need to tell patients' stories in their own words, and to move quickly to preserve their oral histories. Another major concern was whether future management of the park would lessen opportunities for the 'ohana and friends to visit for gather-

ings, genealogical research, or to tend the graves of their ancestors. Several commenters suggested an important role for 'ohana could be serving as interpreters.

Visitor Regulation and Access

The vast majority of the public cited the need to control visitor access in order to preserve the culture and environment of Kalaupapa.

Most believed that 'ohana should have priority over general visitor access. There were concerns that tourism pressure would crowd out families unless preferential access is established. Native Hawaiian access was also addressed, and many suggested that the NPS work closely with Kalaupapa residents and Molokai native Hawaiian groups to develop a plan that allows for subsistence practices and other traditional cultural activities, while still protecting resources.

Another important issue was the current policy prohibiting children under the age of 16. Opinions were evenly divided between those who support relaxing or retaining this restriction.

Many also held opinions about whether or not overnight stays should be allowed. Overall, the comments acknowledged that while a day visit may feel uncomfortably short, too many overnight visitors might encourage an inappropriate level of tourism.

The majority stressed that general visitors should be escorted by a trained guide and that escorts should have a strong personal connection to the Kalaupapa patient community and Hawaiian culture.

Several people identified specific locations which they thought should be subject to special access rules due to the sensitivity of resources, cultural concerns, or safety.

Care and Use of Kalaupapa's Buildings and Landscape

The public emphasized that caring for Kalaupapa's historic structures, cemeteries, and planted areas is necessary to "Keep Kalaupapa Kalaupapa." Many urged the selective preservation, restoration, or re-use of specific sites or structures.



GMP public scoping meeting, April 2009. NPS photo.

Respectful preservation of patient homes was a matter of top concern for the public, as is the care of graves and cemeteries. Commenters also discussed the need to preserve churches (while keeping them open for service), and to preserve or re-use other gathering places, group homes, and additional community sites.

Several people emphasized that planted areas and hand-built landscape features created by patients are important elements to preserve and restore.

Hawaiian archeological sites at Kalaupapa were also listed as significant, including heiau, rock walls, and the crater hōlua slide.

Visitor Experience

When asked about their ideal visitor experience in the historical park, public respondents urged the NPS to preserve qualities they value most about Kalaupapa: the spirit of the people and their stories, the sacred mana and spirituality, the pristine landscape, the historic surroundings, and the peace, quiet, and solitude.

Many said they would like Kalaupapa to evoke a feeling of “living history,” though opinions were mixed about how best to achieve this. Some emphasized the need for daily activity, such as people tending gardens or actually living in the community, while others preferred a quieter atmosphere. Several suggested that visitors experience the same regulations that patients endured, and many supported the idea of a “walking museum,” with restored structures and sites accessible through guided tours. The public consistently emphasized that Kalaupapa should not be managed as a typical “tourist” destination or recreation area, but rather as a place for education, reflection, and spiritual experience or religious pilgrimage. Most who commented on recreational concerns said that recreational uses such as camping and beach and ocean activities should be prohibited.

Interpretation and Education

Public comments revealed a substantial desire for increased outreach by the NPS, as well as a more comprehensive interpretive approach that conveys Kalaupapa’s story with balance, dignity, and respect.

Commenters offered many concrete suggestions for NPS education and interpretation, including the establishment of an orientation venue and the use of multimedia exhibits featuring audio, visual, and written histories, household furnishings, and patient inventions.

A greater interpretive focus on Kalaupapa’s pre-settlement Hawaiian residents and their displacement was requested, as was a more balanced approach to the interpretation of the Hansen’s disease settlement. Most believed that telling the story of the patients is the primary purpose of the historical park, and should be the focus of its interpretation. While recognizing that Saint Damien is an important religious figure, commenters noted that other significant individuals and churches ministered to the patients at Kalaupapa, and that these people and groups should also be acknowledged.

Commercial Activity, Development, and Facilities

Concerns were voiced that increased tourism and a declining patient population will encourage commercial activities and new building projects at Kalaupapa. Many stressed that no new facilities should be added at Kalaupapa, recommending instead that existing buildings be adapted—with as little visual change as possible—for those improvements that are absolutely necessary.

Some suggested particular facilities that would improve the historical park. Examples included a visitor center, additional restrooms, small supply stores, eco-friendly food services, overnight facilities, commercial services to support staff, and a health clinic. Several proposed retaining existing concessions and amenities such as the Kalaupapa General Store, the Bar, and Damien Tours.

Natural Resources

Many commented on the need to protect Kalaupapa’s flora, fauna, and marine life, noting that enforcement of the marine boundaries is needed to prevent poaching and protect marine conditions from degradation. Several suggested official designation of the historical park’s ocean area as a protected area.

Most of the specific comments about natural resources recommended allowing but regulating subsistence activities. Another concern was overgrown invasive vegetation, which crowds out native plants and covers landscape features such as graves and rock walls. Several urged for more active management of deer and

pig populations. Opinions varied as to whether the goal should be control or eradication and whether hunting should be allowed.

Operations

Public comments on operational issues addressed entrance fees, health and safety, staffing, maintenance, sustainability, employee housing, funding needs, enforcement activity, and vehicle use.

Most individuals thought there should not be an entrance fee, or that it should be reduced or waived for Kalaupapa ‘ohana, Molokai residents, or kama‘āina.

Health and safety concerns focused specifically on a lack of medical care in the historical park once the Department of Health (DOH) leaves the peninsula. Most thought the NPS should establish its own clinic and emergency resources; others suggested requiring a liability waiver form for visitors. Another safety/health concern was the condition of the trail from topside to Kalaupapa.

Many comments were received about employee recruitment, hiring, and training. The public felt strongly that people with a relevant cultural heritage, such as Kalaupapa ‘ohana, native Hawaiians, or Molokai and Hawai‘i residents with local roots, should receive hiring preference. People stressed that staff should be trained in Kalaupapa’s history and culture in order to tell stories in an appropriate way and pronounce Hawaiian words correctly, and that at least some employees should speak fluent Hawaiian.

Establishing an enforced “take out what you bring in” policy was a proposed approach to reducing litter problems on the peninsula, especially with the anticipated closure of the Kalaupapa landfill. Many noted that sustainability and self-sufficiency should be priorities, and suggested the establishment of a recycling center, the creation of farming or vegetable gardening plots, and the development of solar and other green energy options.

Employee housing policies were a concern, with mixed views about whether NPS employees and their families should be able to live on site.

Law enforcement and security was another topic, and suggestions sought improved enforcement and the hiring of more rangers, especially in anticipation of Saint Damien’s canonization celebration. Others called for stronger action against drug use.

Several addressed the issue of long-term funding for NPS operations. Ideas included establishing a foundation, cultivating additional partnerships, and seeking a guarantee from Congress for ongoing funding.

A few comments addressed vehicle use at Kalaupapa and included an objection to off-road vehicles because of noise, plant damage, and disturbance to the feeling of sacredness. Others said NPS should limit vehicles of all types and prohibit speeding.



GMP public scoping meeting, April 2009. NPS photo.

Future Land Use and Jurisdiction

The future of the property that NPS currently leases from the Department of Hawaiian Home Lands (DHHL) was a matter of concern. In coming decades, after no living patients remain, decisions will need to be made about use of patient residences. In 2041 the NPS lease with DHHL will expire. Some members of the public suggested allowing native Hawaiian homesteads on the peninsula. Many others are interested

in continuing NPS protection of Kalaupapa. Those who commented voiced a range of perspectives on this complex issue.

Another important issue was a modification of the park boundary to include the adjacent north shore cliffs, valleys, and shoreline. The most consistently stated perspective was that the north shore and valleys should be protected from development but managed to accommodate subsistence activities. A few people favored NPS boundary expansion to promote long-term protection and resource management of the areas. A few spoke clearly against any NPS acquisition, fearing that it would prevent local access to resources that are needed for the island’s food security. Several questioned the feasibility of enforcing new boundaries, and/or noted the need to take care of lands that are already in the historical park before expansion is considered. Others emphasized the need to work with the other stakeholders, consult with the patients, and partner with the community.

Future county jurisdiction of Kalaupapa after DOH departure was another matter of interest to the public, as was the transition in management from the DOH to the NPS.

Partnerships and Collaboration

The public urged the NPS to increase collaboration and communication with those interested in or affected by the future of the historical park. Several expressed concern that decisions at Kalaupapa, particularly following the canonization of Saint Damien, could have tremendous impact on the Molokai community. They recommended that Kalaupapa and the topside community jointly plan for increased visitation in order to help and not harm the island.

The public proposed new or enhanced partnerships with Pacific Historic Parks, the Patient Advisory Committee, the Molokai Community Service Council, and the Ka ‘Ohana O Kalaupapa organization, which submitted a comprehensive 28-page position paper outlining elements to include in the general management plan. Several members of the public voiced strong support for this paper and urged the NPS to work closely with the organization, particularly on matters of interpretation. Hui Ho‘opakele ‘Aina organization recommended that NPS establish representative task forces to supplement the GMP scoping process and create formal community commissions to participate in longer term decision-making.

The public also offered resources including archeological expertise; historical materials; ethnographic research based on oral history sessions with former patients; and donations of money and volunteer time to help maintain the ‘āina.

Transportation

Most thought that access to Kalaupapa should remain as it is today—by air, mule or on foot. Some desired more efficient, reliable and reasonably-priced transportation to assure that the peninsula can receive supplies, handle emergencies, and offer residents an easier connection with the outside world. Others noted that the difficulty of access is “part of the experience, part of the story, and spirituality of the place.”

Transportation recommendations included a more user-friendly flight schedule, though public sentiment was against noise from aircraft and supported the prohibition of air tours. Several suggested improvements to sea access, such as

a lower-cost ferry or small boats for delivery of supplies between barges. Most comments were against current plans to dredge the harbor to allow for larger barges and against expansion of the pier and docking facilities, in favor of repair and maintenance of the existing pier.

The public also expressed views on usage and maintenance of the trail from topside. In general their comments advocated continued usage by mule rides and hikers, maintenance and restoration of the trail to keep it safe for users, and assurance that those who use the trail are fit enough to do so. A few expressed concern about access to Kalaupapa for people with disabilities. One suggested a gondola from topside to meet this need.

Purpose and Significance

The sentiment of the vast majority of people about the significance of Kalaupapa is captured in Ka ‘Ohana O Kalaupapa’s statement that “the paramount mission of Kalaupapa National Historical Park is to accurately present the people of Kalaupapa and their history while preserving their memory with dignity and sensitivity.” Some people asked that the people of Kalaupapa be honored in a way that better captures the elements of human suffering, courage, spirituality, and love that make the peninsula unique.

Many also suggested that the park’s purpose and significance be broadened to include the native Hawaiian ancestors who preceded the Hansen’s disease settlement, and whose culture informs the values of the community today.

Finally, the public emphasized that Kalaupapa’s significance extends beyond Hawai‘i and the nation and that the historical park should be designated a World Heritage Site. Many noted that Kalaupapa is an international crossroads where relatives of patients can meet, heal, and restore family ties. They also observed that Kalaupapa’s founding set the stage for similar settlements in other countries and led to the growing worldwide awareness of leprosy treatment as an issue of social justice. Today Kalaupapa provides an empowering model of ‘ohana, aloha, and mālama in international efforts to conquer stigma and connect estranged family members.

Preliminary Alternatives Public Review

The preliminary alternatives public process was an additional planning step in the planning process. The primary purpose of involving the public in a review of the preliminary alternatives was to understand the public's concerns and preferences with regard to the preliminary alternatives and to assist the planning team in refining the preliminary alternatives and selecting a preferred alternative.

The official public process began in May 2011, when the NPS produced and mailed Newsletter #3: Preliminary Alternatives to approximately 1,000 contacts and announced this planning step on the NPS websites. The newsletter fully outlined the concepts and actions in the preliminary alternatives and management zones and provided a schedule of public open houses.. Press releases were prepared and mailed to local media.

The preliminary alternatives presented to the public in Newsletter #3 were:

Alternative A – No-action alternative. The NPS would continue to manage Kalaupapa NHP as it has been currently managed following existing management policies and programs.

Alternative B focuses on Kalaupapa's special or sacred places celebrated and made legendary by stories. Maintaining Kalaupapa's spirit and character is the primary focus of this alternative.

Alternative C emphasizes stewardship of Kalaupapa's lands. Resources would be managed from mauka to makai.

Alternative D focuses on personal connections to Kalaupapa through visitation by the general public.

Public Open Houses and Written Comments

The NPS held seven public open house meetings on Molokai, Maui, and O'ahu between June 6 and 10, 2011. 164 people participated in the open house meetings and provided oral comments, and the NPS received 60 written responses. After the meetings, the notes were posted at <http://parkplanning.nps.gov/kala> and analyzed.

Table 6.6 Public Open House Meetings

Location	Date	Attendance
Kalaupapa, Molokai McVeigh Social Hall	June 6, 2011, AM	16
Kalaupapa, Molokai McVeigh Social Hall	June 6, 2011, PM	7
Kaunakakai, Molokai Mitchell Pauole Center	June 7, 2011, AM	21
Kaunakakai, Molokai Mitchell Pauole Center	June 7, 2011, PM	17
Kahului, Maui Maui Arts and Cultural Center	June 8, 2011	19
Honolulu, Oahu Bishop Museum	June 9, 2011	51
Honolulu, Oahu Bishop Museum	June 10, 2011	33
TOTAL		164



Preliminary alternatives public open house. NPS photo.

Comments, both through public workshops or written correspondence, were received from the following organizations, affiliates, and elected officials:

American Association of Retired Persons
Bishop Museum
Commission on Transportation, State of Hawai‘i
County of Maui Department of Parks and Recreation
Department of Education
Department of Hawaiian Home Lands
Department of Health
Department of Land and Natural Resources
Department of the Interior
Department of Transportation
Family Life Center Assembly of God
Hawai‘i Catholic Herald
Historic Hawai‘i Foundation
Honolulu Academy of Arts
Honolulu Community College
Hui Ho‘opakele ‘Aina
Iolani Palace
Ka ‘Ohana O Kalaupapa
Kalaupapa NHP Advisory Commission
Kalaupapa Patient Advisory Committee
Kamehameha School Alumni Association – North West Region
Kana‘ana Hou Church
Maui Arts and Cultural Center
Molokai Dispatch
Molokai Museum & Cultural Center
Molokai News
Molokai Visitor’s Bureau
Office of Hawaiian Affairs
Pacific Historic Parks
Pu‘u O Hoku Ranch
Senator Daniel Inouye’s Office
St. Damien Catholic Parish
State of Hawai‘i
The Kalaupapa Connection
The Nature Conservancy

Summary of Public Comments on the Preliminary Alternatives

The comments on the preliminary alternatives covered a broad range of topics, issues, and recommendations for Kalaupapa. The majority of comments received addressed visitor experience, including activities and uses, regulations, and interpretation and education. Resource management, land use and management, and facilities accounted for the second largest number of comments. Fewer comments were split between the additional topic areas discussed below.

Many of the sentiments expressed in the review of alternatives echoed public remarks made during the scoping process. These included general comments about desired visitor access and experience; interpretation; care of buildings, landscapes, and natural resources; commercial activity; operations; land use; partnerships; and significance.

The summary below includes only the new comments that arose during the public review of preliminary alternatives.

Visitor Experience

The majority of commenters believe that visitor experience should focus on learning about Kalaupapa rather than recreational activities.

Camping—While there was some support for organized camping, the overwhelming majority considered camping to be incompatible with the park’s purpose.

Concessions and commercial uses—In general, comments supported limited concession activities at Kalaupapa that provide basic services and goods for visitors.

Gathering, fishing, and hunting—Traditional subsistence activities were supported if managed through regulations (including state laws), monitoring, and a permit system.

Homesteading—A small number of comments addressed homesteading; some supported traditional agricultural practices in Waikolu Valley and others argued

that homesteading is inconsistent with the desire to maintain the sacred character of Kalaupapa.

Overnight use—The majority of people who commented on overnight use advocated for overnight accommodations by reservation, using mainly the existing facilities. Many commenters felt that those who stay overnight should participate in a service project at Kalaupapa.

Orientation and research—Commenters generally felt that all visitors should participate in a required orientation before their visit, whether in a topside or Kalaupapa venue. Many supported research with a preservation focus and opportunities for coordinated natural resource, cultural resource, and ethnographic research.

Spiritual retreats and pilgrimages—Some suggested developing retreat centers at Kalaupapa, possibly in partnership with existing churches at the Bishop Home. A topside Molokai retreat center was suggested for those who cannot visit Kalaupapa.

Age limit—The majority of commenters supported allowing children younger than 16 years old to visit Kalaupapa, because education is considered the primary mission of Kalaupapa NHP. Some commenters thought the age limit could be lowered to either age 10 or 12. Most felt that if children were allowed to visit Kalaupapa they should be accompanied by an adult.

Interpretation and Education

Many comments addressed interpretation and education, the majority encouraging an increase in education and interpretation opportunities both on- and off-site.

Curriculum-based education—Comments regarding curriculum-based education supported partnering with educational institutions to develop curriculum about Kalaupapa for schools in Hawai‘i.

Outreach—Outreach was supported by commenters, whose suggestions ranged from the need for offsite outreach to creating an outreach program to develop financial support for Kalaupapa.

Resource Management

The most common comments on resources discussed the need for preservation.

In general, the majority of comments addressing archeological resources, museum collections, cultural landscapes, and structures were focused on the need for continued and enhanced stabilization, preservation, and conservation. Continued research and documentation are needed for archeological resources.

The public supported adaptive re-use of historic buildings and the maintenance of gravestones. Specific remarks addressed the need to preserve the churches of Kalaupapa.

Comments submitted regarding the Hansen’s disease community focused on the people and keeping their stories alive. In the short term, patients’ opinions should take priority, and in the long term the lifestyle and stories of the patients should be reflected throughout Kalaupapa. Continued research on families that were removed from the peninsula prior to the establishment of the settlement is needed.

Comments on native Hawaiian traditions included granting access to native Hawaiians, allowing subsistence hunting and gathering, and ensuring that the native Hawaiian story is documented and told.

Public comments supported preservation of terrestrial and marine resources and management of invasive species. Control of nonnative species, particularly axis deer, was a concern, and additional support was expressed for continued natural resource research and monitoring activities.

Comments on marine resources support a marine management area designation for Kalaupapa and focused on the need to work cooperatively with the State of Hawai‘i and partners to establish new regulations for resource protection that would continue the will of the Patient’s Council. The protection of the Hawaiian monk seal and other threatened and endangered species was also requested in the comments.

Land Use and Management

Comments were received both in support of the National Park Service’s continued management of Kalaupapa and in support of the State of Hawai‘i as primary manager.

Many supported updating current national designations, such as the National Historic Landmark and National Natural Landmark documentation, as well as proposing new designations such as a marine management area or sanctuary.

Boundary modifications were supported by some commenters, particularly in the North Shore Cliffs area. Many commenters in favor of boundary modifications expressed that adequate funding and staffing would need to be available to support the inclusion of additional lands. Other commenters were opposed to any changes to the existing boundaries. Some comments reflected the desire to have the land managed in the traditional ahupua‘a fashion.

Only a handful of comments were received on the topic of Kalawao County. People had differing opinions about whether to keep Kalawao County as is or incorporate it into Maui County.

Facilities

Concerns for the facilities included the need for a facility maintenance and management plan, as well as long-term infrastructure and utility needs. A variety of uses for the buildings were proposed in the comments. Examples included education and conference centers, medical facilities, a retreat center at Bishop Home, new bathrooms at the Pavilion, and museums.

Planning Process

Commenters were offered the chance to reflect on the general management planning process including the open house meeting format, earlier public meetings, and project newsletters. Many liked the open dialogue that could be had at the stations in the open house meetings. Those who disliked the open house format wanted to be able to hear everyone’s comments in a hearing style meeting. Other commenters appreciated the effort that the NPS has put into the meetings and the information that has been shared through the newsletters.

Alternatives

In general, those who commented on the preliminary alternatives felt that the range of alternatives covered the most important issues facing Kalaupapa. Of the approximately 1,400 comments received, less than 10% of commenters expressed a preference for an alternative concept or a combination of particular alternatives. Of the four alternatives presented, B and C received the highest level of support; however, many commenters expressed a desire for an alternative that would combine elements of all the alternatives presented. Additionally, all of the alternatives received opposition comments.

Preliminary Alternative A (No-action)

Several commenters chose alternative A as their preferred alternative, supporting existing management of Kalaupapa’s resources and expressing the desire to keep Kalaupapa “as-is.” Many supporters of alternative A also favored components of alternative B.

Preliminary Alternative B

Supporters of alternative B approved of the management focus on sensitive resources, the preservation of the sacredness of Kalaupapa, and the minimal change to existing conditions and visitor use. Many supporters of alternative B also liked components of alternative C. Commenters who did not support alternative B felt that it was too restrictive, arguing that limiting visitor access would have an adverse effect on funding and the maintenance of the park’s historic features.

Preliminary Alternative C

Commenters who preferred alternative C believe it is a good balance between management of resources and visitor access. Supporters liked the stewardship-focused activities as well as the interpretation and educational opportunities. They also expressed interest in incorporating components from the other alternatives. Some commenters were wary of unescorted visitor access and did not like that camping is allowed in this alternative.

Preliminary Alternative D

Several commenters chose alternative D because it maximizes public use and allows for a wider audience to engage in educational opportunities. People who didn’t support alternative D argued that it allows too much access to the general public.



GMP planning team field discussion. NPS photo.

Department of Hawaiian Home Lands Beneficiary Consultation

The Department of Hawaiian Home Lands led a beneficiary consultation on the topic of Kalaupapa NHP and the range of management alternatives in June and July 2011. DHHL invited beneficiaries and NPS representatives to participate in a meeting on June 29, 2011. Thirty-one individuals, including DHHL staff and beneficiaries, attended the meeting. Topics discussed during the meeting included homesteading; land management and lease; boundaries; Pālā'au State Park; natural and cultural resources; native Hawaiian involvement and representation; gathering and access rights; visitor experience; education and interpretation; and the future of Kalawao County. Full meeting notes can be found on the DHHL website: www.hawaiianhomelands.org.

Agency Consultation and Coordination

The following sections document the consultation and coordination efforts undertaken by the NPS during the preparation of this Draft GMP/EIS. Consultation is an ongoing effort throughout the entire process of developing the Final GMP/EIS. Copies of letters exchanged with partners and agencies are in the administrative file.

Throughout the comment period, presentations, meetings, and conversations with partner agencies and entities were conducted by the Superintendent, park staff, and members of the planning team to discuss the preliminary alternatives. They included the Department of Health, Department of Land and Natural Resources, the Department of Hawaiian Home Lands, Department of Transportation, and the Kalaupapa NHP Advisory Commission. These meetings were held to ensure that the partner agencies concurred with the range of alternatives and potential actions within each alternative.

Consultation and Coordination with Agencies, Organizations, and Groups

The Federal Land Policy Management Act, Title II, Section 202, provides guidance for coordinating planning efforts with other federal departments, and agencies of the state and local governments. All local governments and federal and state agencies with resource management responsibilities or interest in the planning area were informed of the planning effort and encouraged to participate.

Throughout the planning process, presentations, meetings, and conversations with State of Hawai'i partner agencies and entities were conducted by the Superintendent, park staff, and members of the planning team to discuss the planning issues, preliminary alternatives, and preferred alternative. Agencies included the Department of Health, Department of Land and Natural Resources, the Department of Hawaiian Home Lands, Department of Transportation, and the Kalaupapa NHP Advisory Commission. These meetings were held to ensure that the partner agencies concurred with the potential actions, range of alternatives, and preferred alternative.

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

The State of Hawai'i Historic Preservation Officer must be consulted concerning any resource management proposals that might affect a cultural property listed on or eligible for the National Register of Historic Places; several listed properties exist within Kalaupapa NHP. The NPS initiated consultation with the State of Hawai'i Historic Preservation Division (SHPD) and the Advisory Council for Section 106 of the National Historic Preservation Act, as amended, in April 2009 during the public scoping period. In addition, the NPS communicated with the SHPD and consulting parties and involved the public during the review of the draft alternatives in 2011.

Consultation with the U.S. Fish and Wildlife Service

The Endangered Species Act of 1973 (ESA), as amended, directs every federal agency to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the existence of any listed species or destroy or adversely modify critical habitat (50 CFR 400). The ESA authorizes federal agencies to enter into early consultation with the U.S. Fish and Wildlife Service to make those determinations. Formal consultation with the U.S. Fish and Wildlife Service under Section 7b of the ESA was conducted in April 2009.

Kalaupapa National Historical Park Advisory Commission

The Kalaupapa National Park Advisory Commission was briefed and consulted at every major milestone for this GMP. Discussions focused on preserving the history of Kalaupapa, including two time periods: 1) after 1866 when persons with Hansen's disease were taken to Kalaupapa, and 2) before 1866 which relates to the early native Hawaiian habitation at Kalaupapa. Another concern was aloha 'aina respecting the land and its spirit. The third primary concern was about desecration and concern about access and safety. Members of the Commission supported controlled access and daily visitation limits. They also agreed that the patients' well-being is the most important consideration in the decision-making process.

List of Draft GMP/EIS Recipients

Paper copies or executive summaries of the draft GMP/EIS were sent to the following recipients. Additionally, executive summaries were sent to the mailing list of approximately 1,000 individuals and organizations. The draft GMP/EIS is available on the internet at www.nps.gov/kala/parkmgmt/index.htm and upon request.

Federal Entities

Advisory Council on Historic Preservation
Federal Aviation Administration
Kalaupapa Federal Advisory Commission
National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Island Regional Office
National Park Service
Ala Kahakai National Historic Trail
Denver Service Center
Haleakalā National Park
Hawai'i Volcanoes National Park
Kaloko-Honokōhau National Historical Park
National Park of American Samoa
Pu'uhonua O Hōnaunau National Historic Site
Pu'ukoholā Heiau National Historic Site
War in the Pacific National Historical Park
World War II Valor in the Pacific National Monument
U.S. Army Corps of Engineers, Regulatory Branch
U.S. Department of the Interior, Office of Native Hawaiian Relations
U.S. Department of the Interior, Office of the Inspector General
U.S. Environmental Protection Agency, Region 9
U.S. Fish and Wildlife Service
U.S. Geological Survey
U.S. Natural Resources Conservation Service

U.S. Senators and Representatives

Honorable Colleen Hanabusa, U.S. Representative District 1
 Honorable Mazie Hirono, U.S. Senator
 Honorable Tulsi Gabbard, U.S. Representative District 2
 Honorable Brian Schatz, U.S. Senator

State and County Agencies and Officials

County of Maui
 Councilmember Stephanie “Stacy” Crivello
 Department of Planning
 Parks and Recreation
 Department of Business, Economic Development and Tourism, Coastal Zone Management Program
 Department of Business, Economic Development and Tourism, Land Use Commission
 Department of Hawaiian Home Lands
 Department of Health
 Communicable Disease Division
 Hale Mōhalu Hospital
 Hansen’s Disease Branch
 Department of Land and Natural Resources
 State Historic Preservation Division
 Division of Forestry and Wildlife
 Land Division
 State Parks Division
 Division of Aquatic Resources
 Department of Transportation, Airports Division
 Governor Neil Abercrombie
 Hawai‘i State Library
 Molokai Planning Commission
 Molokai Public Library
 National Area Reserve Commission
 Office of Environmental Quality Control
 Representative Mele Carroll
 Senator J. Kalani English

Business, Institutions and Organizations

‘Aha Kiolo
 ‘Ahahui Mālama I Ka Lōkahi
 Aiea Public Library
 Akaku: Maui Community Television
 Aka‘ula School
 Alu Like, Molokai Island Center
 Bishop Museum
 Central Maui Hawaiian Civic Club
 Congregation of the Sacred Hearts of Jesus and Mary
 Conservation Council of Hawai‘i
 Earth justice Legal Defense Fund
 Ewa Beach Public Library
 Hamilton Library
 Hana Public Library
 Hanapepe Public Library
 Hawai‘i Audubon Society
 Hawai‘i Conference United Church of Christ
 Hawai‘i Council for the Humanities
 Hawai‘i Kai Public Library
 Hawai‘i National History Association
 Hawaiian Ecosystems at Risk
 Hawaiian Historical Society
 Hilo Public Library
 Historic Hawai‘i Foundation
 Holualoa Public Library
 Honokaa Public Library
 Hui Malama I Na Kupuna O Hawai‘i Nei
 Hui Malama O Mo‘omomi
 IDEA
 Ilio‘ulaokalani Coalition
 International Federation of Anti-Leprosy Association
 Japanese Cultural Center of Hawai‘i
 Ka ‘Ohana O Kalaupapa
 Kahuku Public Library
 Kahului Public Library
 Kailua Public Library
 Kailua-Kona Public Library

Kaimuki Public Library
Kalaupapa Patient Advisory Council
Kalihi-Palama Public Library
Kana’ana Hou and Siloama Church
Kaneohe Public Library
Kapaa Public Library
Kapolei Public Library
Keaau Public Library
Kealahou Public Library
Kihei Public Library
Koloa Public Library, Koloa, HI
Lahaina Public Library
Lāna‘i Public Library
Laupahoehoe Public Library
LBPH Public Library
Leprosy Mission Canada
Līhu‘e Public Library
Liliha Public Library
Manoa Public Library
Maui County Farm Bureau
Maui Electric Company Ltd
Maui Invasive Species Committee
Maui Nui Botanical Gardens
Meyer, Ranch, R.W. Meyer, Limited
Mililani Public Library
Molokai Dispatch
Molokai Irrigation District
Molokai Island Burial Council
Kalaupapa Guided Mule Tour
Molokai Museum and Cultural Center
Molokai Public Library
Molokai Ranch
Mormon Church
Mountain View Public Library
Na Kupuna O Maui
Naalehu Public Library
National Parks Conservation Association
National Parks Foundation
National Trust for Historic Preservation, Western Office

Native Hawaiian Plant Society
Natural Resources Defense Council
Nippon Foundation
Office of Hawaiian Affairs
Office of Hawaiian Affairs Molokai Branch
Pacific Historic Parks
Pahala Public Library
Pāhoa Public Library
Pearl City Public Library
Princeville Public Library
Pu‘u O Hoku Ranch
Roman Catholic Church, Diocese of Honolulu
Salt Lake Public Library
Shrine and Museum of Blessed Marianne Cope, Sisters of Saint Francis Motherhouse
Sierra Club, Maui Group
Society for Hawaiian Archaeology
Soto Mission of Hawai‘i
St. Francis and St. Philomena Catholic Church
St. Francis Healthcare Foundation of Hawai‘i
The Conservation Fund
The Nature Conservancy of Hawai‘i
The Nature Conservancy–Molokai Office
The Wilderness Society
Thelma Parker Public Library
University of Hawai‘i
University of Hawai‘i, Department of Anthropology
University of Hawai‘i, Historic Preservation Program, Department of American Studies
Wahiawa Public Library
Waialua Public Library
Waianae Public Library
Waikiki-Kapahulu Public Library
Wailuku Public Library
Waimanalo Public Library
Waimea Public Library





View of the North Shore cliffs and islets from the Kalaupapa peninsula. NPS photo.

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Glossary

Accessibility: Occurs when individuals with disabilities are able to reach, use, understand, or appreciate NPS programs, facilities, and services, or to enjoy the same benefits that are available to persons without disabilities. See also, “universal design.”

Acoustic ecology: The study of sound in the relationships between organisms and their environment.

Adaptive management: A system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes. Adaptive management recognizes that knowledge about natural resource systems is sometimes uncertain and is the preferred method of management in these cases.

Archeology: The scientific study, interpretation, and reconstruction of past human cultures from an anthropological perspective based on the investigation of the surviving physical evidence of human activity and the reconstruction of related past environments. Historic archeology uses historic documents as additional sources of information.

Archeological resource: Any material remains or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. They are capable of revealing scientific or humanistic information through archeological research.

Asset: A physical structure or grouping of structures, land features, or other tangible property which has a specific service or function.

Asset management: A systematic process of maintaining, upgrading, and operating assets cost-effectively by combining engineering principles with sound business practices and economic theory.

Best management practices (BMPs): Practices that apply the most current means and technologies available to not only comply with mandatory environ-

mental regulations, but also maintain a superior level of environmental performance. See also, “sustainable practices/principles.”

Carbon Footprint: A measure of the amount of carbon dioxide produced by a person, organization or state in a given time.

Climate Change: refers to any distinct change in measures of climate lasting for a long period of time. In other words, “climate change” means major changes in temperature, rainfall, snow, or wind patterns lasting for decades or longer. Climate change may result from:

- natural factors, such as changes in the Sun’s energy or slow changes in the Earth’s orbit around the Sun;
- natural processes within the climate system (e.g., changes in ocean circulation);
- human activities that change the atmosphere’s make-up (e.g, burning fossil fuels) and the land surface (e.g., cutting down forests, planting trees, building developments in cities and suburbs, etc.).

CLIP Tool: Software developed jointly by the Environmental Protection Agency and the NPS, was used to calculate the park’s greenhouse gas emissions.

Conserve: To protect from loss or harm; preserve. Historically, the terms conserve, protect, and preserve have come collectively to embody the fundamental purpose of the NPS—preserving, protecting and conserving the national park system.

Consultation (cultural resources): A discussion, conference, or forum in which advice or information is sought or given, or information or ideas are exchanged. Consultation generally takes place on an informal basis; formal consultation requirements for compliance with section 106 of the NHPA are published in 36 CFR Part 800. Consultation with recognized tribes is done on a government-to-government basis.

Cultural Landscape: A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or esthetic values. There are four non-mutually-exclusive types of cultural landscapes: historic

sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.

Cultural Resource: An aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places; and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

Cumulative actions: Actions that, when viewed with other actions in the past, the present, or the reasonably foreseeable future regardless of who has undertaken or will undertake them, have an additive impact on the resource the proposal would affect.

Desired condition (also called management direction and management actions): A park's natural and cultural resource conditions that the National Park Service aspires to achieve and maintain over time, and the conditions necessary for visitors to understand, enjoy, and appreciate those resources.

Ecosystem: A system formed by the interaction of a community of organisms with their physical and biological environment, considered as a unit.

Ecosystem management: A collaborative approach to natural and cultural resource management that integrates scientific knowledge of ecological relationships with resource stewardship practices for the goal of sustainable ecological, cultural, and socioeconomic systems.

Enabling legislation: The law(s) that establish a park as a unit within the national park system.

Environmental impact statement (EIS): A detailed National Environmental Policy Act analysis document that is prepared, with extensive public involvement, when a proposed action or alternatives have the potential for significant impact on the human environment.

Environmentally preferred alternative (or environmentally preferable alternative): Of the action alternatives analyzed, the one that would best promote the

policies in NEPA section 101. This is usually selected by the planning team members. CEQ encourages agencies to identify an environmentally preferable alternative in the draft EIS or EA.

Ethnographic resource: A site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.

Facility costs: One-time costs related to a facility, such as the cost associated with building or trail.

Foundation document: A statement that begins a park unit's planning process and sets the stage for all future planning and decision-making by identifying the park's mission, purpose, significance, special mandates and the broad, park-wide mission goals. Incorporated into a park unit's GMP, but may also be produced as a stand-alone document for a park unit.

FTE (full time equivalent): A computed number of employees, representing the number of full-time employees that could have been employed if the reported number of hours worked by part time employees had been worked by full-time employees. For example, two half-time employees equal one FTE.

General management plan (GMP): A plan which clearly defines direction for resource preservation and visitor use in a park, and serves as the basic foundation for decision making. GMPs are developed with broad public involvement.

Geologic resources: Features produced from the physical history of the earth, or processes such as exfoliation, erosion and sedimentation, glaciation, karst or shoreline processes, seismic, and volcanic activities.

Historic district: A geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, landscapes, structures, or objects, united by past events or aesthetically by plan or physical developments.

Human environment: Defined by CEQ as the natural and physical environment, and the relationship of people with that environment. Although the socioeconomic environment receives less emphasis than the physical or natural

environment in the CEQ regulations, NPS considers it to be an integral part of the human environment.

Impact: The likely effect of an action or proposed action upon specific natural, cultural or socioeconomic resources. Impacts may be direct, indirect, individual, cumulative, beneficial, or adverse. (Also see Unacceptable impacts.)

Impact topics: Specific natural, cultural, or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration, and timing of the effect to each of these resources is evaluated in the impact section of an EA or an EIS.

Impairment: An impact that, in the professional judgment of a responsible NPS manager, would harm the integrity of park resources or values and violate the 1916 NPS Organic Act's mandate that park resources and values remain unimpaired.

Implementation plan: A plan that focuses on how to implement an activity or project needed to achieve a long-term goal. An implementation plan may direct a specific project or an ongoing activity.

Indicators of user capacity: Specific, measurable physical, ecological, or social variables that can be measured to track changes in conditions caused by public use, so that progress toward attaining the desired conditions can be assessed

Invasive species: A nonnative species whose introduction does, or is likely to cause, economic or environmental harm or harm to human, animal, or plant health. These species have the ability to displace or eradicate native species, alter fire regimes, damage infrastructure, and threaten human livelihoods.

Issue: Some point of debate that needs to be decided.

Life cycle costing (analysis): An accounting method that analyzes the total costs of a product or service, including construction, maintenance, manufacturing, marketing, distribution, useful life, salvage, and disposal.

Light Pollution: The illumination of the night sky caused by artificial light sources, decreasing the visibility of stars, and other natural sky phenomena. Also includes other incidental or obtrusive aspects of outdoor lighting such as

glare, trespass into areas not needing lighting, alternation of nighttime landscape, and negative impact to ecosystems.

Management concept: A brief, statement of the kind of place the park should be (a "vision" statement).

Management zone: A geographical area for which management directions have been developed to determine what can and cannot occur in terms of resource management, visitor use, access, facilities or development, and park operations. Each zone has a unique combination of resource and social conditions and a consistent management direction. Different actions are taken by the NPS in different zones.

Management zoning: The application of management zones to a park unit. The application of different type of zones and/or size of zones will likely vary in different alternatives.

Management direction (also called desired condition and management prescription): A planning term referring to statements about desired resource conditions and visitor experiences, along with appropriate kinds and levels of management, use, and development for each park area.

Manager: The managerial-level employee who has authority to make decisions or to otherwise take an action that would affect park resources or values. Most often it refers to the park superintendent or regional director, but may at times include, for example, a resource manager, facility manager, or chief ranger to whom authority has been re-delegated.

Mitigation: A modification of a proposal to lessen the intensity of its impact on a particular resource. Actions can be taken to avoid, reduce, or compensate for the effects of environmental damage.

Museum Collection: Assemblage of objects, works of art, historic documents, or natural history specimens collected according to a rational scheme and maintained so they can be preserved, studied, and interpreted for public benefit. Museum collections normally are kept in park museums, although they may also be maintained in archeological and historic preservation centers (NPS DO-28).

Museum object: A material thing possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include prehistoric and historic objects, artifacts, works of art, archival material, and natural history specimens that are part of a museum collection. Structural components may be designated museum objects when removed from their associated structures.

National Park Service Organic Act: The 1916 law (and subsequent amendments) that created the National Park Service and assigned it responsibility to manage the national parks.

National park system: The sum total of the land and water now or hereafter administered by the Secretary of the Interior through the National Park Service for park, monument, historic, parkway, recreational or other purposes.

National Register of Historic Places: The comprehensive federal listing of nationally, regionally, or locally significant districts, sites, buildings, structures, and objects of national, regional, state, and local significance in American history, architecture, archeology, engineering, and culture kept by the National Park Service in authority of the National Historic Preservation Act of 1966.

NEPA process: The objective analysis of a proposed action to determine the degree of its impact on the natural, physical, and human environment; alternatives and mitigation that reduce that impact; and the full and candid presentation of the analysis to, and involvement of, the interested and affected public—as required of federal agencies by the National Environmental Policy Act of 1969.

Planning, Environment, and Public Comment (PEPC) System: An online database designed to facilitate the project management process in conservation planning and environmental impact analysis. It assists NPS employees in making informed decisions with regard to a number of compliance issues throughout the planning, design, and construction process.

Potential boundary modifications: The description of areas or resources that meet criteria for boundary adjustments, along with the rationale for an adjustment.

Potential management zone: General guidance about an integrated set of resource conditions and associated visitor experiences that could be applied to various locations throughout a park.

Preferred alternative: The alternative an NPS decision-maker has identified as preferred at the draft EIS stage. It is identified to show the public which alternative is likely to be selected to help focus its comments.

Preserve: To protect from loss or harm; conserve. Historically, the terms preserve, protect and conserve have come collectively to embody the fundamental purpose of the NPS—preserving, protecting and conserving the national park system.

Preservation (cultural resources): The act or process of applying measures to sustain the existing form, integrity, and material of a historic structure, landscape or object. Work may include preliminary measures to protect and stabilize the property, but generally focuses upon the ongoing preservation maintenance and repair of historic materials and features rather than extensive replacement and new work.

Professional judgment: A decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker's education, training, and experience advice or insights offered by subject matter experts and others who have relevant knowledge and experience good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities relating to the decision.

Public involvement (also called public participation): The active involvement of the public in NPS planning and decision-making processes. Public involvement occurs on a continuum that ranges from providing information and building awareness, to partnering in decision making.

Projected implementation costs: A projection of the probable range of recurring annual costs, initial one-time costs, and life-cycle costs of plan implementation.

Record of Decision (ROD): The document that is prepared to substantiate a decision based on an environmental impact statement (EIS). It includes a statement of the decision made, a detailed discussion of decision rationale, and the reasons for not adopting all mitigation measures analyzed, if applicable.

Rehabilitation: In reference to cultural resources, the act or process of making possible an efficient compatible use for a historic structure or landscape through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, and architectural values (NPS DO-28).

Restoration: From a cultural resource perspective, (1) The act or process of accurately depicting the form, features, and character of a historic structure, landscape, or object as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period; (2) The resulting structure, landscape, or object.

From a natural resource perspective, restoration refers to the reestablishment/recovery of biological community structure, natural functions and processes in landscapes that have been disturbed or altered by people — actions taken to return disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated.

Landscapes that have been disturbed by natural phenomena, such as floods and hurricanes, generally are allowed to recover naturally in parks unless manipulation is necessary to protect other park resources, developments, or employee and public safety.

Sacred Sites: Certain natural and cultural resources treated by American Indian tribes and Alaska Natives, and Native Hawaiians as sacred places having established religious meaning, and as locales of private ceremonial activities.

Scoping: Includes internal NPS decision-making on issues, alternatives, mitigation measures, the analysis boundary, appropriate level of documentation, lead and cooperating agency roles, available references and guidance, defining purpose and need, and so forth; and external scoping, the early involvement of the interested and affected public.

Section 106: Refers to Section 106 of the National Historic Preservation Act of 1966, which requires federal agencies to take into account the effects of their proposed undertakings on properties included or eligible for inclusion in the National Register of Historic Places and give the Advisory Council on

Historic Preservation a reasonable opportunity to comment on the proposed undertakings.

Soundscape (natural): The aggregate of all the natural, nonhuman-caused sounds that occur in parks, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive, and can be transmitted through air, water, or solid materials.

Structure: Structures are constructed works, usually immovable by nature or design, consciously created to serve some human activity. Examples are buildings of various kinds, monuments, dams, roads, railroad tracks, canals, millraces, bridges, tunnels, locomotives, nautical vessels, stockades, forts and associated earthworks, Indian mounds, ruins, fences, and outdoor sculpture. In the national register program “structure” is limited to functional constructions other than buildings (NPS DO-28).

Stakeholders: Individuals and organizations that are actively involved in the project, or whose interests may be positively or negatively affected as a result of the project execution /completion. They may also exert influence over the project and its results. For GMP planning purposes, the term stakeholder includes NPS offices/staff as well as public and private sector partners and the public, which may have varying levels of involvement.

Standards: The minimum acceptable condition for an indicator of a desired condition.

Stewardship: The cultural and natural resource protection ethic of employing the most effective concepts, techniques, equipment, and technology to prevent, avoid, or mitigate unacceptable impacts.

Superintendent: The senior onsite NPS official in a park.

Sustainable design: Design that applies the principles of ecology, economics, and ethics to the business of creating necessary and appropriate places for people to visit, live in, and work. Development that has a sustainable design sits lightly upon the land, demonstrates resource efficiency, and promotes ecological restoration and integrity, thus improving the environment, the economy, and society.

Sustainable practices/principles: Those choices, decisions, actions and ethics that will best achieve ecological/ biological integrity; protect qualities and functions of air, water, soil, and other aspects of the natural environment; and preserve human cultures. Sustainable practices allow for use and enjoyment by the current generation, while ensuring that future generations will have the same opportunities.

Traditionally associated peoples: Social cultural entities such as tribes, communities, and kinship units exhibiting a continued identity and associated with a specific park unit, area, or resource.

Unacceptable impacts: Impacts that, individually or cumulatively, would be inconsistent with a park's purposes or values, or impede the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or create an unsafe or unhealthful environment for visitors or employees, or diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values, or unreasonably interfere with park programs or activities, or an appropriate use, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park, or NPS concessioner or contractor operations or services.

Universal design: The design of products and environments to be usable by all people to the greatest extent possible, without the need for adaptation or specialized design.

User Capacity: The type and level of use that can be accommodated while sustaining the quality of park resources and visitor opportunities consistent with the purposes of the park unit. It is not necessarily a set of numbers or limits, but rather a process involving establishing desired conditions, monitoring, evaluation, and actions (managing visitor use) to ensure values are protected.

Value analysis/value engineering: An organized, multi-disciplined team effort that analyzes the functions of facilities, processes, systems, equipment, services, and supplies for the purpose of achieving essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, and safety.

Visitor: Anyone who physically visits a park for recreational, educational or scientific purposes, or who otherwise uses a park's interpretive and educational services, regardless of where such use occurs (e.g., via Internet access, library, etc.).

Visitor experience: The perceptions, feelings, and reactions a person has while visiting a park. Examples of visitor experiences include: a sense of being immersed in a natural landscape; a feeling of being crowded; a feeling of being in an area where the sights and sounds of people and vehicles are predominant; having a sense of challenge and adventure; or a perception of solitude and privacy.

Zone: See "management zone."

Appendix A: Enabling Legislation

Kalaupapa National Historical Park Enabling Legislation:

Public Law 95-565

Public Law 100-202

NATIONAL HISTORICAL PARKS		259
6. Kalaupapa		
PUBLIC LAW 96-565—DEC. 22, 1980		94 STAT. 3321
Public Law 96-565 96th Congress		
An Act		
To establish the Kalaupapa National Historical Park in the State of Hawaii, and for other purposes.		Dec. 22, 1980 [H.R. 7217]
<i>Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,</i>		
SEC. 101. In order to provide for the preservation of the unique nationally and internationally significant cultural, historic, educational, and scenic resources of the Kalaupapa settlement on the island of Molokai in the State of Hawaii, there is hereby established the Kalaupapa National Historical Park (hereinafter referred to as the "park").		Kalaupapa National Historical Park, Hawaii. Establishment. 16 USC 410(j).
SEC. 102. The Congress declares the following to constitute the principal purposes of the park:		Purposes. 16 USC 410(j)-1.
(1) to preserve and interpret the Kalaupapa settlement for the education and inspiration of present and future generations.		
(2) to provide a well-maintained community in which the Kalaupapa leprosy patients are guaranteed that they may remain at Kalaupapa as long as they wish; to protect the current lifestyle of these patients and their individual privacy; to research, preserve, and maintain the present character of the community; to research, preserve, and maintain important historic structures, traditional Hawaiian sites, cultural values, and natural features; and to provide for limited visitation by the general public and		
(3) to provide that the preservation and interpretation of the settlement be managed and performed by patient and Native Hawaiians to the extent practical, and that training opportunities be provided such person in management and interpretation of the settlement's culture, historical, educational and scenic resources.		
SEC. 103. The boundaries of the park shall include the lands, waters, and interests therein within the area generally depicted on the map entitled "Boundary Map, Kalaupapa National Historical Park", numbered P07 80024, and dated May 1980, which shall be on file and available for public inspection in the local and Washington, District of Columbia offices of the National Park Service, Department of the Interior. The Secretary of the Interior (hereinafter referred to as the "Secretary") may make minor revisions in the boundary of the park by publication of a revised boundary map or other description to that effect in the Federal Register.		Boundaries; public inspection. 16 USC 410(j)-2.
SEC. 104. (a) Within the boundary of the park, the Secretary is authorized to acquire those lands owned by the State of Hawaii or by political subdivision thereof only by donation or exchange, and only with the consent of the owner. Any such exchange shall be accomplished in accordance with the provisions of sections 5 (b) and (c) of the Act approved July 15, 1968 (82 Stat. 354). Any property conveyed to the State or a political subdivision thereof in exchange for property within the park which is held in trust for the benefit of Native		Land acquisition. 16 USC 410(j)-2. 16 USC 4601-22.

260	NATIONAL HISTORICAL PARKS
94 STAT. 3322	PUBLIC LAW 96-565—DEC. 22, 1980
48 USC 691.	Hawaiians, as defined in the Hawaiian Homes Commission Act of 1920 shall, as a matter of Federal law, be held by the grantee subject to an equitable estate of the same class and degree as encumbers the property within the preserve; and "available lands" defined in section 203 of the Hawaiian Homes Commission Act may be exchanged in accordance with section 204 of said Act. The vesting of title in the United States to property within the park shall operate to extinguish any such equitable estate with respect to property acquired by exchange within the park.
48 USC 697. 48 USC 698.	(b) The Secretary is authorized to acquire privately-owned lands within the boundary of the park by donation, purchase with donated or appropriated funds, or exchange.
	(c) The Secretary is authorized to acquire by any of the foregoing methods except condemnation, lands, waters and interests therein outside the boundary of the park and outside the boundaries of any other unit of the National Park System but within the State of Hawaii, and to convey the same to the Department of Hawaiian Home Lands in exchange for lands, waters, and interests therein within the park owned by that Department. Any such exchange shall be accomplished in accordance with the provisions defined in subsection (a) of this section.
Administration. 16 USC 410j-4. 43 USC 1457, 16 USC 1, 2, 3, 4, 22, 43. 16 USC 461-467.	SEC. 105. (a) The Secretary shall administer the park in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535), the Act of August 21, 1935 (49 Stat. 666), and the provisions of this Act.
	(b)(1) With the approval of the owner thereof, the Secretary may undertake critical or emergency stabilization of utilities and historic structures, develop and occupy temporary office space, and conduct interim interpretive and visitor services on non-Federal property within the park.
Cooperative agreements.	(2) The Secretary shall seek and may enter into cooperative agreements with the owner or owners of property within the park pursuant to which the Secretary may preserve, protect, maintain, construct, reconstruct, develop, improve, and interpret sites, facilities, and resources of historic, natural, architectural, and cultural significance. Such agreements shall be of not less than twenty years duration, may be extended and amended by mutual agreement, and shall include, without limitation, provisions that the Secretary shall have the right of access at reasonable times to public portions of the property for interpretive and other purpose, and that no changes or alterations shall be made in the property except by mutual agreement. Each such agreement shall also provide that the owner shall be liable to the United States in an amount equal to the fair market value of any capital improvements made to or placed upon the property in the event the agreement is terminated prior to its natural expiration, or any extension thereof, by the owner, such value to be determined as of the date of such termination, or, at the election of the Secretary, that the Secretary be permitted to remove such capital improvements within a reasonable time of such termination. Upon the expiration of such agreement, the improvements thereon shall become the property of the owner, unless the United States desires to remove such capital improvements and restore the property to its natural state within a reasonable time for such expiration.
	(3) Except for emergency, temporary, and interim activity as authorized in paragraph (1) of this subsection, no funds appropriated pursuant to this Act shall be expended on non-Federal property unless such expenditure is pursuant to a cooperative agreement with the owner.

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PUBLIC LAW 96-565—DEC. 22, 1980	94 STAT. 3323
(4) The Secretary may stabilize and rehabilitate structures and other properties used for religious or sectarian purposes only if such properties constitute a substantial and integral part of the historical fabric of the Kalaupapa settlement, and only to the extent necessary and appropriate to interpret adequately the nationally significant historical features and events of the settlement for the benefit of the public.	Religious structures.
SEC. 106. The following provisions are made with respect to the special needs of the leprosy patients residing in the Kalaupapa settlement—	Leprosy patients. 16 USC 410j 5
(1) So long as the patient may direct, the Secretary shall not permit public visitation to the settlement in excess of one hundred persons in any one day.	
(2) Health care for the patient shall continue to be provided by the State of Hawaii, with assistance from Federal programs other than those authorized herein.	
(3) Notwithstanding any other provision of law, the Secretary shall provide patients a first right of refusal to provide revenue-producing visitor services, including such services as providing food, accommodations, transportation, tours, and guides.	
(4) 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.	
(5) 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.	
SEC. 107. The following provisions are made with respect to additional needs of the leprosy patients and Native Hawaiians for employment and training. (The term "Native Hawaiian" as used in this title, means a descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to the year 1778.)—	Employment and training. 16 USC 410j 6. "Native Hawaiian."
(1) Notwithstanding any other provision of law, the Secretary shall give first preference to qualified patients and Native Hawaiians in making appointments to positions established for the administration of the park, and the appointment of patients and Native Hawaiians shall be without regard to any provision of the Federal civil service laws giving an employment preference to any other class of applicant and without regard to any numerical limitation on personnel otherwise applicable.	
(2) The Secretary shall provide training opportunities for patients and Native Hawaiians to develop skills necessary to qualify for the provision of visitor services and for appointment to positions referred to in paragraph (1).	
SEC. 108 (a) There is hereby established the Kalaupapa National Historical Park Advisory Commission (hereinafter referred to as the "Commission"), which shall consist of eleven members each appointed by the Secretary for a term of five years as follows:	Kalaupapa National Historical Park Advisory Commission. Establishment. Membership. 16 USC 410j 7.
(1) seven members who shall be present or former patients, elected by the patient community, and	
(2) four members appointed from recommendations submitted by the Governor of Hawaii, at least one of whom shall be a Native Hawaiian.	

262	NATIONAL HISTORICAL PARKS
94 STAT. 3323	PUBLIC LAW 96-565—DEC. 22, 1980
Chairman. Vacancies.	(b) The Secretary shall designate one member to be Chairman. Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.
Compensation. Expenses.	(c) A member of the Commission shall serve without compensation as such. The Secretary is authorized to pay the expenses reasonably incurred by the Commission in carrying out its responsibilities under this Act on vouchers signed by the Chairman.
94 STAT. 3324	(d) The Secretary shall consult with and seek the advice of the Commission with respect to the development and operation of the park including training program The Commission shall, in addition, advise the Secretary concerning public visitation to the park, and such advice with respect to numbers of visitors shall be binding upon the Secretary if the Commission certifies to him that such advice is based on a referendum, held under the auspices of the Commission, of all patients on the official Kalaupapa Registry.
Expiration.	(e) The Commission shall expire twenty five years from the date of enactment of this Act.
Reevaluation. 16 USC 410jj-8.	SEC. 109. At such time when there is no longer a resident patient community at Kalaupapa, the Secretary shall reevaluate the policies governing the management, administration, and public use of the park in order to identify any changes deemed to be appropriate.
Appropriation Authorization. 16 USC 410jj-9.	SEC. 110. Effective October 1, 1981, there are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this title but not to exceed \$2,500,000 for acquisition of lands and interests in lands and \$1,000,000 for development.

NATIONAL HISTORICAL PARKS	263
PUBLIC LAW 96-565—DEC. 22, 1980	94 STAT. 3327
Approved December 22, 1980.	
LEGISLATIVE HISTORY:	
HOUSE REPORT No. 96-1019 (Comm. on Interior and Insular Affairs).	
SENATE REPORT No. 96-1027 (Comm. on Energy and Natural Resources).	
CONGRESSIONAL RECORD, Vol. 126 (1980):	
May 19, considered and passed House.	
Dec. 4, considered and passed Senate, amended.	
Dec. 5, House concurred in Senate amendments.	

NATIONAL HISTORICAL PARKS	465
7. Kalaupapa	
PUBLIC LAW 100-202—DEC. 22, 1987	101 STAT. 1329
Public Law 100-202 100th Congress	
Joint Resolution	
Making further continuing appropriations for the fiscal year 1988, and for other purposes.	Dec. 22, 1987 [H.J. Res. 395]
<i>Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,</i>	
AN ACT	101 STAT. 1329-214
Making appropriations for the Department of the Interior and Related Agencies for the fiscal Year ending September 30, 1988, and for other purposes.	
TITLE I—DEPARTMENT OF THE INTERIOR	
NATIONAL PARK SERVICE	101 STAT. 1329-218
OPERATION OF THE NATIONAL PARK SYSTEM	
... <i>Provided further,</i> That notwithstanding any other provision of law, Public Law 96-565 is amended by adding the following at the end of section 104(a): "The Secretary may lease from the Department of Hawaiian Home Lands said trust lands until such time as said lands may be acquired by exchange as set forth herein or otherwise acquired. The Secretary may enter into such a lease without regard to fiscal year limitations.":	101 STAT. 1329-220 16 USC 410jj-3.
Approved December 22, 1987.	101 STAT. 1329-450
Certified April 20, 1988.	
LEGISLATIVE HISTORY—H.J. Res. 395:	
HOUSE REPORTS: No. 100-415 (Comm. on Appropriations) and No. 100-498 (Comm. of Conference).	
SENATE REPORTS: No. 100-238 (Comm. on Appropriations).	
CONGRESSIONAL RECORD, Vol. 133 (1987):	
Dec. 3, considered and passed House.	
Dec. 11, considered and passed Senate, amended.	
Dec. 21, House and Senate agreed to conference report.	
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 23 (1987):	
Dec. 22, Presidential remarks.	

Appendix B: Pertinent Laws, Policies, and Procedures

Federal Laws Applicable to the National Park System

Abandoned Shipwreck Act of 1987
 Acid Precipitation Act of 1980
 Act amending the act of October 2, 1968
 (commonly called the Redwoods Act)
 Act of August 8, 1953
 Act of February 21, 1925
 Act of June 30, 1864
 Act of June 5, 1920
 Act of March 1, 1872
 Act of May 26, 1930
 Administrative Dispute Resolution Act
 Administrative Procedures Act
 Airport and Airway Development Act of 1970
 Airports In or Near National Parks Act
 Alternative Dispute Resolution Act
 American Folklife Preservation Act of 1976
 American Indian Religious Freedom Act
 Americans with Disabilities Act of 1990
 Antiquities Act of 1906
 Archeological and Historic
 Preservation Act of 1974
 Archeological Resources Protection Act of 1979
 Architectural Barriers Act of 1968
 Arizona Desert Wilderness Act (contains NPS
 boundary study provisions)
 Clean Air Act
 Coastal Barrier Resources Act
 Coastal Zone Management Act of 1972
 Comprehensive Environmental Response
 Compensation and Liability Act (commonly
 referred to as CERCLA or the Superfund Act)
 Department of Transportation Act of 1966

Disposal of Materials on Public Lands (Material
 Act of 1947)
 Emergency Planning and Community Right-to-
 Know Act of 1986
 Endangered Species Act of 1973
 Endangered Species Conservation Act of 1969
 Energy Independence and Security Act of 2007
 Energy Policy Act of 2005
 Energy Supply and Environmental
 Coordination Act of 1974
 Estuary Protection Act
 Farmland Protection Policy Act
 Federal Advisory Committee Act
 Federal Aviation Act of 1958
 Federal Cave Resources Protection Act of 1988
 Federal Insecticide, Fungicide, and
 Rodenticide Act
 Federal Land Policy and Management Act
 Federal Noxious Weed Act of 1974
 Federal Power Act of 1920
 Federal Water Pollution Control Act (commonly
 referred to as Clean Water Act)
 Federal Water Project Recreation Act
 Fish and Wildlife Coordination Act
 Flood Disaster Protection Act of 1973
 Food Security Act of 1985 (Sodbuster Law)
 Forest and Rangeland Renewable Resources
 Planning Act of 1974
 Freedom of Information Act
 General Authorities Act, October 7, 1976
 General Mining Act of 1872
 Geothermal Steam Act Amendments
 Geothermal Steam Act of 1970
 Historic Sites Act of 1935
 Intergovernmental Cooperation Act of 1968
 Lacey Act of 1900
 Land and Water Conservation Fund Act of 1965
 Magnuson-Stevens Fishery Conservation and
 Management Act
 Management of Museum Properties Act of 1955
 Marine Mammal Protection Act of 1972

Marine Protection, Research, and Sanctuaries
 Act of 1972 (commonly known as Ocean
 Dumping Act)
 Migratory Bird Conservation Act
 Migratory Bird Treaty Act
 Mineral Leasing Act for Acquired Lands
 Mineral Leasing Act of 1920 (commonly referred
 to as Mineral Leasing Act or Mineral Lands
 Leasing Act)
 Mining in the Parks Act
 Native American Graves and
 Repatriation Act of 1990
 National Environmental Policy Act of 1969
 National Flood Insurance Act of 1968
 National Historic Preservation Act
 National Invasive Species Act of 1996
 National Park Service Concession Management
 Improvement Act of 1998
 National Park Service Omnibus
 Management Act of 1998
 National Park System Concessions Policy Act
 National Park System General Authorities Act (Act
 to Improve the Administration of the National
 Park System), August 18, 1970
 National Park System New Areas Studies Act
 National Parks Air Tour Management Act of 2000
 National Parks and Recreation Act,
 November 10, 1978
 National Parks Overflights Act of 1987
 National Trails System Act
 National Trust Act of 1949
 National Wildlife Refuge System
 Administration Act of 1966
 Native American Grave Protection and
 Repatriation Act
 Negotiated Rulemaking Act of 1990
 Noise Control Act of 1972
 NPS Organic Act
 Outdoor Recreation Coordination Act of 1963
 Outer Continental Shelf Lands Act
 Park System Resource Protection Act
 Parks, Parkways, and Recreational Programs Act

Payment in Lieu of Taxes Act
Public Buildings Cooperative Use Act of 1976
Rehabilitation Act of 1973
Reorganization Act of March 3, 1933
Reservoir Salvage Act of 1960
Resource Conservation and Recovery Act of 1976
Revised Statute 2477, Right-of-Way across
Public Lands
Rivers and Harbors Appropriation Act of 1899
Safe Drinking Water Act
Soil and Water Resources
Conservation Act of 1977
Surface Mining Control and
Reclamation Act of 1977
Surface Resources Use Act of 1955
Surface Transportation Assistance Act of 1982
Tax Reform Act of 1976
Telecommunications Act of 1996
Toxic Substances Control Act
Uniform Relocation Assistance and Real Property
Acquisition Policies Act of 1970
Water Resources Planning Act of 1965
Watershed Protection and Flood Prevention Act
Wild and Scenic Rivers Act
Wilderness Act
Wildfire Disaster Recovery Act of 1989

Executive Orders Applicable to the National Park System

Executive Order 11514: Protection and
Enhancement of Environmental Quality
Executive Order 11593: Protection and
Enhancement of the Cultural Environment
Executive Order 11644
Executive Order 11987: Exotic Organisms, 42 FR
26949, Revoked by Executive Order 13112
Executive Order 11988: Floodplain Management

Executive Order 11989 (42 FR 26959) and
11644 (37 FR 2877): Offroad Vehicles
on Public Lands
Executive Order 11990:
Protection of Wetlands
Executive Order 12003: Energy Policy and
Conservation
Executive Order 12088: Federal Compliance with
Pollution Control Standards
Executive Order 12372: Intergovernmental Review
of Federal Programs
Executive Order 12873: Federal Acquisition,
Recycling, and Waste Prevention
Executive Order 12898: General Actions to Address
Environmental Justice in Minority Populations
and Low-Income Populations
Executive Order 12902: Energy Efficiency and
Water Conservation at Federal Facilities
Executive Order 13006: Locating Federal
Facilities on Historic Properties in our Nation's
Central Cities
Executive Order 13007: Indian Sacred Sites
Executive Order 13089: Coral Reef Protection
Executive Order 13112: Invasive Species.
Executive Order 13158: Marine Protected Areas
Executive Order 13175: Consultation and
Coordination with Indian Tribal Governments
Executive Order 13186: Responsibilities of Federal
Agencies to Protect Migratory Birds
Executive Order 13352: Facilitation of Cooperative
Conservation
Executive Order 13423: Strengthening
Federal Environmental, Energy, and
Transportation Management
Executive Order 13514: Federal Leadership
in Environmental, Energy, and
Economic Performance
Executive Order 13547: Stewardship of Our
Oceans, Coasts, and Great Lakes

Policies and Procedures Applicable to the National Park System

Analysis of Impacts on Prime or Unique
Agricultural Lands in Implementing the
National Environmental Policy Act
Code of Federal Regulations
Department of the Interior Secretarial Orders
Federal Wildland Fire Management Policy, 2001
Historic Preservation Certifications Pursuant to
the Tax Reform Act of 1976, the Revenue Act of
1978, the Tax Treatment Extension Act of 1980,
and the Economic Recovery Tax Act of 1981
National Park Service Director's Orders
National Park Service Management Policies 2006
Policies on Construction of Family Housing for
Government Personnel
Procedures for Interagency Consultation to Avoid
or Mitigate Adverse Effects on Rivers in the
Nationwide Inventory

State of Hawai'i Land Use Regulations

Land Use Law
Hawai'i Environmental Impact Statement Law,
Chapter 343, Hawai'i Revised Statutes
Hawai'i Coastal Zone Management Act of 1977

Appendix C: Desired Conditions from Law and Policy

The desired conditions described in this section provide the broadest level of direction for management of Kalaupapa National Historical Park and are based on federal laws, executive orders, and NPS management policies.

To understand the implications of the actions described in the alternatives, it is important to describe the laws and policies that underlie the management actions. Many park management directives are required based on law and/or policy and are therefore are not subject to alternative approaches. A GMP is not needed to decide, for instance, that it is appropriate to protect endangered species, control nonnative invasive species, protect archeological sites, conserve artifacts, or provide for universal access—laws and policies already require the NPS to fulfill these mandates. The NPS would continue to implement these requirements with or without a new general management plan.

The National Park System General Authorities Act affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one National Park System as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Further, the Redwood Act of 1978 states that NPS management of park units should not “derogate[e]... the purposes and values for which these various areas have been established.” The NPS has established policies for all units under its stewardship that are explained in a guidance manual: NPS Management Policies 2006. The alternatives considered in this document incorporate and comply with the provisions of these laws and policies.

The following tables show the most pertinent laws and policies related to planning and managing Kalaupapa National Historical Park. For each topic there are a series of desired conditions required by law and policy that Kalaupapa NHP would continue to work toward under all of the alternatives presented in this general management plan/environmental impact statement (GMP/EIS). The alternatives therefore address the desired future conditions that are not mandated by law and policy and that are appropriate to determine through a planning process. The tables cite the law or policy behind these desired conditions, and give examples of the types of actions being pursued by the NPS at Kalaupapa.



Kalaupapa Settlement, looking east from offshore. Photo courtesy of Damien Museum Archives.

Cultural Resources: Servicewide Laws, Policies and Desired Conditions

Archeological Resources	
Policy Guidance/ Sources: Antiquities Act, 1906 Historic Sites Act, 1935 National Historic Preservation Act, 1966 Protection and Enhancement of the Cultural Environment (Executive Order 11593, 1971) Archeological Resources Protection Act, 1979 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, 1983 Curation of Federally Owned and Administered Archaeological Collections (36 CFR 79, 1990) NPS Cultural Resource Management Guideline (Director's Order 28, 1996) Protection of Historic Properties (36 CFR 800, 2004) NPS Management Policies 2006 State of Hawai'i Revised Statutes Chapter 6E, Historic Preservation	Desired Conditions: <ul style="list-style-type: none"> • Archeological sites are identified and inventoried, their significance is evaluated and documented, and they are in good condition. • Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance is unavoidable or that ground disturbing research or stabilization is desirable. • When disturbance or deterioration of an eligible property is unavoidable, the site is professionally documented and excavated, and the resulting artifacts, materials, and records are curated and conserved in consultation with the state historic preservation division, resident patient community, and Native Hawaiian organizations. • Some archeological sites that can be adequately protected may be interpreted to the visitor. • Archeological site baseline data are documented and available for park staff. Site conditions are monitored to record changes in resource conditions as a result of environmental conditions or visitor use impacts. • To the extent feasible, archeological resources degraded from environmental conditions and visitor impacts are mitigated through data recovery or other appropriate site treatment techniques. • Archeological resources threatened by project development are mitigated first through avoidance or secondly through other preservation strategies such as data recovery. • Significant archeological sites are nominated for listing in the National Register of Historic Places either individually or in districts. Management Direction/Strategies: <ul style="list-style-type: none"> • Continue the process of parkwide archeological survey and inventory until all archeological resources have been identified, documented, and evaluated. • Qualified individuals and organizations conduct archeological fieldwork and research in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. • Curate archeological collections in accordance with federal standards. • Record all archeological sites, including new discoveries, in the Archeological Sites Management Information System. • Monitor all archeological sites on a regular basis and record their current conditions in the Archeological Sites Management Information System. • Regularly update archeological baseline documents including but not limited to GIS base maps and the archeological overview and assessment. • Protect archeological site locations and other sensitive archeological information and keep confidential as required or appropriate. • Educate visitors on regulations governing protection and conservation of archeological resources. • Partner with colleges, universities, and other appropriate organizations to encourage preservation and appropriate research for the public benefit.

Cultural Landscapes	
<p>Policy Guidance/ Sources:</p> <p>Antiquities Act, 1906</p> <p>Historic Sites Act, 1935</p> <p>National Historic Preservation Act, 1966</p> <p>Protection and Enhancement of the Cultural Environment (Executive Order 11593, 1971)</p> <p>Advisory Council on Historic Preservation's implementing regulations regarding the Protection of Historic Properties (36 CFR 800, 2004)</p> <p>Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, 1996</p> <p>NPS Cultural Resource Management Guideline (Director's Order 28, 1996)</p> <p>NPS Management Policies 2006</p> <p>State of Hawai'i Revised Statutes Chapter 6E, Historic Preservation</p>	<p>According to the NPS's <i>Cultural Resource Management Guideline</i> (DO-28), a cultural landscape is a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use, reflecting cultural values and traditions.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Cultural landscape inventories are conducted to identify resources potentially eligible for listing in the National Register and to assist in future management decisions for landscapes and associated resources, both cultural and natural. • The management of cultural landscapes focuses on preserving the landscape's physical attributes, biotic systems, viewshed, and use when that use contributes to its historical significance. • The preservation, rehabilitation, restoration, or reconstruction of cultural landscapes is undertaken in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties with Guideline's for the Treatment of Cultural Landscapes</i>. • The cultural landscapes of Kalaupapa NHP are managed to retain a high degree of integrity. • Identified and evaluated cultural landscapes are monitored, inspected, and managed to ensure preservation of the contributing resources, qualities, materials, and the historic character defining significance. • Actions identified in cultural landscape reports are implemented, and a record of treatment is added to the reports. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Complete a survey, inventory, and evaluation of cultural landscapes. • Assure all significant cultural landscape resources are preserved in their historic setting and larger environmental context to the degree possible. • Determine the general preservation philosophy for long term stewardship of the cultural landscape through park management plans (such as the GMP). • Prepare a cultural landscape report outlining preservation treatments for the cultural landscape holistically in compliance with the <i>Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes</i>.

Historic Structures	
Policy Guidance/ Sources: National Historic Preservation Act, 1966 Archeological and Historic Preservation Act, 1974 The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, 1983 Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995 NPS Cultural Resource Management Guideline (Director's Order 28, 1996) National Historic Lighthouse Preservation Act, 2000 NPS Management Policies 2006 Programmatic Agreement among the NPS, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, 2008 State of Hawai'i Revised Statutes Chapter 6E, Historic Preservation	<p>The National Historic Preservation Act calls for analyzing the effects of possible federal actions on historic structures on, or eligible for, the National Register and for inventorying and evaluating their significance and condition. NPS <i>Management Policies 2006</i> (§5.3.5.4) calls for the treatment of historic structures, including prehistoric ones, to be based on sound preservation practice to enable the long-term preservation of a structure's historic features, materials, and qualities.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Historic structures are inventoried and their significance and integrity are evaluated. • The qualities that contribute to the listing or eligibility for listing of historic structures on the national register are protected in accordance with the <i>Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties</i>. • Historic structure reports are prepared and existing reports amended as needed. Actions identified in historic structure reports are implemented and a record of treatment added to the reports. • Identified and evaluated historic structures are monitored, inspected and managed to ensure long-term preservation. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Employ the comprehensive maintenance, protection and preservation measures in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. For properties lacking specific plans, preservation actions would be based on the Secretary of the Interior Standards and NPS policy and guidelines for stabilization of historic resources. • Treat all historic structures as eligible for listing on the National Register of Historic Places pending formal determination by the NPS and State of Hawai'i Historic Preservation Division. • Create design guidelines and/or historic structure reports for primary building types in Kalaupapa NHP to preserve the architectural characteristics and character-defining features of the buildings. Assure the siting and design for new structures within the NHL are reviewed to assure compliance with the <i>Secretary of the Interior Standards for Treatment of Historic Properties</i>. • Address recurring maintenance activities for significant historic buildings to assure structures remain stable and in good condition. • Document the history of individual buildings through physical investigations, oral histories of individuals, groups, and others who have ties to the park. • Consult with the State of Hawai'i Historic Preservation Division and the Advisory Council for Historic Preservation (as appropriate) before modifying any historic structure listed in the National Register of Historic Places or the updated NHL nomination form.

Museum Collections	
<p>Policy Guidance/ Sources:</p> <p>Antiquities Act, 1906</p> <p>Historic Sites Act, 1935</p> <p>Management of Museum Properties Act, 1955</p> <p>National Historic Preservation Act, 1966</p> <p>Archeological and Historic Preservation Act, 1974</p> <p>American Indian Religious Freedom Act, 1978</p> <p>Archaeological Resources Protection Act, 1979</p> <p>Native American Graves Protection and Repatriation Act, 1990</p> <p>Curation of Federally Owned and Administered Archeological Collections (36 CFR 79, 1990)</p> <p>NPS Cultural Resource Management Guideline (Director's Order 28, 1996)</p> <p>NPS Management Policies 2006</p> <p>NPS Museum Collections Management (Director's Order 24, 2008)</p> <p>NPS Museum Handbook</p> <p>Programmatic Agreement among the NPS, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, 2008</p> <p>State of Hawai'i Revised Statutes Chapter 6E, Historic Preservation</p>	<p>NPS <i>Management Policies 2006</i> (§5.3.5.5) states that the NPS "...will collect, protect, preserve, provide access to, and use objects, specimens, and archival and manuscript collections...in the disciplines of archeology, ethnography, history, biology, geology, and paleontology to aid understanding among park visitors, and to advance knowledge in the humanities and sciences."</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • All museum collections (objects, specimens, and manuscript collections) are identified and inventoried, catalogued, documented, preserved, protected, and available for access and use for research, interpretation, and exhibits, subject to appropriate limitations, such as for preservation or restricted information. • The qualities that contribute to the significance of collections are protected in accordance with established standards. • Research and development projects include plans for the curation of collected objects and specimens. • Kalaupapa NHP's museum collections are housed in appropriate facilities that provide protection for current collections and allow for future collection expansion. • Museum collections provide documentation of Kalaupapa NHP's cultural and natural resources. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Continue to ensure adequate conditions for the climate control of collections and means for fire detection and suppression, integrated pest management, and research and interpretation access are maintained. • Inventory and catalog all park museum collections in accordance with standards in the NPS Museum Handbook. • Develop and implement a collection management program according to NPS standards to guide the protection, conservation, and use of museum objects. • Develop documentation for all specimens in the cultural and natural resource collections. • Ensure that the qualities that contribute to the significance of collections are protected and preserved in accordance with established NPS museum curation and storage standards. • Maintain a curator-of-record.

Values, Traditions, and Practices of Traditionally Associated Peoples (also referred to as ethnographic resources)	
Policy Guidance/ Sources: Antiquities Act, 1906 National Historic Preservation Act, 1966 National Environmental Policy Act, 1969 American Indian Religious Freedom Act, 1978 Archaeological Resources Protection Act, 1979 Native American Graves and Repatriation Act, 1990 Public Access Shoreline Hawai'i (PASH) 1995 NPS Cultural Resource Management Guideline (Director's Order 28, 1996) NPS Management Policies 2006 Nationwide Programmatic Agreement for Section 106 of the National Historic Preservation Act, 2008 State of Hawai'i Revised Statutes Chapter 6E, Historic Preservation	<p>As defined in NPS <i>Management Policies 2006</i>, ethnographic resources are objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Place based values, traditions, and practices of traditionally associated peoples can be eligible for the National Register of Historic Places as part of traditional cultural properties. Traditionally associated peoples are social/cultural entities such as tribes, communities, and kinship units, as well as park neighbors, traditional residents, and former residents who remain attached to a park area despite having relocated, are “traditionally associated” with a particular park when (1) the entity regards park resources as essential to its development and continued identity as a culturally distinct people; (2) the association has endured for at least two generations (40 years); and (3) the association began prior to establishment of the park.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Appropriate cultural anthropological research is conducted in consultation with groups traditionally associated with Kalaupapa NHP. • To the extent practicable, permitted by law, and consistent with essential agency functions, the NPS accommodates traditionally associated peoples (including but not limited to: patients, kōkua, ‘ohana, and native Hawaiians) access to significant sites, features, objects, and natural resources, and avoids adversely affecting the physical integrity of these resources. • Traditionally associated peoples linked by ties of kinship or culture to ethnically identifiable human remains, sacred objects, objects of cultural patrimony, and associated funerary objects are consulted when such items may be disturbed or are encountered on park lands. • All traditional cultural properties determined eligible for listing or listed in the National Register of Historic Places are protected. If disturbance of such resources is unavoidable, formal consultation with the State of Hawai'i Historic Preservation Division, the Advisory Council on Historic Preservation, the Patients Advisory Council, and patients, kōkua, ‘ohana, and native Hawaiian groups as appropriate, is conducted. • The identities of community consultants and information about sacred and other culturally sensitive places and practices are kept confidential according to protocols established in consultation with the affected groups. • Potentially sensitive natural and cultural resources and traditional cultural properties (traditional cultural properties eligible for the National Register of Historic Places) are identified, recorded, and evaluated through consultation with affected groups. The integrity of traditional cultural properties is preserved and protected. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Survey and inventory practices and traditions to assess their significance to traditionally associated people and groups. This could be done in the framework of a potential traditional cultural property. • Treat all traditional cultural properties as eligible for listing in the National Register of Historic Places pending a formal determination by the NPS. <p><i>(continued on next page)</i></p>

Values, Traditions, and Practices of Traditionally Associated Peoples (also referred to as ethnographic resources) <i>(continued)</i>	
	<p>Management Direction/Strategies <i>(continued)</i>:</p> <ul style="list-style-type: none"> • As possible under laws and regulations, allow for continued access to and use of resources and areas essential to the survival of family, community, or regional cultural practices. • Exercise reasonable control over the times when and places where specific groups are provided exclusive access to particular areas of the park. • Allow for consumptive use of park resources as provided for in regulations published at 36 CFR 2.1. These regulations allow superintendents to designate certain fruits, berries, nuts, or unoccupied seashells which may be gathered by hand for personal use or consumption if it will not adversely affect park wildlife or the reproductive potential of a plant species, or otherwise adversely affect park resources. • Protect sacred resources to the extent practicable. • Restrict information about the location and character of sacred sites from the public, if disclosure will cause effects, such as invasion of privacy, risk harm to the resource, or impede the use of a traditional religious site by practitioners. • Develop a record about such places in consultation with appropriate groups, and identify any treatments preferred by the groups. This information will alert superintendents and planners to the potential presence of sensitive areas, and will be kept confidential to the extent permitted by law. • Collaborate with affected groups to prepare mutually agreeable strategies for providing access to locales, and for enhancing the likelihood of privacy during religious ceremonies or important cultural events. Any strategies that are developed must comply with constitutional and other legal requirements. • Make accommodations for access to, and the use of, sacred places when interest is expressed by traditionally associated peoples who have a long standing connection and identity with Kalaupapa. • Continue to encourage the employment of native Hawaiians in the NPS to improve communications and working relationships and encourage cultural diversity in the workplace.

Natural Resources: Servicewide Laws, Policies and Desired Conditions

Air Quality	
Policy Guidance/ Sources: Clean Air Act, 1970 Natural Resource Management Guidelines (Reference Manual 77, 1991) NPS Management Policies 2006	<p>Kalaupapa NHP is a Class I air quality area under the Clean Air Act. Class I areas are afforded the highest degree of protection under the Clean Air Act. This designation allows very little additional deterioration of air quality.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Air quality in the park meets national ambient air quality standards for specified pollutants. The park's air quality is maintained or enhanced with no significant deterioration. • Nearly unimpaired views of the landscape both within and outside the park are present. • Scenic views are substantially unimpaired (as meant by the Clean Air Act). • Kalaupapa NHP management and visitor service activities promote preservation of excellent air quality, including healthful indoor air quality in NPS and concession facilities. • Air quality monitoring within or near Kalaupapa NHP is able to verify whether trends are improving or deteriorating, and whether Class I air quality standards are met within Kalaupapa NHP. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Cooperate with the Hawai'i Department of Land and Natural Resources and the U.S. Environmental Protection Agency to monitor air quality and ensure that park actions do not impair air quality. (Note: The NPS has very little direct control over air quality in the airshed encompassing the national historical park.) • Inventory the air quality-related values (AQRVs) associated with the national historical park. Establish baseline conditions and monitor native plants or other species that may be sensitive indicators of air pollution. • Minimize air pollution emissions associated with park operations, including the use of prescribed fire, management practices, and visitor use activities. • Conduct park operations in compliance with federal, state, and local air quality regulations. • Ensure healthy indoor air quality at NPS facilities. • Participate in federal, regional, and local air pollution control plans and drafting of regulations and review permit applications for major new air pollution sources. • Develop educational programs to inform visitors and regional residents about the threats of air pollution. • Participate in research on air quality and effects of air pollution. Determine changes in ecosystem function caused by atmospheric deposition and assess the resistance and resilience of native ecosystems in the face of these external perturbations.

Ecosystem Communities and Processes	
Policy Guidance/ Sources: Lacey Act, 1900 Endangered Species Act, 1973 Federal Noxious Weed Act, 1974 Natural Resource Management Guidelines (Reference Manual 77, 1991) National Invasive Species Act, 1996 Invasive Species, Executive Order 13112, 1999 NPS Management Policies 2006	Desired Conditions: <ul style="list-style-type: none"> • Kalaupapa NHP is managed holistically, as part of a greater ecological, social, economic, and cultural system. • Managers seek to maintain all components and processes of naturally evolving park ecosystems. Natural disturbance and change are recognized as an integral part of the functioning of natural systems. • Natural abundance, diversity, dynamics, distribution, and habitat of native plant and animal populations are preserved and restored. • Potential threats to the park's native plants and wildlife are identified early and proactively addressed through mitigation measures. • Sources of air, water, and noise pollution and visitor uses adversely affecting plants and animals are limited to the greatest degree possible. • In collaboration with landowners inside and outside Kalaupapa NHP, watersheds within and adjacent to the park are protected. • Visitors and staff recognize and understand the value of the park's native plants and wildlife and the role that surrounding landscapes play in habitat connectivity. • NPS staff uses the best available scientific information and technology to manage these resources. • State and federally listed threatened and endangered species and their habitats that are critical to maintain ecosystem processes are protected and sustained. NPS staff prevents the introduction of nonnative species and provides for their control to minimize the economic, ecological, and human health impacts that these species cause. Management Direction/Strategies: <ul style="list-style-type: none"> • Continue to inventory and monitor plants and animals in the park. Collected data will be used to monitor the distribution, abundance, and condition of selected species, including indicators of ecosystem condition and diversity, rare and protected species, and nonnative species. Management plans will be modified to be more effective, based on the results of monitoring. • Participate in regional ecosystem efforts and develop methods to restore native species and ecosystem processes. • Support research that contributes to management of ecosystem processes. • Minimize and mitigate negative human impacts on native plants, animals, and ecosystem processes. • Rely upon natural processes whenever possible to maintain native plant and animal species and to influence natural fluctuations in populations of these species. • Protect a full range of genetic types (genotypes) of native plant and animal populations in the park by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity. • Manage populations of exotic plant and animal species using integrated pest management techniques, up to and including eradication, when control is prudent and feasible. • Work cooperatively with other public and private land managers to conserve open space connectivity and native species, both common and rare. Work cooperatively with park neighbors regarding best management practices inside and outside the park to conserve native species and habitats. • Avoid, minimize, or otherwise mitigate any potential impacts on state or federally listed species. Should it be determined through informal consultation that an action might adversely affect a federally listed or proposed species, NPS staff would initiate formal consultation with the U.S. Fish and Wildlife Service or NOAA under Section 7 of the Endangered Species Act. • Provide interpretive and educational programs about the preservation of native species, ecosystem processes, "ecological services," and methods to sustain these.

Fire Management	
Policy Guidance/ Sources: Wilderness Preservation and Management (Director's Order 41, 1999) Federal Wildland Fire Management Policy, 2001 NPS Management Policies 2006 Wildland Fire Management (Director's Order 18 and Reference Manual 18, 2008)	Desired Conditions: <ul style="list-style-type: none"> • Fire management programs are designed to meet resource management objectives prescribed for the various areas of Kalaupapa NHP and to ensure that the safety of firefighters, patient community, staff, and the public is not compromised. • All wildland fires are effectively managed, considering resource values to be protected and firefighter and public safety, using the full range of strategic and tactical operations as described in an approved fire management plan. • Natural fire regimes are restored and maintained, but will be modified to comply with air quality regulations, and/or to protect listed species, cultural resources, and the safety of life and property. • The best available technology and scientific information are used to manage fire within Kalaupapa NHP, to conduct routine monitoring to determine if objectives are met, and to evaluate and improve the fire management program. • Kalaupapa NHP managers develop a comprehensive cross-boundary fire management plan with adjacent land managers, recognizing fire as a natural process that does not acknowledge administrative boundaries. • Other fire management program goals and objectives from the 2011 fire management plan for Kalaupapa NHP include enhancing the firebreak around the settlement of Kalaupapa and utilizing strategically arranged areas of fuel reduction to reduce fire hazard across the peninsula and within the settlement. Management Direction/Strategies: <ul style="list-style-type: none"> • Maintain a current fire management plan to reflect the most recent fire policy, managed fire applications, and the body of knowledge on fire effects within the unit's vegetation types. • Maintain cooperative agreements for fire suppression with appropriate federal, state, and local agencies and organizations. • Monitor individual prescribed fires to provide information on whether specific objectives regarding smoke behavior, fire effects, etc. are met. • Conduct fire history research and other studies to describe Kalaupapa NHP's natural fire regime. • Conduct research and monitor the effects of fires in Kalaupapa NHP to ensure that long-term resource objectives are met. • Controlled burns are used as possible and appropriate to reduce invasive vegetation and reestablish native communities. • Fire protection zones are established to create defensible space around primary historic structures.

Geologic and Soil Resources	
Policy Guidance/ Sources: Mining in the Parks Act, 1976 Federal Cave Resources Protection Act, 1988 Natural Resource Management Guidelines (Reference Manual 77, 1991) NPS Management Policies 2006	Desired Conditions: <ul style="list-style-type: none"> • The national historical park’s geologic and soil resources are preserved and protected as integral components of its natural systems. Natural geological processes are unimpeded. • The NPS actively seeks to understand and preserve the soil resources of Kalaupapa NHP, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or the soil’s contamination of other resources. Management Direction/Strategies: <ul style="list-style-type: none"> • Assess the impacts of natural processes and human-related events on geologic resources. • Integrate geologic resource management into NPS operations and planning to maintain and restore the integrity of geologic resources. • Develop programs to educate visitors about geologic resources. • Update geologic interpretations of localities that are the subject of interpretive venues. • Collect baseline information on surficial geology. • Partner with the U.S. Geological Survey (USGS) and others to inventory geologic resources, conduct research, and identify and monitor geologic hazards. • Update geologic map of Kalaupapa National Historical Park in digital format that can be used in GIS applications. • Update geologic history of the peninsula using modern theory and techniques.
Lightscape Management/ Dark Night Sky	
Policy Guidance/ Sources: NPS Management Policies 2006 Clean Air Act, 1970 (air quality related value) The Green Parks Plan, Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings Guidance, 2011	<p>NPS <i>Management Policies 2006</i> (§4.10) recognizes that natural lightscapes are natural resources and values that exist in the absence of human-caused light. Natural lightscapes contribute to positive visitor experiences and natural resource processes. The policy further states that the NPS staff will seek to minimize the intrusion of artificial light into the night scene. In natural areas, artificial outdoor lighting will be limited to meet basic safety requirements and will be shielded when possible.</p> Desired Conditions: <ul style="list-style-type: none"> • Natural darkness and other components of the natural lightscape in Kalaupapa NHP are protected. • Artificial light sources both within and outside the national historical park does not adversely impact the natural lightscape or affect opportunities to see the night sky. Management Direction/Strategies: <ul style="list-style-type: none"> • Cooperate with visitors, neighbors, and local government agencies to find ways to prevent or minimize the intrusion of artificial light into Kalaupapa NHP. • Limit artificial lighting in the park to basic safety requirements and where possible. • Evaluate impacts on the night sky caused by park facilities. If light sources within the park are affecting night skies, alternatives such as shielding lights, redirecting lights, changing lamp types, or eliminating unnecessary light sources would be used. • Interpretive programs and materials will be provided to help visitors understand the role and value of natural lightscape.

Marine Resources	
Policy Guidance/ Sources: Rivers and Harbors Act, 1899 Clean Water Act, 1972 Coastal Zone Management Act, 1972 Hawai'i Coastal Zone Management Act, 1977 Marine Protected Areas (Executive Order 13158, 2000) Stewardship of Our Oceans, Coasts, and Great Lakes (Executive Order 13547, 2010) NPS Ocean Park Stewardship Action Plan, 2006 NPS Management Policies 2006 NPS Pacific Ocean Parks Strategic Plan, 2007	<p>Marine resources are at risk due to a variety of threats, including invasive species, excessive resource use, pollution, and changes in ocean temperature and chemistry as a result of global climate change. Coastal habitats are important for the preservation of several rare and endangered species, such as the Hawaiian monk seal, humpback whale, green sea turtle, and Hawaiian spinner dolphin, in addition to well-preserved reef communities of coral, fish, and invertebrates.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Marine resources are managed from an ecosystem perspective, considering both internal and external factors affecting visitor use, environmental quality, and resource stewardship. • Park management demonstrates leadership in resource stewardship and conservation of ecosystem values. • Management decisions about ecosystems are based on scientific information and acceptable indigenous practices. • Pollution prevention and protection of water quality to meet the needs of aquatic organisms are priorities. • Communicate an ocean stewardship message to visitors, park staff, and the public. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Develop and implement a marine management plan, which includes pollution prevention and environmental best management practices. • Through collaboration with other agencies and organizations, the park will continue to conduct and support regional baseline inventories, monitoring, and mapping of marine resources. • Park staff in collaboration with other agencies will continue to document and monitor physical processes influencing marine resources. • Park staff will identify and quantify threats to marine resources, including those associated with invasive species, resource extraction, land- and water-based activities, and climate change. • Consider the establishment of sensitive resource zones and special closure areas in consultation with DLNR, the local community, and stakeholders. The park will protect the most sensitive biological resources from disturbance. • Park staff would work to inform visitors about the value of coastal areas, preservation of marine resources, and water quality in the watershed through a variety of interpretive media to increase protection and awareness of these resources.

Soundscapes	
<p>Policy Guidance/ Sources:</p> <p>Executive memorandum signed by President Clinton on April 22, 1996</p> <p>Sound Preservation and Noise Management (Director's Order 47, 2000)</p> <p>NPS Management Policies 2006</p> <p>National Parks Air Tour Management Act, 2000</p> <p>National Parks Overflight Act of 1987</p> <p>36 CFR 2.1 -Audio Disturbance</p>	<p>An important component of NPS management is to preserve or restore the natural sounds associated with national park system units. The sounds of nature are among the intrinsic elements that combine to form the environment of national park system units. Park natural soundscape resources encompass all the natural sounds that occur in parks, including the physical capacity for transmitting those natural sounds and the interrelationships among park natural sounds of different frequencies and volumes. Natural sounds occur within and beyond the range of sounds that humans can perceive, and they can be transmitted through air, water, or solid materials.</p> <p>Cultural soundscapes are also important resources and values in many parks. The NPS protects opportunities for appropriate transmission of cultural and historic sounds that are fundamental to the purposes and values of the park.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • The NPS preserves the natural ambient soundscapes, restores degraded soundscapes to the natural ambient condition wherever possible. • The NPS protects natural soundscapes from degradation due to noise. • Noise from park operations or recreational uses is minimized using the best available technology and methods to provide a high-quality visitor experience and protect biological resources and processes that involve natural sounds (for example species that use sound to attract mates, protect territories, locate prey, navigate, or avoid predators). • Visitors have opportunities to experience and understand natural soundscapes. • The soundscape contributes to a contemplative, reverent, and reflective setting at Kalaupapa. • Kalaupapa NHP maintains a library of baseline ambient sound levels and, as feasible, monitors key locations for maintaining natural soundscapes. • Ecological interactions that depend upon or are affected by sound are protected. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Take actions to monitor and minimize or prevent unnatural sounds that adversely affect park resources and values, including visitors' enjoyment. • Require NPS staff, concessioners, and contractors to comply with measures designed to reduce noise levels. • Consider noise in the procurement and use of equipment within the national historical park. • Consult and make recommendations to the Federal Aviation Administration regarding any proposed changes to current Air Tour regulations designed to protect privacy of patient community at Kalaupapa. • Monitor and ensure compliance with Programmatic Agreement with Marines that restricts any increase in 2012 levels of military air flight training exercises at the Kalaupapa Airport. • Encourage visitors to respect the sacredness and spirituality of Kalaupapa by reducing unnecessary noise. • Provide interpretive programs and materials to help visitors understand the role and value of natural soundscapes.

Scenic Resources	
Policy Guidance/ Sources: NPS Organic Act, 1916 NPS Management Policies, 2006	Desired Conditions: <ul style="list-style-type: none"> • The scenic views at Kalaupapa NHP continue to stir imaginations, inspire, and provide opportunities for visitors to understand, appreciate, and forge personal connections to the peninsula. • Intrinsically important scenic vistas and scenic features are not significantly diminished by development. Management Direction/Strategies: <ul style="list-style-type: none"> • Park operations and projects will preserve scenic viewsheds and scenic vistas. • NPS staff will work with adjacent and nearby landowners to minimize any visual impacts from nearby developments and to ensure that developments do not encroach on Kalaupapa NHP.
Water Resources	
Policy Guidance/ Sources: Rivers and Harbors Act, 1899 Protection and Enhancement of Environmental Quality (Executive Order 11514, 1970) Clean Water Act, 1972 Federal Compliance with Pollution Control Standards (Executive Order 12088, 1978) Natural Resource Management Guidelines (Reference Manual 77, 1991) NPS Management Policies 2006	<p>NPS <i>Management Policies 2006</i> (§4.6.1, 4.6.2) calls for the NPS to perpetuate surface and groundwater as integral components of park aquatic and terrestrial ecosystems. “Natural Resource Management Reference Manual #77” provides further direction on the management of water quantity in parks, stating the NPS will manage and use water to protect resources, accommodate visitors, and administer park units within legal mandates. The Clean Water Act strives to restore and maintain the integrity of U.S. waters, which includes waters found in national parks.</p> Desired Conditions: <ul style="list-style-type: none"> • Surface water and groundwater are protected, and water quality meets or exceeds all applicable water quality standards. • NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface water and groundwater. • Water resources in Kalaupapa NHP meet or exceed all federal and state water quality standards for temperature, bacteria, dissolved oxygen, turbidity, toxic substances, pH, and nutrients. • Pollution prevention and protection of water quality to meet the needs of freshwater and marine aquatic organisms are priorities. Management Direction/Strategies: <ul style="list-style-type: none"> • Develop and implement an environmental management plan, which includes pollution prevention and environmental best management practices. • Promote water conservation by the NPS, partners, visitors, and park neighbors. • Apply best management practices to reduce pollution-generating activities and facilities in Kalaupapa NHP. • Minimize the use of pesticides, fertilizers, and other chemicals, and manage them in keeping with NPS policy and federal regulations. • Manage stormwater runoff appropriately. • Promote greater public understanding of water resource issues at Kalaupapa NHP and encourage public support for and participation in protecting watersheds.

Wetlands	
<p>Policy Guidance/ Sources:</p> <p>Rivers and Harbors Act, 1899</p> <p>Protection and Enhancement of Environmental Quality (Executive Order 11514, 1970)</p> <p>Clean Water Act, 1972</p> <p>Protection of Wetlands (Executive Order 11990, 1977)</p> <p>Natural Resource Management Guidelines (Reference Manual 77, 1991)</p> <p>Wetland Protection (Director's Order 77-1 and accompanying procedural manual, 2002)</p> <p>NPS Management Policies 2006</p>	<p>Desired Conditions:</p> <ul style="list-style-type: none"> • Natural and beneficial conditions of wetlands are preserved and enhanced. • The NPS implements a “no net loss of wetlands” policy and strives to achieve a longer-term goal of net gain of wetlands across the national park system through the restoration of previously degraded wetlands. • To the extent possible, the NPS avoids long- and short-term adverse impacts associated with the destruction or modification of wetlands, and avoids direct or indirect construction in wetlands wherever there is a practicable alternative. • The NPS compensates for remaining unavoidable adverse impacts on wetlands by restoring wetlands that have been previously degraded. • Species that depend upon wetland habitats occur in sustainable numbers. • Park visitors have the opportunity to learn about and understand the unique services and functions provided by wetlands. • Wetlands near developed areas remain unaffected by maintenance of park or concession facilities or management or recreational activities. • Wetlands adversely affected by prior human activity are restored where feasible. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Wetlands within Kalaupapa NHP are inventoried and their conditions monitored. The distinct functions they perform are identified. • Locate any new facilities if needed, or relocate existing facilities to avoid impacting wetlands if feasible. If avoiding wetlands is not feasible, undertake other actions to comply with Executive Order 11990 “Protection of Wetlands,” the Clean Water Act, and Director’s Order 77-1 “Wetland Protection,” such as compensation. • Prepare a statement of findings if proposed actions would result in adverse impacts on wetlands, including an analysis of alternatives, delineation of the wetland, a wetland restoration plan, mitigation, and a functional analysis of the impact site and restoration sites. • Restore degraded wetlands by removing invasive species and obstructions to natural water movements. • Encourage the use of wetlands for educational and scientific purposes that do not disrupt natural wetland functions. • Participate in collaborative planning efforts with adjacent land managers and other associated groups to protect and restore wetlands within and outside the boundaries through cooperative conservation strategies.

Wild and Scenic Rivers, Rivers, and Floodplains	
Policy Guidance/ Sources: Wild and Scenic Rivers Act of 1968 Executive Order 11988, “Floodplain Management” NPS Director’s Order 77-2 NPS Management Policies 2006	<p>The Wild and Scenic Rivers Act (Act), passed in 1968, protects the free-flowing waters of many of our nation’s greatest rivers, while also recognizing the potential for appropriate use and development. The Act ensures the public’s enjoyment of the river and its resources for present and future generations. Floodplains are protected and managed in accordance with Executive Order 11988 “Floodplain Management,” NPS Director’s Order 77-2 and its accompanying procedural manual, and NPS <i>Management Policies 2006</i> (§4.6.4).</p> <p>Desired Conditions: Management actions and visitor uses do no inhibit the natural free flowing conditions of rivers and streams.</p> <ul style="list-style-type: none"> • When it is not practicable to locate or relocate development or inappropriate human activities to a site outside the floodplain or tsunami hazard zone, the National Park Service : <ul style="list-style-type: none"> • prepares and approves a statement of findings in accordance with Director’s Order #77-2 • uses nonstructural measures as much as practicable to reduce hazards to human life and property while minimizing impacts on the natural resources of floodplains • ensures that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR 60) <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Identify 100-year and 500-year floodplains and any administrative, maintenance, operational, or visitor facilities located within them. • Develop a program to protect these facilities using the most current techniques that minimize adverse effects on aquatic and riparian habitats and fluvial processes. • Recognize that native Hawaiian archeological features, such as lo‘i, are part of the significance of stream systems. • Manage significant prehistoric and historic properties to protect cultural and scientific values and to educate visitors about the system’s cultural history. • Work with area partners, including federal, state, and county agencies, and others, to develop restoration plans for at-risk river systems. Use current technologies, over time, to restore or improve floodplain and riparian functions such as removing invasive species. • If facilities are damaged or destroyed by a hazardous or catastrophic natural event, thoroughly evaluate options for relocation or replacement at a different location. If a decision is made to relocate or replace a severely damaged or destroyed facility, it will be placed, if practicable, in an area believed to be free from natural hazards. • Prepare evacuation plans for facilities in flood or tsunami hazard areas. • Protect shoreline areas along rivers that provide spawning, feeding, and rearing habitats for fish and support rare aquatic plant species. • When emergency situations occur, consult with traditionally associated peoples of that area to evaluate the potential impact of the proposal and consider traditionally associated people’s views in the decision-making process. Protocols for consultation would be developed when needed.

Visitation: Servicewide Laws, Policies, and Desired Conditions

Visitor Experience	
<p>Policy Guidance/ Sources:</p> <p>NPS Organic Act, 1916</p> <p>Architectural Barriers Act (ABA), 1968</p> <p>Americans with Disabilities Act, 1990</p> <p>Accessibility for Visitors with Disabilities (Director's Order 42, 2000)</p> <p>Interpretation and Education (Director's Order 6, 2005)</p> <p>NPS Management Policies 2006</p> <p>Law Enforcement (Director's Order 9, 2005, Reference Manual 9, 2009)</p> <p>Programmatic Access Guidelines for NPS Interpretive Media, February 2012</p> <p>NPS Servicewide Interdisciplinary Strategic Plan for Interpretation, Education, and Volunteers, 2013-2016 (draft)</p>	<p>The NPS Organic Act, NPS General Authorities Act, and NPS <i>Management Policies</i> (2006) (§1.4, 8.1) all address the importance of national park units being available to all people to enjoy and experience. Current laws, regulations, and policies leave considerable room for judgment about the best mix of types and levels of visitor use activities, programs, and facilities. For this reason, most decisions related to visitor experience are addressed in the alternatives, however, all visitor use of the national park system must be consistent with the following guidelines.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Park resources are conserved “unimpaired” for the enjoyment of future generations. • Visitors have enjoyment opportunities that are uniquely suited and appropriate to the natural and cultural resources in the park; opportunities continue to be provided for visitors to understand, appreciate, and enjoy the park within its regional context. • Visitors have opportunities to understand and appreciate the significance of the park and its resources, and to develop a personal stewardship ethic. Interpretive and educational programs build public understanding of and support for such decisions and initiatives, for the NPS mission, and for Kalaupapa National Historical Park. • Visitors will have opportunity for participatory experiences that promote stewardship and provide relevant, inclusive, and active learning experiences. • To the extent feasible, all programs, services, and facilities in the park are accessible to and usable by all people, including those with disabilities. • For all zones or districts in Kalaupapa NHP, the types and levels of visitor use are consistent with the desired resource and visitor experience conditions prescribed for those areas. • The level and type of commercial guided activities is managed to protect resources and the visitor experience. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Provide visitors with easy access to the information they need to have a safe and enjoyable experience through information and orientation programs. • For all zones, districts, or other logical management divisions in Kalaupapa NHP, identify visitor carrying capacities for managing public use and ways to monitor for and address unacceptable impacts on resources and visitor experiences. • Provide both on- and off-site interpretive programs that are designed to encourage visitors to form their own intellectual or emotional connections with the resource. Interpretive programs facilitate a connection between the interests of visitors and the meanings of the park. • Design curriculum-based educational programs that link park themes to national standards and state curricula and involve educators in planning and development. These programs would include pre-visit and post visit materials, address different learning styles, include an evaluation mechanism, and provide learning experiences that are linked directly to clear objectives. Programs would develop a thorough understanding of a park's resources in individual, regional, national, and global contexts. • Develop interpretive media that provide visitors with relevant park information and facilitate more in-depth understanding of and personal connection with park stories and resources. This media will be continually maintained for both quality of content and condition based upon established standards. • Integrate resource issues and initiatives of local and national importance into the interpretive and educational programs. • Modifications for access are assessed in consideration to and following the Secretary of Interior's Standards for Historic Preservation. • Fully integrate programmatic and physical access to ensure equal access by people with disabilities. • Provide special, separate, or alternative facilities, programs, or services only when existing ones cannot reasonably be made accessible.

Operations: Servicewide Laws, Policies, and Desired Conditions

Climate Change, Sustainability, and Sustainable Facility Design	
Policy Guidance/ Sources: Federal Acquisition, Recycling, and Waste Prevention (Executive Order 12873, 1993) Energy Efficiency and Water Conservation at Federal Facilities (Executive Order 12902, 1994) Evaluating Climate Change Impacts in Management Planning (DOI Secretarial Order 3226, 2001) Sustainable Design and Construction Practices (Pacific West Region Directive PW-048, 2001) Energy Policy Act, 2005 NPS Management Policies 2006 Energy Independence and Security Act, 2007 Strengthening Federal Environmental, Energy, and Transportation Management (Executive Order 13423, 2007) Federal Leadership in Environmental, Energy, and Economic Performance (Executive Order 13514, 2009) <i>(continued on next page)</i>	Desired Conditions: Kalaupapa National Historical Park is managed in accordance with the nine goals articulated in the Green Parks Plan. The Green Parks Plan defines a collective vision for integrating environmental stewardship into facility management, and for educating park staff and visitors about climate change and sustainability in a manner consistent with the mission of the NPS, as well as all relevant laws, Executive Orders, and Secretarial and Director's orders. The goals are: <ol style="list-style-type: none"> 1. Environmental Compliance 2. Climate Change Mitigation and Facility Adaptation 3. Energy Management 4. Water Management 5. Fleet and Transportation Management 6. Environmental Purchasing and Waste Reduction/Management 7. Healthy Indoor Environments 8. Outdoor Environmental Quality and Sustainable Sites 9. Best Practices in Sustainable Facility Management and Use Based on the nine Green Parks Plan goals, Kalaupapa NHP would: <ul style="list-style-type: none"> • Fully embrace stewardship of Kalaupapa's natural environment through federal, DOI, and NPS policies and regulations, and educational opportunities; • Respond to the challenges of climate change by reducing CO₂ emissions within the park, protecting natural ecosystem processes to ensure ecological resilience, and mitigating impacts to coastal structures; • Strive toward energy independence; • Protect all terrestrial and coastal waters, and regulate water usage; • Greatly reduce fleet reliance on fossil fuels; • Embrace green purchasing and waste reduction; • Provide healthy indoor environments in all facilities; • Implement sustainable operations and new development planning; • Manage historic and contemporary facilities compatibly with their surrounding natural and cultural landscapes. <i>(continued on next page)</i>

Climate Change, Sustainability, and Sustainable Facility Design (<i>continued</i>)	
<p>Policy Guidance/ Sources (<i>continued</i>):</p> <p>Addressing the Impacts of Climate Change on America's Water, Land and Other Natural and Cultural Resources (DOI Secretarial Order 3289, 2009)</p> <p>NPS Climate Change Response Strategy, 2010</p> <p>The Green Parks Plan, Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings Guidance, 2011</p> <p>Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings</p> <p>General Services Administration Sustainable Design</p> <p>National Institute of Building Sciences, Whole Building Design Guide</p>	<p>Potential Management and Implementation Strategies:</p> <ul style="list-style-type: none"> • NPS would collaborate with other governmental agencies, Native Hawaiian groups, private landowners, and other organizations and individuals to protect the park and the broader natural environment. This includes conservation of species, natural communities, lands, and water quality to promote ecological resilience and biological carbon sequestration. • NPS would train staff in environmental leadership and sustainability. • NPS would model sustainable practices that lead by example, using programs, presentations, workshops, and hands-on activities. • Potential climate change impacts would be factored into all planning exercises, priority-setting for scientific research and investigations, and for natural and cultural resource activities. • NPS would monitor and document climate change parameters in the park, including meteorological and sea level changes. • The Cultural Resources program would document, protect, and potentially move or abandon architectural, archeological and other cultural resources due to climate change impacts such as sea level rise. • The Natural Resources program would monitor and document climate change impacts on species migrations and extinctions, invasive species, and species adaptations. • NPS would participate in the Climate Friendly Parks program. • NPS would strive to achieve "net zero energy" performance for the buildings and site through building retrofits, energy conservation, and the implementation of on-site renewable energy sources such as photovoltaic and wind. • By 2020, the NPS would reduce the park's carbon footprint by 20% below 2008 levels. • With park partners, the NPS would implement projects and activities that conserve and protect the streams, wetlands, coastal waters, and potable water sources of the Kalaupapa peninsula. Assess all aspects of water use, including lawns and garden irrigation, the potential use of graywater, and the use of native and climate-appropriate vegetation. • NPS would strive to minimize, and eventually eliminate, the use of fossil fuel-driven modes of transportation except for special needs equipment. • NPS would promote walking and cycling when possible. • The reduction, re-use, and recycling of materials would be promoted, while the purchase and use of materials and products that are nondurable, environmentally detrimental, or that require transportation from outside Hawai'i would be avoided whenever possible. • Through energy management, natural ventilation, and green product purchasing, the NPS would provide sustainable, healthy indoor environments for all staff, residents, and visitors. • NPS would perform value analyses and value engineering, including life cycle analyses to examine the energy, environmental, and economic implications of proposed facility changes and developments. • The adaptive re-use and rehabilitation of existing structures would be preferred over new construction. Sustainable location and site development practices for new construction would be implemented. The NPS would use best management practices to keep historic facilities harmonious with the park's historic character, compatible with natural processes, energy efficient, functional, cost-effective, and in compliance with accessibility and historic preservation laws and guidelines. • NPS would use suppliers and contractors that follow sustainable practices and promote the use of construction materials that resist insect damage and corrosion. • Provide interpretive and educational programs to park staff and visitors about climate change and NPS efforts to mitigate impacts in a sustainable manner.

Public Health and Safety	
Policy Guidance/ Sources: Federal Acquisition, Recycling, and Waste Prevention (Executive Order 12873, 1993) Energy Efficiency and Water Conservation at Federal Facilities (Executive Order 12902, 1994) OSHA Regulations (29 CFR) NPS Management Policies 2006 Emergency Medical Services (Director's Order 51, 2005 and Reference Manual 51, 2009) Hazard and Solid Waste Management (Director's Order 13A and 13B)	<p>NPS <i>Management Policies 2006</i> (§8.2.5) states that the saving of human life would take precedence over all other management actions as the NPS strives to protect human life and provide for injury-free visits.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Kalaupapa NHP and its partners, contractors, and cooperators work together to provide a safe and healthful environment for all, while applying nationally accepted standards and while recognizing that there are limitations on the NPS's capability to eliminate all hazards. • Consistent with mandates and nonimpairment, the park would reduce or remove known hazards by applying appropriate mitigation measures, such as closures, guarding, gating, education, and other actions. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • Maintain a documented safety program in the park to address health and safety concerns and to identify appropriate levels of action and activities to reduce or eliminate safety hazards. • Incorporate operational leadership strategies and concepts in to common practice to promote a safe environment. • Ensure that all potable water systems and wastewater systems in the park continue to meet state and federal requirements. • Provide interpretive signs and materials as appropriate to notify visitors of potential safety concerns, hazards and procedures; to help provide for a safe visit to the park; and to ensure visitors are aware of the possible risks of certain activities.

Relations with Private and Public Organizations, Owners of Adjacent Land, and Governmental Agencies	
Policy Guidance/ Sources: NPS Management Policies 2006	<p>The NPS <i>Management Policies 2006</i> (§1.6) stresses the need for cooperative conservation beyond park boundaries. This cooperation is necessary in order for the NPS to fulfill its mandate to preserve the park's natural and cultural resources unimpaired for future generations. Local and regional cooperation may involve other federal agencies, state, and local governments, neighboring landowners, and nongovernmental and private sector organizations.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Kalaupapa NHP is managed as part of a greater ecological, social, economic, and cultural system. • Good relations are maintained with residents and adjacent landowners, religious organizations in the park, and private and public groups that affect, and are affected by Kalaupapa NHP. • Kalaupapa NHP is managed proactively to resolve external issues and concerns and ensure that the resources and values of Kalaupapa NHP are not compromised. • Because Kalaupapa NHP is an integral part of a larger regional and islandwide environment, the NPS works cooperatively with others to anticipate, avoid, and resolve potential conflicts, protect Kalaupapa resources, and address mutual interests in the quality of life for community residents. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • NPS staff would continue to establish and foster partnerships with public and private organizations to achieve the purpose of Kalaupapa NHP. Partnerships would continue to be sought for resource protection, research, education, and visitor enjoyment purposes. • To foster a spirit of cooperation with neighbors and encourage compatible adjacent land uses, NPS staff would continue to keep landowners, land managers, local governments, and the public informed about management activities. Periodic consultations would continue with residents and landowners who might be affected by visitors and management actions. • NPS staff would continue to respond promptly to conflicts that arise over NPS activities, visitor access, and proposed activities and developments on adjacent lands that could affect Kalaupapa NHP. • NPS staff may provide technical and management assistance to landowners to address issues of mutual interest. NPS staff would continue to work closely with adjacent landowners, local, state, and federal agencies, Kalaupapa NHP Advisory Commission, and other groups whose programs affect, or are affected by, activities in Kalaupapa NHP. • NPS managers would continue to pursue cooperative regional planning whenever possible to integrate the unit into issues of islandwide concern.

Transportation to and within Kalaupapa NHP	
Policy Guidance/ Sources: NPS Management Policies 2006	<p>NPS <i>Management Policies 2006</i> (§9.2) calls for NPS managers to identify solutions to transportation issues that preserve natural and cultural resources while providing a high-quality visitor experience. Management decisions regarding transportation generally require a comprehensive alternatives analysis. The location, type, and design of multimodal transportation facilities (such as roads, bridges, parking areas, sidewalks, bikeways, and pedestrian trails) strongly influence the quality of the visitor experience and the preservation of park unit resources.</p> <p>Desired Conditions: Transportation facilities in Kalaupapa NHP preserve the integrity of the surroundings within a National Historic Landmark; respect ecological processes; protect natural, cultural, and scenic resources; and provide the highest visual quality and a rewarding visitor experience.</p> <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • NPS staff would participate in transportation studies and planning processes that may result in links to Kalaupapa NHP or impacts to resources. NPS managers would work closely with other federal agencies, state and local governments, regional planning bodies, citizen groups, and others to enhance partnering and funding opportunities, and to encourage effective regional transportation planning. • In general, the preferred modes of transportation would be those that contribute to maximum visitor enjoyment of, and minimum adverse impacts to, resources and values. Before a decision is made to design, construct, expand, or upgrade transportation access to or within Kalaupapa NHP, non-construction alternatives—such as distributing visitors to alternative locations—would be fully explored. If non-construction alternatives would not achieve satisfactory results, then a development solution should consider whether the project: <ul style="list-style-type: none"> • is appropriate and necessary to meet management needs • is designed with extreme care and sensitivity to the landscape through which it passes • would not cause adverse impacts to natural and cultural resources, and would minimize or mitigate those impacts that cannot be avoided • reduces traffic congestion, noise, air pollution, and adverse effects on resources and values • would not violate federal, state, or local air pollution control plans or regulations • would not cause use in the areas to exceed the areas' user capacity • incorporates the principles of energy conservation and sustainability • is able to demonstrate financial and operational sustainability • incorporates universal design principles to provide for accessibility for all people, including those with disabilities • takes maximum advantage of interpretive opportunities and scenic values • is based on a comprehensive and multidisciplinary approach that is fully consistent with Kalaupapa NHP's general management plan and asset management plan • enhances the visitor experience by offering new or improved interpretive or visitor opportunities, by simplifying travel within Kalaupapa NHP, or by making it safer to see features within Kalaupapa NHP.

Utilities and Communication Facilities	
<p>Policy Guidance/ Sources:</p> <p>Telecommunica- tions Act of 1996</p> <p>16 USC 5, Rights-of-Way Through Parks or Reserva- tions for Power and Com- munications Facilities</p> <p>NPS Management Policies 2006</p>	<p>The Telecommunications Act of 1996 directs all federal agencies to assist in the national goal of achieving a seamless telecom- munications system throughout the United States by accommodating requests by telecommunication companies for the use of property, rights-of-way, and easements to the extent allowable under each agency’s mission. The NPS is legally obligated to permit telecommunication infrastructure in park units if such facilities can be structured to avoid interference with park unit purposes. Rights-of-way for utilities to pass over, under, or through NPS property may be issued only pursuant to specific statutory authority, and generally only if there is no practicable alternative to such use of NPS lands. Statutory authorities in (16 USC 5) and in NPS <i>Management Policies 2006</i> (§8.6.4) provide guidance on these rights-of-way.</p> <p>Desired Conditions:</p> <ul style="list-style-type: none"> • Kalaupapa NHP resources or public enjoyment are not degraded by nonconforming uses. • Telecommunication structures are permitted in Kalaupapa NHP to the extent they do not jeopardize Kalaupapa NHP’s mission and resources. • No new nonconforming use or rights-of-way are permitted through Kalaupapa NHP without specific statutory authority and approval by the director of the NPS or his/her representative, and are permitted only if there is no practicable alternative to such use of NPS lands. <p>Management Direction/Strategies:</p> <ul style="list-style-type: none"> • NPS staff would work with service companies, local communities and the public to locate new utility lines and maintain exist- ing lines so that there is minimal effect on resources. • If necessary, and if there are no other options, new or reconstructed utilities and communications infrastructure would be placed in association with existing structures and along roadways or other established corridors in developed areas. For recon- struction or extension into undisturbed areas, routes would be selected that minimize impacts on Kalaupapa NHP’s natural, cultural, and visual resources. Utility lines would be placed underground to the maximum extent possible, away from sensi- tive resources. • NPS policies would be followed in processing applications for commercial telecommunications facilities.

Appendix D: Floodplain Statement of Findings

Floodplain Statement of Findings for the Kalaupapa National Historical Park General Management Plan (Draft)

Kalaupapa National Historical Park

Kalawao County, Molokai, Hawai‘i

Recommended:

Superintendent, Kalaupapa National Historical Park

Date

Certification of Technical Adequacy and Statewide Consistency:

Chief, Water Resources Division, National Park Service

Date

Concurrence:

Regional Safety Officer, Pacific West Region, National Park Service

Date

Approved:

Regional Director, Pacific West Region, National Park Service

Date

Introduction

The National Park Service (NPS) prepared the Floodplain Statement of Findings for the Kalaupapa National Historical Park General Management Plan in August 2012 to describe proposals to implement broad actions described in the Kalaupapa National Historical Park General Management Plan/General Plan (GMP).

Kalaupapa National Historical Park (KNHP) was established by Congress in 1980 “in order to provide for the preservation of the unique nationally and internationally significant cultural, historic, educational, and scenic resources of the Kalaupapa Settlement on the island of Molokai in the State of Hawai‘i” (Public Law 96-565). The purpose of KNHP honors the mo‘olelo (story) of the isolated Hansen’s disease (leprosy) community by preserving and interpreting its site and values. The historical park also tells the story of the rich Hawaiian culture and traditions at Kalaupapa that go back at least 900 years. This general goal is included within the GMP for Kalaupapa in the form of several objectives:

- To develop the purpose, significance, and interpretive themes;
- To describe any special mandates;
- To clearly define desired resource conditions and visitor uses and experiences;
- To provide a framework for NPS managers to use when making decisions about how to best protect KNHP’s resources, how to manage visitor use, how to provide quality visitor experiences, and what kinds of facilities, if any, are needed for management of the park;
- To ensure that this foundation and plan for decision-making has been developed in consultation with the public, interested stakeholders and adopted by the NPS leadership after an adequate analysis of the benefits, impacts, and economic costs of alternative courses of action.

The purpose of this floodplain statement of findings (SOF) is to review the GMP in sufficient detail to:

- Provide an accurate and complete description of the coastal hazards assumed by implementation of the general management plan (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

KNHP is located on the island of Molokai, which at 38 miles long, 6 to 10 miles wide, and encompassing approximately 259 square miles, is the fifth largest island in the State of Hawai‘i. The park consists of a relatively flat peninsula (the Peninsula) located 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. The National Park boundaries extend one-quarter mile offshore and include the islands of Huelo and ‘Ōkala.

KNHP’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 KNHP (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 KNHP 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.

For the purposes of the GMP and this SOF, *buildings* are defined as constructed features made to shelter some sort of human activity such as a house, barn, church, or warehouse; whereas structures are constructed features for other purposes such as fences, bridges, gravemarkers, roads, utilities or terrain modifications.

KNHP has approximately 1,500 historic buildings and structures which includes 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.

When the Kalaupapa Leprosy Settlement historic district was declared a National Historical Landmark (NHL) in 1976, over 400 buildings stood in the area. Upon establishment of KNHP in 1980, the NPS completed an inventory of the historic buildings. Knowing not all of these could be saved, the Park Service targeted about 200 for preservation, prioritizing them by their significance. Over the intervening 40 years, about one-fifth of these priority buildings have been lost due to weather-related deterioration and termite infestation. At the same time, the NPS has identified historic buildings which were not listed in 1980, but which contribute to the historic district's character and setting.

The types and patterns of buildings on the peninsula reflect patients' needs and the operational requirements of the State of Hawai'i Department of Health (DOH). Buildings are of four major types: residential, administration/industrial, religious, and patient-built structures. Despite their different uses, nearly all the buildings share an architectural cohesiveness that is the result of a consistent handling of form, material, and style. Similarly, the 12 marked cemeteries in the park display relatively consistent use of materials, construction styles, and techniques.

Most of the historic buildings at Kalaupapa were erected by the State of Hawai'i Department of Health. But patients added buildings and structures of their own, ranging from garages, pig sties, and chicken coops to houses on the beach that offered an option for rest and recreation outside their institution provided

facilities while still isolated in the settlement proper. To effectively tell the story of how patients shaped their lives on the peninsula, it is important to preserve and maintain these small but significant patient-built elements.

Despite the maintenance challenges, many of the historic buildings and structures from the settlement's period of significance still stand as visible testaments to the needs and strengths of the Hansen's disease patients. Smaller features such as stone walls, entry pillars, statuary, monuments, and memorials are simple but vivid expressions of their utilitarian, aesthetic, and spiritual life. KHNP staff play an ever more important role in managing the remaining cultural and natural resources of the park as DOH responsibilities decline consequent to the dwindling number of patients.

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 KHNP.

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 KNHP coastline. The first waves would reach the coastline many hours after the earthquake occurred depending on the distance of the quake from KNHP. Tsunami Warning Centers will alert local officials, who may order evacuation along the coastline in KHNP.

The effects of a distant-source tsunami on KNHP 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 generated 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

In addition to tsunamis, another 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 KNHP 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 KNHP is a coastal park, sea level rise may inundate low-lying natural and cultural 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 in sea level 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 C.1.

Kalaupapa Tsunami Evacuation Plan

The current evacuation map for Kalaupapa is available on-line from State Civil Defense (<http://www.scd.hawaii.gov/>), represented also by Figure 1. The map

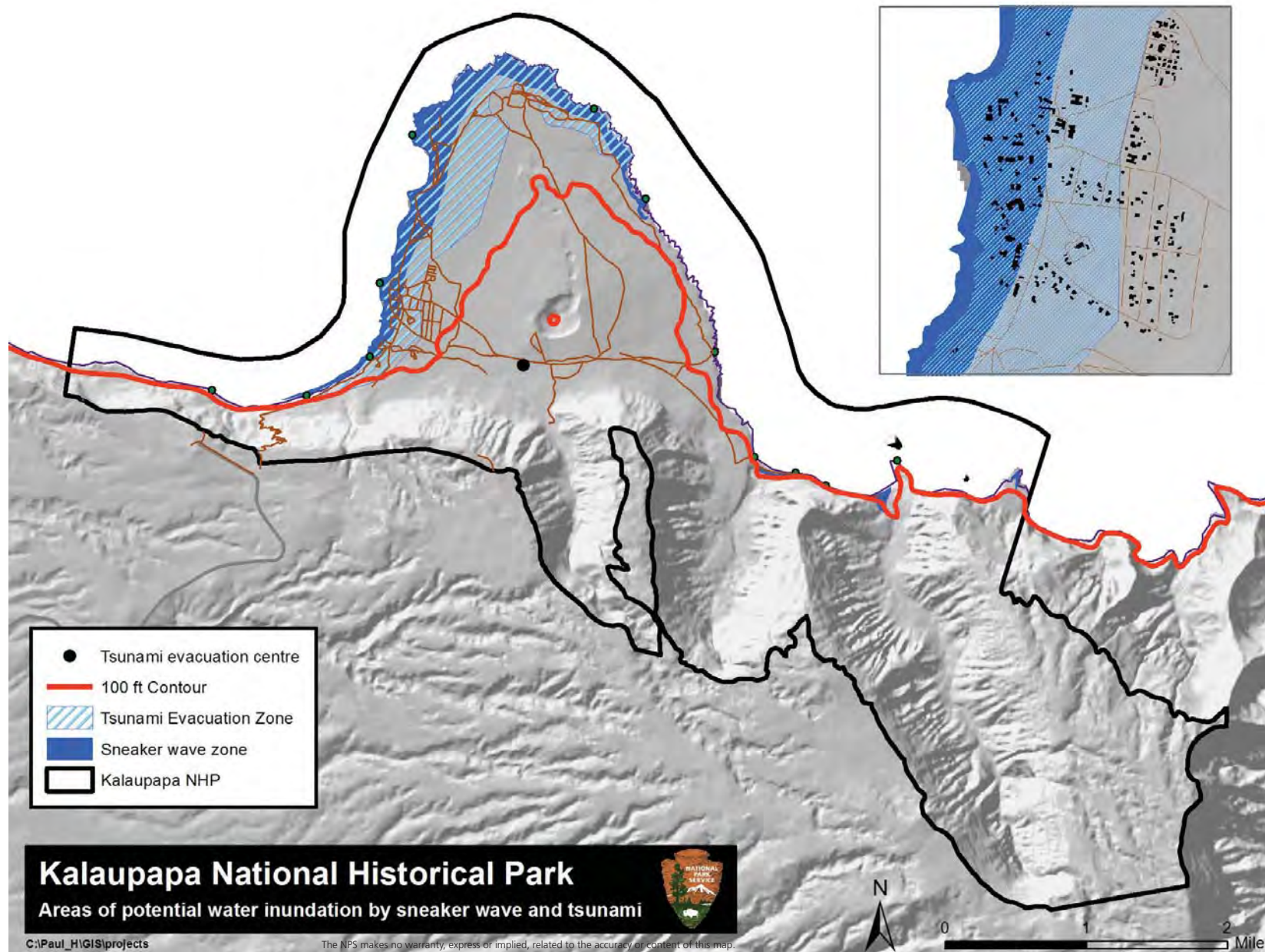


Figure C.1. Areas of potential inundation by water due to flood or tsunami: The tsunami evacuation zone dates from 1991, and may be updated consequent to the 2011 Japanese earthquake and subsequent tsunami. Inset provides detail of current inundation zone. The 100-foot elevation contour provides insight about the inundation zone consequent to a more extreme tsunami event. The 100-year floodplain indicates danger from sneaker waves.

dates from 1991 and 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). This mapping, using state-of-the-art two-dimensional modeling, was completed by Kwok Fai Cheung at the University of Hawai‘i, Manoa. For Kalaupapa, the maps show flooding entirely contained within the evacuation area of the 1991 map. It is thus 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 recent Japanese earthquake are completed.

The 2011 Japanese earthquake was unusual in that it ruptured a fairly small area but had huge slip, more than double the slip ever before seen in any previous earthquake. A similar large-slip magnitude 9 earthquake at the right location in the eastern Aleutians could send Hawai'i waves significantly larger than those that encountered by the islands in 1946.

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 (Figure C.2), 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 (Figure C.1).

The GMP Alternatives

The GMP alternatives differ principally in the incorporation of a long-term plan (no-action versus alternatives B, C, and D), the number of historic buildings stabilized versus restored/rehabilitated, visitation (number of visitors, and whether the visitation is focused topside (alternative B) versus on the Kalaupapa Settlement (alternatives C and D)).

Under alternative A (the no-action alternative), the NPS would continue to manage KNHP as it has been currently managed following existing management policies and programs. Alternative A assumes that existing management, programming, facilities, staffing, and funding would generally continue at their current levels to protect the values of KNHP in the near term. Alternative A does not provide long-term guidance for park management after the DOH departs Kalaupapa. Existing cooperative agreements with agencies and organizations and the lease agreement with DHHL would continue as long as they are viable. Upon expiration, these agreements would be subject to negotiation.

Alternative B focuses on Kalaupapa's special or sacred places celebrated and made legendary by stories.

Maintaining Kalaupapa's spirit and character is the primary focus of this alternative. Kalaupapa's diverse resources would be managed to protect, maintain, and enhance their integrity. Visitor use and experiences at Kalaupapa would be similar to existing conditions. The NPS would develop an extensive outreach program to share Kalaupapa's history with a wide audience at off-site locations. Agreements with partners would be renegotiated and renewed to reflect the intent and actions of this alternative.

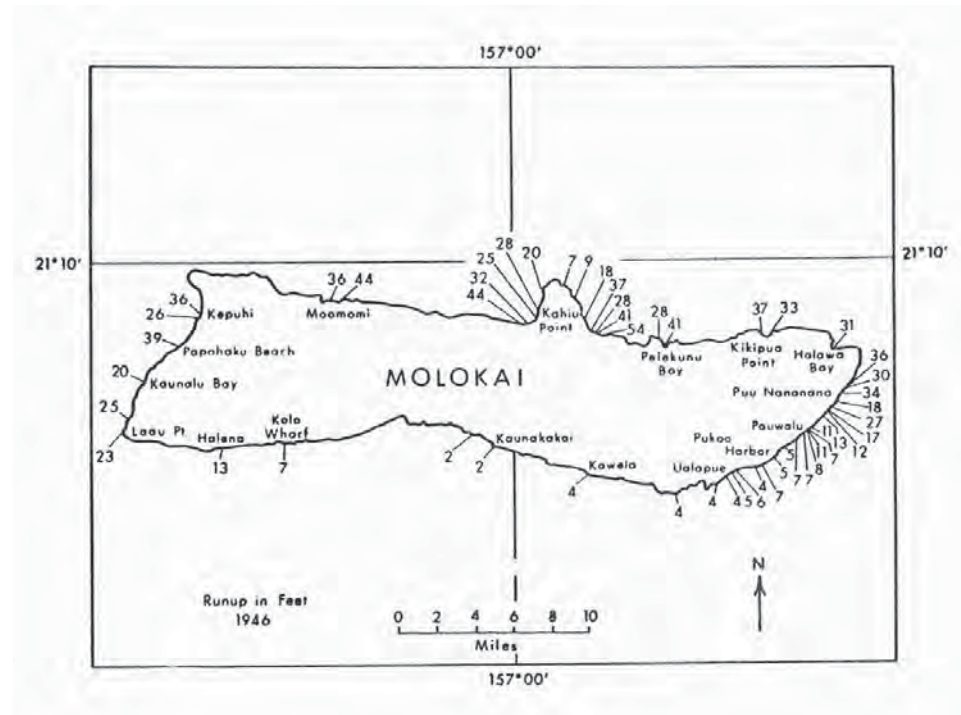


Figure C.2. Run-up data (feet) for the 1946 tsunami, island of Molokai (Loomis 1976).

Alternative C (the preferred alternative) emphasizes stewardship of Kalaupapa's lands. Resources would be managed from mauka to makai. Kalaupapa's diverse resources would be managed to protect, maintain, and enhance their integrity. This alternative emphasizes resource stewardship of Kalaupapa's lands through hands-on activities and service and volunteer work groups. Alternative C focuses on group visitation and some general visitation. Agreements with partners would be renegotiated and renewed to reflect the intent and actions of this alternative as necessary.

Alternative D focuses on personal connections to Kalaupapa through visitation by the general public. Kalaupapa's diverse resources would be managed to protect and maintain their integrity. Alternative D emphasizes visitation by the general public. Visitors would have the freedom to learn about Kalaupapa's people and history through direct experience, exploration, and immersion in the historic setting. Agreements with partners would be renegotiated and renewed to reflect the intent and actions of this alternative.

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 located 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 located in high hazard areas such as those subject to coastal hazards.

While no new structures are proposed for construction within the settlement of Kalaupapa, over 400 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 located in the hazard zone are:

- Care facility (DOH);
- State Department of Health Administration office;
- Visitors quarters used to house non-volunteer visitors;
- KNHP Administration office;
- Hale Malama Archival facility;
- Natural Resource Management office;
- Paschoal Recreational Hall;
- Bishop Home;
- St Francis Church;
- Protestant Church;
- Store and warehouse;
- Gasoline station;
- Bayview Home used to house volunteers and staff;
- Quonset hut used to house staff; and;
- many buildings considered residential.

An Analysis of GMP Alternative Influence on Coastal Hazards

None of the alternatives have the intention of constructing new facilities within the tsunami inundation zone. All alternatives favor the restoration of key buildings symbolic of the history of Kalaupapa (for example, St Philomena from which Saint Damien administered his flock and Paschoal Hall where patients sought entertainment) and the stabilization of lesser historic buildings. Alternatives with higher levels of visitation within the settlement (alternatives C and D) would restore/rehabilitate or retrofit a greater number of buildings to accommodate the increased visitation. Many of these buildings would be in the tsunami inundation zone, and therefore represent a federal investment placed at greater risk than alternative B which favors developing visitor facilities topside, outside of the tsunami inundation zone.

From the perspective of analyzing the influence of the GMP alternatives on coastal hazards and endangerment of human lives, there is little difference between alternatives but for the number of visitors within the tsunami inunda-

tion zone. While all alternatives to the no-action would have a greater number of visitors within the settlement of Kalaupapa, the emphasis of increased daily visitors under alternative D would endanger more people than alternatives B and C. Alternative C (the preferred alternative) is therefore intermediate in the number of visitors at threat from tsunami or sneaker waves.

All of the actions proposed under the KNHP General Management Plan 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

KNHP was established in 1980 to preserve and educate visitors about the isolated Hansen's disease (leprosy) community established on the Kalaupapa peninsula. The facilities serving day-use and overnight visitors to KNHP are located immediately adjacent the coastline. Based on the establishing legislation, preservation of the buildings and public education are the major purposes of KNHP. There are no alternative sites out of the coastal high hazard zone where historic preservation and interpretation can be located. Proclamation as a National Historical Landscape and desire to preserve historic viewsapes 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 every year in Hawai'i to unpredictable sneaker waves.

Description of Site-specific Coastal Hazard Risk

The tsunami risk at KNHP depends on the magnitude and location of the seismic event that generates the tsunami. The height of the tsunami depends on the magnitude of the event. The lapse of time between earthquake and arrival of the tsunami depends on the location of the event. 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 KNHP by evacu-

ating any visitors and most park staff out of the immediate area using trained staff from KNHP 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. It is envisaged that this approach would achieve evacuation of most Kalaupapa residents within minutes of the earthquake. Following the issuance of a tsunami warning, the end point for any exodus from the settlement of Kalaupapa or the east coast of the peninsula is the tsunami evacuation center immediately south of the crater, midway between the crater and the pali (see map 1).

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 National Park Service Floodplain Management Guideline (Director's Order 77-2).

Destruction from tsunamis is the direct result of three factors: wave impact, inundation, and erosion. The influence of wave impact and inundation are easily understood as a result of the imagery resulting from the 2011 Japanese earthquake. 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 have been kept to a minimum to reduce intrusions into the ocean views and preserve the historic viewscape. The structures located 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.

There are no mitigation measures that could be applied to protect facilities within the tsunami hazard zone. 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 general management plan 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 KNHP would be minimized by:

- Posting signs at the beach advising about the danger of sneaker waves;
- 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;
- Risk to human life and safety from sneaker waves, undertows, and rip currents would be reduced through posting signs describing coastal dangers and 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.
- Improving our knowledge base by completing an assessment of coastal vulnerability to wave overtopping, sea level rise, and extreme wave events for KNHP. Products would include a paleo tsunami evaluation and maps of historical shoreline change showing coastal erosion areas.
- As climate change progresses, park closing the park may become a useful tool to improve safety in the face of predicted storms.

Conclusion

The NPS concludes that the proposed action would not appreciably increase the impacts of coastal hazards associated with tsunamis or “sneaker” waves at KNHP.

Exceptionally large sneaker waves and seismic events capable of generating a tsunami are a certainty but the 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 Hawaiian Coast 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 inundation zone amount to over \$20,000,000. Furthermore, key administrative buildings, law enforcement, residences, and the archival center would be destroyed by a tsunami event that completely covered the inundation zone depicted by Figure 1. 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 KNHP.

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. For distant source tsunamis, the NPS will undertake 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, islandwide, 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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Appendix E: Wild and Scenic River Analysis for Kalaupapa NHP

The Wild and Scenic Rivers Act of 1968 resulted in the Nationwide Rivers Inventory—a listing of more than 3,400 free-flowing river segments in the United States that are believed to possess one or more special natural or cultural values judged to be rare, unique, or exemplary within a region of comparison. Free-flowing condition and possession of these river-related or river dependent outstandingly remarkable values (ORVs) form the basis for listing a river as eligible for listing as a “Wild and Scenic River.”

Rivers are also classified as Wild, Scenic, or Recreational based on the level of human impact. In general, rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted are classed as Wild rivers. Scenic rivers or sections of rivers are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. Recreational rivers are rivers or sections of rivers readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Purpose and Scope

In 1990, the Hawai‘i Stream Assessment documented, analyzed, and made recommendations about streams throughout the Hawaiian Islands, including Waikolu Stream located in Kalaupapa NHP. In 1993, Waikolu Stream and other Molokai North Shore rivers (Pelekunu and Wailau) were listed within the National Rivers Inventory as eligible for Wild and Scenic classification. The National Rivers Inventory states that Waikolu contains outstandingly remarkable values of *scenery*, *fish*, and *wildlife*. Waikolu was tentatively classed as both Wild and Scenic based on the degree of existing development

The first purpose of this report is to update past eligibility findings based on new information and changes that have occurred since 1993, and new guidance and criteria developed and adopted by the Interagency Wild and Scenic River Coordinating Council. The second purpose is to lay the groundwork for

a more detailed analysis of suitability during the lifetime of this general management plan.

See Figure 4.3 Aquatic Ecosystems.

Waikolu Watershed

Moving from the dry west to the east end of the island of Molokai, Waikolu is the only stream with a perennial watercourse that maintains running water through the dry season. It is also the only perennial stream within the boundary of Kalaupapa National Historical Park (Kalaupapa NHP). Other streams within the park may have perennial seeps and pools, but do not maintain flow throughout the year to enable the designation as a perennial stream. The Hawaiian meaning of Waikolu, “three waters,” is in reference to its three major tributaries.

The Waikolu Stream watercourse is deeply entrenched in the floor of Waikolu Valley. It is artificially interrupted by water diversion structures in its upper reaches. The valley, like most north shore Molokai streams, is wide at the mouth and narrow with steep valley walls in the upper portion. The steep headwaters arise from mountain bogs between Pepeopae and Pu‘u Ali‘i just above an elevation of 4,000 feet on the interfluvium that separates Waikolu and Pelekunu Valleys. The headwater reach drops rapidly to the mid-reach which has a moderate gradient and numerous small waterfalls and rapids. The mouth of Waikolu Stream consists of a relatively shallow boulder riffle (Brasher 1996, Polhemus 1996). The location of the opening to the sea can change as winter storms rearrange the boulder rampart at the shoreline.

Four miles of the stream are considered eligible for listing. The area of the watershed is 4.7 square miles, with a maximum elevation of 4,275 feet. Most of the Waikolu watershed occurs on State of Hawai‘i Department of Land and Natural Resources lands (82.7%) within Kalaupapa NHP, while the remainder is under private ownership by the Nature Conservancy (9.7%).

Waikolu Stream Management

The entire Waikolu watershed is considered to be under conservation management by the NPS, DLNR, and the Nature Conservancy through a cooperative agreement (DAR 2008).

The Waikolu watershed incorporates the Pu‘u Ali‘i National Area Reserve. The State of Hawai‘i Department of Land and Natural Resources (DLNR) and Division of Forestry and Wildlife are responsible for the National Area Reserve System, which are managed according to Hawai‘i Administrative Rules (HAR) Title 13, Chapter 209.

The NPS, DLNR, and the Nature Conservancy collaborate on the management of the watershed. The construction of large feral ungulate exclosures and wingfences for the management of problem animals is a joint venture between partner organizations. Partners continue to work together to maintain low numbers of goats and pigs over much of the landscape and to eradicate animals from exclosures for the protection of the rainforest. The prevention of soil surface disturbance and recovery of vegetation reduces erosion and the transfer of sediments along the Waikolu watercourse thus improving water quality.

Water diversions remain one of the major impacts to the Waikolu system. Upper Waikolu Stream has been diverted for irrigation and human use by the Molokai Irrigation System since November 1960. Water taken from Waikolu Stream is transported through the 5.1 mile Waikolu Tunnel for use in the western and southern portions of Molokai (Brasher 1996). Three surface water diversion structures exist at approximately 1,000 ft elevation; two diversions occur on tributaries to Waikolu Stream and one on the main stream. There is also a surface water diversion structure at 730 ft, which collects and pumps water up to the Waikolu Tunnel. The Molokai Irrigation System diverts roughly 4.5 million gallons per day (Way et al. 1998). Six wells have been drilled, five in the valley and one in the tunnel (Brasher 1996); however, their current operational status is unknown.

Eligibility Analysis

The WSR Act has two requirements for eligibility; the river segment must be free-flowing and possess one or more outstandingly remarkable value in *fish*, *wildlife*, *geology*, *recreation*, *scenery*, *history*, *culture*, or other similar value. This section reexamines the current listing of Waikolu’s eligibility for free-flowing condition and outstandingly remarkable values of *scenery*, *fish*, and *wildlife* that are listed on the National Rivers Inventory. It also provides new information and analysis about history and culture.

Free-flowing Condition

“Free-flowing” is defined in section 16(b) of the Act as: existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway. However, the existence of low dams, diversion, and other minor structures does not bar Waikolu’s eligibility as a wild and scenic river. Considerable research about the effects of water removal on the hydrology has been completed for Waikolu.

Three stream gages were recently operating on Waikolu Stream. A single gage was located in the upper reach of Waikolu Stream at altitude 900 ft. Another gage was on Waikolu Stream below the pipeline crossing at 252 ft from 1919 to 1996. Another gage operated in the Molokai Tunnel east portal from 1966 to 2002.

Daily discharge is monitored at the three stations along the stream course. There are often high peaks in the mean daily flows. Base flows at the gaging station near the mouth of Waikolu Stream ranged from 9.89 to 30 cubic feet per second (cfs) during the rainy season and less than 9.89 cfs during the dry season (Kondratieff et al. 1997).

Temperature measurements taken at three gaging stations on Waikolu Stream increased slightly between 1969 and 1898. Polhemus (1996) found that water temperatures along the main channel of Waikolu Stream ranged from 64.4 degrees Fahrenheit at 590 ft to 69.8 degrees at 262 ft. The water temperature in the spring fed tributaries was slightly colder, measured as 66.2 degrees (Polhemus 1996). From 1969 to 1985, the lower and middle stations experienced a drop in pH. During this period, the State of Hawai‘i Water Quality Standards upper limit for pH levels in surface water resources was exceeded nine times (DeVerse and DiDonato 2006).

Water diversion has altered the natural base flow of the stream. The lower reach maintains continuous flow due to intermediate surface runoff and groundwater accretion. In contrast, intermediate reaches below the diversion are dry for most of the year. It has been estimated that the intermediate reaches of Waikolu Stream carry only 50% of the natural undiverted flow conditions, while the lower reaches carry 70% (Brasher 1996); however, the accuracy of these estimates may be in question due to the short duration of these studies.

The instantaneous measurements of discharge at the upper level intake are generally higher (mean = 3.9 cfs) than at the station just below it (mean = 2.7 cfs) and much lower than the lowest elevation station (10.4 cfs) (DeVerse and DiDonato 2006). The impact of water withdrawals by the diversions is also dependent on the amount of stream flow. The diversions have the greatest hydrological impact on low flows, with levels of depletions reaching 50%, and the least impact on very high flows (Diaz et al. 1995).

Historic data indicate that before the stream was diverted, periods of high flow greater than 10.6 cfs occurred in the winter and spring, followed by drier periods of greater than 4.9 cfs in the summer and fall. Once the Molokai Irrigation System became operational, there was a reduction in flow for all months.

Concerned about the potential impacts of water diversion upon the native amphidromous fauna in Waikolu Stream, the NPS Water Resources Division DLNR initiated a project to demonstrate the impact of the diversions and well pumping on the natural flow regime of the stream (NPS 1996). As stated above, Water Resources Division collected discharge data at two locations on Waikolu Stream between 1993 and 1996. Immediately downstream of the lower-most diversion, the lowest and highest daily mean discharge collected during this time period was 0.12 and 149 cfs, respectively. Above the upper-most surface water diversion, the lowest and highest daily mean discharge was reported as 0.3 and 63 cfs, respectively.

Brasher documented microhabitat and substrate composition for certain sections or stations of Waikolu Stream (Brasher 1996, 1997a, 1997b). In and just below the diverted section in Waikolu Stream, 93% of the macrohabitat at sampling stations was classified as “pool,” indicating negligible flow through the section during the period of study. Boulders were the most common substrate.

The distribution patterns of freshwater gobies provide some evidence of the influence of altered hydrology on the aquatic ecology of Waikolu Stream. *Awaous guamensis* was observed in the upper stations of Waikolu Stream above the diversion. Brasher suggested that the lack of fish in this area may be due to restricted upstream movement by the two dams and the reduction of flow (Brasher 1996). In Hawai‘i, *Lentipes concolor* typically increase in abundance with increasing distance upstream; however, *L. concolor* were more abundant in the lower reaches of Waikolu Stream, and less abundant in the higher reaches, especially above the diverted section. Brasher suggested that the lower number

of *L. concolor* in the mid and upper reaches of Waikolu Stream may be a result of the decreased flow and periodic dewatering of the stream section below the upper dam, reducing available habitat for the gobies and inhibiting upstream migration (Brasher 1996).

Outstandingly Remarkable Values

An Outstandingly Remarkable Value (ORV) is defined as a river-dependent feature that is unique, rare, or exemplary at a comparable regional or national level. Typically, a “region” is defined on the scale of an administrative unit, a portion of a state, or an appropriately scaled physiographic or hydrologic unit. To be considered river-dependent, a value must be located in the river or on its immediate shorelands and contribute substantially to the functioning of the river ecosystem or owe its location or existence to the presence of the river.

Scenery

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. When analyzing scenic values, additional factors, such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

The narrow watercourse hemmed in by steep cliffs clothed in verdant vegetation is the primary contributor to Waikolu’s scenic character. Much of the higher elevation vegetation within the bogs that feed Waikolu Stream remains native. The structure of the vegetation including ferns, sedges, shrubs, and trees clothed in mosses and lichens is characteristic of the dwindling native rainforests of Hawai‘i. The rainforest is located within a Natural Area Reserve managed by the State DLNR.

The Pu‘u Ali‘i NAR is considered an outstanding example of a Hawaiian montane wet forest or *Metrosideros* (‘ōhi‘a) forest (NPS 2007). Five natural vegetation communities have been identified in the Pu‘u Ali‘i NAR. These include *Metrosideros*/ Mixed Shrub Montane Wet Forest, *Metrosideros* Montane Wet Shrubland, Mixed Fern/ Mixed Shrub Montane Wet Cliffs, *Metrosideros*/ *Cheirodendron* (‘ōlapa) Montane Wet Forest, and *Metrosideros*/ *Dicranopteris* (uluhe) Montane Wet Forest (Hawai‘i Natural Heritage Program 1989). Several

of these communities are also found on the adjacent Pelekunu Preserve (The Nature Conservancy 2003b).

Roughly 160 plant species were documented in the Pu‘u Ali‘i NAR in 2003 (Wood and Hughes 2003). Seventy percent of these species are considered endemic to Hawai‘i. At least 43 new plant records have been surveyed and documented for the NAR (Wood et al. 2005). Approximately 34 species within the NAR and surrounding area are considered rare plant taxa. The Pu‘u Ali‘i Management Plan defines a species as rare “if it is known from 20 or fewer locations worldwide, or fewer than 3,000 individuals.” Of these, ten have been confirmed within the reserve boundary.

Apart from the contribution of vegetation to the scenic ORV, the valley has a unique topography and drainage structure compared to the nearby Pelekunu and Wailau Valleys (Diaz et al. 1995). The steep headwaters arise from mountain bogs between Pepeopae and Pu‘u Ali‘i just above an elevation of 1,219 m (4,000 ft) on the interfluvium that separates Waikolu and Pelekunu Valleys. The headwater reach drops rapidly to the midreach (500 m or 1,650 ft elevation) which has a moderate gradient and numerous small waterfalls and rapids. The mouth of Waikolu Stream consists of a relatively shallow boulder riffle (Brasher 1996, Polhemus 1996). The location of the opening to the sea can change as winter storms rearrange the boulder rampart at the shoreline. The water that originates from the bogs feeds the numerous tributaries that cascade over towering cliffs to eventually form the main-stem of Waikolu.

Fish

Fish values may be judged on the relative merits of fish populations, habitat, cultural use, recreational importance, or a combination of these river-related conditions.



Waikolu Valley. NPS photo.

Characteristic macrofauna of Hawaiian streams include five species of goby fishes: *Awaous guamensis* (o‘opu nakea), *Sicyopterus stimpsoni* (o‘opu nopili), *Lentipes concolor* (o‘opu alamo‘o); and the eleotrids *Eleotris sandwicensis* (o‘opu akupa) and *Stenogobius hawaiiensis* (o‘opu naniha). Two gastropods, *Neritina granosa* (hīhīwai) and the estuarine *Neritina vespertina* (hapawai), are common in many East Maui, Hawai‘i, Molokai and Kaua‘i streams. The shrimp *Atyoida bisulcata* (‘ōpae kalaole) inhabits the middle and upper reaches of pristine mountain streams statewide. The Hawaiian prawn *Macrobrachium grandimanus* (‘ōpae ‘oeha‘a) inhabits estuaries and the terminal reaches of streams.

All of these species share the same life history strategy referred to as amphidromy. All the Hawaiian amphidromous species exhibit ‘freshwater amphidromy’ where spawning takes place in freshwater, and the newly hatched larvae are swept into the sea by stream currents. While in the marine environment, the larvae undergo development as zooplankton before returning to freshwater to grow to maturity.

The lower reaches of Waikolu Stream contain a dense and diverse assemblage of native macrofauna. This portion of the stream provides habitat for all five native amphidromous fish species.

Overall, Waikolu Stream has one of the highest densities of stream gobies in the Hawaiian Islands, with total fish densities approaching 4 to 8 individuals per m² (Brasher 1996, 1997a).

Wildlife

Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations, habitat, cultural uses, recreational importance, or a combination of these conditions. Of particular importance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important

consideration and could, in itself, lead to a determination of “outstandingly remarkable.”

Rare insect invertebrates can be found along the Waikolu watercourse. *Megalagrion pacificum* (listed as an endangered species by the U.S. Fish and Wildlife Service in 2010) and *Megalagrion xanthomeles* (listed as a candidate species by the U.S. Fish and Wildlife Service in 2008) have been recorded from Waikolu Stream. *Megalagrion nigrohamatum nigrohamatum*, a Species of Concern, has also been documented in Waikolu Stream. Waikolu also supports a dense population of the native Hawaiian stream snail *Neritina granosa* which can be uncommon in some streams due to overfishing or other causes.

The vegetation communities of the Waikolu watershed are dominated by native plants (as described in the Scenery section) and provide essential habitat for native forest birds, including rare and endangered species (NPS 1997). Six native forest birds have historically been recorded in Pu‘u Ali‘i NAR and the vicinity. Three are currently protected by federal or state law. More common native forest birds that have been recorded in the NAR include *Himatione sanguinea* (‘apapane), *Hemignathus virens wilsoni* (Maui ‘amakihi), and *Asio flammeus sandwichensis* (Hawaiian short-eared owl or pueo).

History

Historic values of a water system may contain sites that are associated with a historically important event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region.

Being the only dependable, year-round stream of fresh water in the vicinity of the Kalaupapa area, Waikolu Valley was extremely important to the Kalawao and Kalaupapa settlements from 1866 through the 1980s. For the newly arrived exiles to Kalawao, getting access to fresh potable water was a major problem from the very beginning, and there was rarely an adequate supply. With no fresh water springs nearby and no water transportation system in place, water for cooking and drinking had to be carried long distances in containers from Waikolu Stream. In the early years, patients often went thirsty. Scarcity of water contributed to unsanitary living conditions. There was not enough water for basic hygiene, cooking, washing clothes and soiled bandages (BOH Appendix M 1886b: cxiii; BOH Appendix N 1886b: cxxv). For patients in advanced stages of leprosy, the mile-long trek one-way on foot to Waikolu Stream was difficult

and next to impossible given their medical condition, especially if they did not own a horse.

When Father Damien arrived in May of 1873, he quickly realized the water supply problem would have to be solved if improvements were to be made in living conditions. The Board of Health had already been considering the idea of laying pipes from Waikolu to Kalawao, but this would be expensive. Seven years after the settlement’s establishment in summer of 1873, the Board of Health provided pipe for the first water system at Kalawao. Patients and kōkua helped to lay the pipe from Wai‘ale‘ia, an intermittent stream close to Kalawao, and built a rock-lined water cistern at Kalawao.

In addition to water, the settlement depended on the cultivation of kalo (taro) as an essential food. Father Damien understood the importance of diet on the effects of the disease. He saw that while the food in the settlement was of poor quality, that kalo seemed the easiest food to digest. Furthermore, he was aware of how significant kalo was to the early community, he noted not only the nutritional aspect, but also an emotional attachment to the crop. In 1877, Puna, wrote about Waikolu:

A wide and cool stream leads to the ocean from the foot of the dark green mountains. We follow its course when we get there, below the steep hills, on horseback or by foot. We go down below the palis [between Kalawao and Waikolu] every Wednesday to get our share of hard poi. When I first went below the pali I was filled with fear lest the stones fall down, for if you go and look upward the pali top juts over above as though you are going through a cave. I held in my dread. Our store house (for the Leper Colony) is situated at this place (Puna 1877 from Summers 1971: 185).

In 1891, pressure was put on the Board of Health to allow further kalo cultivation and settlement in Waikolu. Waikolu Valley was the host of much of the kalo cultivation to the settlement until at least 1905 and would be known as Waikolu Taro Plantation (Greene 1985: 207).

While the cistern at Kalawao was sufficient for about ten years, a growth in the patient population in the mid-1880’s proved taxing to the water system. The Wai‘ale‘ia and the Waihānau streams no longer provided enough water for an ever-growing community of patient settlers. The Board once again weighed the possibility of bringing in water from Waikolu Valley. The distance was much

farther but Waikolu was a perennial stream. At first, water from Waikolu was piped from Notley Springs on the eastern slope of the pali.

Initially, the Waikolu pipeline only went to Kalawao. But as demands increased, the pipeline was extended to Kalaupapa and enlarged from a four-inch pipe in the 1880s to an eight-inch pipe in 1894. For protection, the eight-inch pipe was buried underground whenever possible, going down the pali, across Waikolu Valley, then running west at the base of the pali along the boulder beach, across and up the gulch and onto the Kalawao end of the peninsula.

Maintaining the pipeline to Waikolu was plagued with problems that went on for nearly 100 years. The pipeline was battered by natural elements – winter storms, falling rocks from the pali above, and landslides triggered by earthquakes. Broken joints and smashed pipes constantly needed repair. There was no back-up and the settlement did not have a source of water during emergencies. In 1894, the Board recommended construction of a reservoir to supply water to the settlement during such times. Two stone reservoirs (50,000 and 150,000 gallons) were built on high ground between Kalawao and Kalaupapa. Both reservoirs are still intact.

From 1908–48, there were several extensions and modifications to the water system. In 1908, the United States Leprosy Investigation Station (UCLIS) was established at Kalawao and a pipeline extension to the head of the valley was constructed where it connected to an old ‘auwai (irrigation ditches) system for lo‘i kalo (wetland taro). At this time, the Notley reservoir system consisting of three catch basins was enlarged. In 1912, the Board extended the water line further up the valley to connect with an old ‘auwai at 2,200 feet to ensure a reliable water supply. Thinking that ditch water was unsanitary, the Board felt that a flume would provide cleaner water, so a wooden flume was built and reached 2800 feet up the valley. (NPS 1998-1999:8) In 1931, a 750,000 gallon tank was constructed that increased the storage capacity to over one million gallons of water. (NPS 1998-1999:7-8) In 1937, the Waikolu water system was overhauled and reconstructed. The new system utilized updated features (concrete Hume pipes and cast-iron pipe instead of wood flumes) that greatly improved the quality of the water to the settlement. The new system also included an updated water intake. In 1948, the Waikolu water system was lengthened one last time. The head reaches about the 560 foot elevation, five miles from Kalaupapa. This time, the intake drew water from main Waikolu Stream. This system was used until the 1980s.

In the late 1960s, the beach portion of the pipeline was dug up and mounted on concrete trestles. To provide access for repairs and facilitate travel across the rough boulder beach, a wood walkway was built over the trestles. Over time, this arrangement proved to be unsatisfactory. The pipeline was now even more exposed to falling rocks, landslides and storms and repairs increased. In the 1970s, PVC pipe was used for quick repairs but the plastic pipe could not hold the waterline pressure. A good solution for protecting the Waikolu pipeline across the boulder beach segment was never found (NPS Report 1998-1999:5-6)

In 1980, Kalaupapa National Historical Park was established and one of its mandates was to “provide a well-maintained community” which involved ensuring a reliable and well maintained water system. Instead of Waikolu Stream, Waihānau was chosen for the site of a new well that was completed in 1983. A second well was added in 1985. Today, the Kalaupapa water system relies on water from Waihānau Valley instead of Waikolu.

Site Integrity

The Waikolu water pipeline components and access road are in good condition; much of the remaining pieces are unmodified and retain original character. A dam at Waikolu Stream is also in good condition; it is unmodified and retains its original character. These historic features are the only examples of the important water system to the Kalaupapa Leprosy Settlement National Historic Landmark (NHL).

Terraces for kalo cultivation associated with the leprosy settlement period in Waikolu Valley exhibit two construction styles. The first is native Hawaiian construction and the second is thought to be done by Chinese immigrant cultivators. The terraces are unmodified, retain their original character, and are in very good condition. Furthermore, these terraces are exceptional examples of kalo terraces within this region (Kirch 2002).

Educational or Interpretative Opportunities

The kalo terraces and water pipeline components at Waikolu reveal the unique history of the Kalaupapa leprosy settlement. The features have high integrity and exhibit several aspects of life at Kalaupapa that could be interpreted for the public. These include the needs of the community, the Board of Health’s responses to community’s need for water, the engineering structures to convey water in the early periods, and the hard work and hardships experiences by

patients in ill health. Hiking the trek to Waikolu illustrates the difficulties that the early patients had to endure. Other educational and interpretive opportunities could be more hands-on through site stabilization projects of the kalo terraces.

Designations

The Waikolu Stream, water pipeline, and archeological features contribute to the Kalaupapa Leprosy Settlement NHL.

The water pipeline components at Waikolu are directly associated with the leprosy settlement period and are characteristic of an impressive water system that was the only reliable source of water to the peninsula for decades. The water pipeline components are eligible for listing on the National Register under criteria A and C.

The kalo terraces are eligible for listing on the National Register under criteria A, C, and D. They are associated with the leprosy settlement. There are at least two styles of construction in the corridor that show impressive utilization of the resources. There is a recognized opportunity for these terraces to yield more data, not only on kalo cultivation, but also on life in the Waikolu Valley and the similarities and differences between Hawaiian cultivators and immigrant cultivators.

Culture

Cultural values include sites, events, and related factors contributing to notable or important cultural features or attractions within the region. Cultural sites associated with Native Hawaiians may be highly diverse over the majority of the river corridor.

Waikolu contains evidence of pre-contact habitation, which include sacred places, mo'olelo (a story, tale, myth or legend) and agriculture. Waikolu means "Three Waters" or "Triple Water" and Kili'o'opu is the name of its wind (Summers 1971: 185). Waikolu is an ahupua'a that is comprised of a narrow

valley and bounded by two sharp points of land and three small islets. In the mid 1850's Voyaging Naturalist M. Jules Remy toured the Island of Molokai and described Waikolu as "... a village situated at the opening of a valley which marked, to the west, the limit of the insurmountable pali of Moloka'i." In 1931 Arning said "In crossing the Pali between Kalawao and Waikolo [sic] the natives deposited oval stones on the dangerous hills. This custom was, during my stay, still rigidly observed" (Arning 1931 from Summers 1971:185). These early written descriptions provide a glimpse of native Hawaiian life in the Waikolu Valley and adjacent area.

Several different types of archeological features exist in Waikolu and are evidence of ongoing habitation and agriculture in pre-contact Hawaiian history. These include heiau (Hawaiian pre-Christian places of worship or shrines), lo'i kalo, and a variety of other archeological features. "The valley and its sites exemplify the extremes of windward valley adaptation in the Hawaiian archipelago" (Kirch 2002:46).

There are three heiau that were noted to be located at Waikolu. One heiau, 'Ahina, has been located. The other two heiau have not been located, even with efforts in 1909 by Stokes of the Bishop Museum. Stokes was unable to gather information on the second heiau, Ka'aiea. The other heiau, Moa'ula, is described in 1909 as being "out of human reach" high up on the pali, and is credited as being built by "Menehunes" (Stokes 1909).

Prior to 1866, Hawaiians utilized water from Waikolu Stream to support the many lo'i kalo on the terraced mountain slopes of Waikolu Valley. A charcoal sample

from a stratigraphic layer interpreted as being associated with human occupation dates to 1200-1290, which corresponds to the Early Expansion Period in terms of island chronology. See Kirch (2002) and McCoy (2007), for further information.

Also part of Waikolu ahupua'a are two points. The first is called Leinapapio. It is described by Coelho.



NPS scientists and volunteers take streambed measurements of Waikolu Stream. NPS photo.

This place was famous for this is where the people learned to leap over the cliffs in the olden days. From Huelo [an island] came the loulou palm leaves which were woven into hammocks, like the thick floor mats. A man was laid thereon and was tossed into the sea. This game was somewhat like the darts made of pieces of heavy paper by the children. The first Hawaiian who originated this game of leaping off the cliff, like an aeroplane, was Papio. Because the game was such fun, the pali was named Leinapapio, that is Papio's leaping place. . . a place from which Papio leaped (Coelho 1922 from Summers 1971: 185-186.)

The other point is Kuka'iwa'a, which is a vast archaeological landscape but largely unrecorded. The archeology site types include platforms, mounds, terraces, enclosures with several possible functions, including heiau, ko'a and ku'ula, and burial sites (NPS Field Notes 2009). Ko'a are fishing grounds, usually identified by lining up with marks on shore or a shrine, often consisting of circular piles of coral or stone, built along the shore or by ponds or streams, used in ceremonies as to make fish multiply (Pukui and Elbert 1986: 156). Ku'ula, which is any stone god used to attract fish, whether tiny or enormous, carved or natural, named for the god of fisherman; heiau near the sea for workship of fish gods (Pukui and Elbert 1986: 187). The area is currently targeted by the NPS for native outplanting sites.

The islets in the ocean off of Waikolu are known as the "Rocks of Kana" and their presence are described in mo'olelo, see Fornander (1916-1917: 444, 446).

Although not yet fully inventoried, Waikolu is remote and isolated, and it is presumed that a high level of intact archeology is in good condition showing a wide variety of site types enabling better understandings of native Hawaiian life in the north shore valleys.

Current Use

Waikolu Stream is important to native Hawaiians today because of the ability to perform traditional cultural practices. It is also important because of its rich landscape of cultural sites and mo'olelo. At present, it is protected and rarely visited because of its remote location and State of Hawai'i rules for visitation to the Kalaupapa Settlement. There is some limited use by Kalaupapa workers for gathering of plants, and fishing both in the ocean and the freshwater stream. There is also limited and infrequent use by hunters in the upper reaches of the valley.

Site Integrity

There are extensive sets of formerly irrigated lo'i kalo on both sides of Waikolu Stream exhibiting distinctly Hawaiian architectural construction. The Hawaiian construction terraces are unmodified and retain their original character; they also are exceptional examples of this site type in the region and are in good condition.

The heiau site named 'Ahina, first recorded by Stokes in 1909, is still present. The main terrace wall is well constructed but covered in vegetation (Kirch 2002). A stabilization project to remove invasive vegetation with a cultural cyclic maintenance plan would keep vegetation away. The heiau is unmodified and retains its original character; it is in good condition and provides an example of valley heiau within the region.

Educational or Interpretative Opportunities

There is an opportunity to share native Hawaiian traditions and practices at Waikolu with student groups, native Hawaiian organizations, and those seeking an in-depth visit to Kalaupapa NHP. Archeological investigations and stabilization projects at Waikolu would illustrate how early Hawaiians lived in the remote valleys as well as assist the NPS archeology program. Hands-on educational and interpretive opportunities could be afforded through site stabilization projects targeting 'Ahina Heiau and the kalo terraces.

Designations

All of the archeology associated with the Kalaupapa Leprosy Settlement and within the Kalaupapa NHP contributes to the NHL designation.

'Ahina Heiau, the kalo terraces, and other archaeological resources are eligible for listing on the National Register under criteria C and D. They are characteristic of specific and distinct Hawaiian construction, and provide prime opportunities to yield more data about early occupation of Waikolu Valley.

Waikolu Valley, like the rest of Kalawao County, is incredibly important to native Hawaiians and the resident patient community. The valley has been accessed for subsistence living from the first inhabitants through today. Because there was a displacement period of the native kama'āina, there is great interest for people to re-connect to this landscape, especially since the mo'olelo and archaeological sites are so well intact with a high degree of integrity. For this

reason, it is likely that an in-depth look at the cultural importance of the valley would reveal eligibility for designation as a Traditional Cultural Property.

Classification

In the 1993 listing of Waikolu Stream on the National Rivers Inventory, Waikolu Stream was classified as both Wild and Scenic. This report supports the continued classification of Waikolu Stream as both Wild and Scenic.

Conclusions

The three main steps involved in a WSR study are eligibility, classification, and suitability analysis.

The eligibility analysis is a resource inventory and evaluation to determine if the river is free-flowing and possesses one or more outstandingly remarkable value. This document verifies the initial evidence leading to the 1993 listing of Waikolu as eligible for designation as a Wild and Scenic River based on *scenery*, *fish*, and *wildlife* as outstandingly remarkable values.

The majestic topography comprised of perched bogs bisected by deep ravines broken by cascading waterfalls is reason enough for identifying scenery as an ORV. The native rainforest and bog communities enhance the scenery and provide habitat for rare birds leading to wildlife as an ORV for Waikolu.

Aquatic biologists in Hawai‘i consider the presence of native amphidromous species as an indicator of outstanding environmental quality. The presence of five native amphidromous fish and one mollusk at relatively high densities indicate favorable aquatic conditions. Furthermore, the presence of invertebrates considered rare or indicative of high water quality (DAR 2008) are testament to favorable aquatic conditions (despite water diversions) and the establishment of *fish* as an ORV. The 2008 DAR study supports the identification of Waikolu as a “Priority Aquatic Site” by the Nature Conservancy, one of the reasons for the 1993 eligibility listing.

Waikolu Stream provided fresh water for human use for over 100 years to the Hansen’s disease patient communities at Kalawao and Kalaupapa. The pipeline and engineered water system traversed steep cliffs, rocky surf, and travelled for nearly three miles from Waikolu to Kalaupapa Settlement. Waikolu Stream and

the engineered system to convey the water are largely unmodified and in good condition and are contributing features to the Kalaupapa Leprosy Settlement NHL. These important features lead to *history* as an ORV for Waikolu Stream.

This analysis recommends the addition of *culture* as an ORV for Waikolu Stream. The lo‘i kalo represent extensive utility of the valley and some of the earliest occupation throughout the Hawaiian archipelago. Because of Waikolu’s remoteness and it being within Kalawao County, it has remained relatively untouched and represents an example of valley habitation with high integrity and importance. Waikolu Stream and associated archaeological and cultural sites contribute to the Kalaupapa Leprosy Settlement NHL.

The identification of *scenery*, *fish*, *wildlife*, *history* and *culture* as ORVs supports the continued eligibility of Waikolu Stream, and its existing level of development continues to support the classification of Waikolu as Wild and Scenic. The current lack of public access precludes recreation as an outstandingly remarkable value. Sudden storm-mediated water-flows coupled with remoteness and rugged topography make recreation dangerous. The difficulty in delivering medical aid in the event of a mishap make it unlikely that recreation activities would ever be developed within Waikolu valley.

An examination of information, much collected since 1993, support the continued listing of Waikolu as eligible for designation as a Wild and Scenic River. Final suitability determination is based on an assessment of the characteristics that make the river segments worthy of designation; the ability of NPS and its non-Federal partners to manage the river segments to protect their ORVs, water-quality, and free-flow; the compatibility of wild and scenic river designation with other potential uses of the river segments; and public support and involvement. An issue facing its suitability for WSR designation is future flow management— whether flow-dependent ORVs and water quality can be protected and enhanced in light of community needs for water supply and consequent alterations to the river’s natural flow regime. Designation of eligible and suitable river segments into the National WSR System on NPS managed lands would be decided through a Congressional Act. The necessary suitability assessment would be completed within the life-span of the general management plan.

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Appendix F: Building Inventory List

The following list of buildings was developed by the NPS in 2012.

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Beach House: Hamai Shoichi	Airport Rd.	1920	693	59701	60090	Private
Beach House: Elizabeth Bell	Airport Rd.	1920	698	101911	60240	Private
Beach House (Nicholas Ramos)	Airport Rd.	1920	691	56196	60243	Private
Storage Shed (behind Beach House #691)	Airport Rd.	1920	690	56207	60231	Private
Airport Terminal	Airport Rd.	1930	703	59989	58881	DOT
Beach House: Elaine Remigio	Airport Rd.	1930	695	336829	58883	Private
Beach House: Bernard Punikaia	Airport Rd.	1930	699	56122	58882	Private
Lions Club Restroom	Airport Rd.	1950	687	55730	60097	Private
Lions Club Pavilion	Airport Rd.	1965	688	56611	60096	Private
Beach House: Gloria and Richard Marks	Airport Rd.	1969	694	324319	60242	Private
Shelter 1 (Lion's Club Bar)	Airport Rd.	1969	727	NH	239505	Private
Shelter 2 (Lion's Club Kitchen)	Airport Rd.	1974	728	NH	239506	Private
Airport Storage: Kamaka Air (Replaced #705)	Airport Rd.	1984	818	NH	60228	DOT

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Airport ops Bldg. (Replaced #704)	Airport Rd.	1984	816	573939	99307	DOT
Beach House Meli Watanuki	Airport Rd.	2008	722		99302	Private
Pig Sty at New Baldwin Home	Baldwin Home	1940	852*	373536	99315	NPS
Residence: (Nakoa)	Baldwin St.	1931	181	59966	58611	DOH
Residence: (Mamuad)	Baldwin St.	1936	161	59965	58630	DOH
Garage	Baldwin St.	1950	588	55771	58567	Private
Residence: (Ai) Katherine Costales	Baldwin St.	1956	178-56	55775	58626	DOH
Residence: Nellie McCarthy	Baldwin St.	1956	173-56	55776	58627	DOH
Residence: (Mario Rea)–NPS Superintendent	Baldwin St.	1956	172-56	55777	58629	NPS
Residence: (Eddie and Barbara Marks)	Baldwin St.	1962	182-62	55770	58608	NPS
Residence: (Mary Yonemori)	Baldwin St.	1962	179-62	55772	58613	DOH
Garage (Near #173-56)	Baldwin St.	1969	585	573560	58596	Private
Wilcox Memorial Building	Bayview	1906	277BV	21052	49842	DOH
Old Bayview Home Kitchen and Dining Hall: Re-use as NPS Resources Office	Bayview	1916	6BV	21047	57581	NPS

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Residence: (Mable and Joe Kekahuna)	Kamehameha St.	1936	15	55726	58664	DOH
Residence: Norbert Palea	Kamehameha St.	1936	25	59951	58667	DOH
Residence: (Mae Malakaua)	Kamehameha St.	1938	56	22629	49086	DOH
Kanaana Hou Church Parish Hall	Kamehameha St.	1939	287	342044	57597	Partner
Motor Pool Gas Station	Kamehameha St.	1939	258a	59973	58249	DOH
Motor Pool Garage	Kamehameha St.	1939	259	59974	58248	DOH
Latter-day Saints Church	Kamehameha St.	1940	257	56610	58658	Private
Latter-day Saints Parish Hall	Kamehameha St.	1940	257a	59972	58659	Private
NPS Mechanics Garage (from Bishop Home 1980)	Kamehameha St.	1944	284	573509	57595	NPS
Storage Shed (behind #56)	Kamehameha St.	1969	664	573930	49085	Private
Storage Shed (No. side of #4)	Kamehameha St.	1969	4a	573888	58640	Private
Storage Shed	Kamehameha St.	1970	670	55728	59400	Private
Ambulance Garage	Kamehameha St.	1991	314*	NH	99290	DOH
Vehicle/Equip- ment Storage	Kamehameha St.	1991	259a	NH	99328	DOH
Garage (Large Equipment–DOH)	Kamehameha St.	1995	315*	NH	99298	DOH

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Garage/HAZMAT	Kamehameha St.	2004	316*	NH	99299	NPS
Residence: (Ernest Kala)	Kapiolani St.	1932	199	55704	59570	NPS
Residence: Hamai Shoichi	Kilohana St.	1932	53	59954	58272	DOH
Garage, Kilohana St.	Kilohana St.	1935	643	573920	58273	Private
Molokai Light- house Princi- pal Keepers Residence	Lighthouse Area	1909	707	341337	60093	NPS
Molokai Light- house	Lighthouse Area	1909	715	21176	58875	NPS
Molokai Light- house Water Tank	Lighthouse Area	1909	712	21174	58879	NPS
Molokai Light- house Generator Shed	Lighthouse Area	1909	713	59999	58880	NPS
Molokai Light- house Garage	Lighthouse Area	1909	709	340719	60095	NPS
Molokai Light- house Storage Vault	Lighthouse Area	1909	714	21175	58878	NPS
Molokai Light- house Asst. Keepers Residence	Lighthouse Area	1950	706	232237	58877	NPS
Molokai Light- house Storage Shed (LCS #56121?)	Lighthouse Area	1950	708	341389	60235	NPS
Transmitter Repeater Building	Lighthouse Area	1991	715a		59590	NPS

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Bayview Home Residence 2	Bayview	1916	2BV	21044	57584	NPS
Bayview Home Residence 3	Bayview	1916	3BV	21045	57585	NPS
Bayview Home Residence	Bayview	1916	1BV	21043	57580	DOH
Bayview Home Chapel: Re-use as Pool Hall	Bayview	1928	8BV	21049	59073	DOH
Bayview Home Residence	Bayview	1929	10aBV	21050	49847	NPS
Garage: (Ike's) moved to Kamehameha St.	Bayview	1930	65BV	101952	58181	Private
Bay View Lanai	Bayview	1930	528BV	55721	49849	DOH
Visitors Quarters Kitchen	Bayview	1933	275BV	56539	49852	DOH
Visitors Pavilion: aka Long House	Bayview	1933	278BV	21069	49841	DOH
Visitors Quarters	Bayview	1933	274BV	21051	49853	DOH
Residence: Elroy [Makia] Malo	Bayview	1936	64BV	56512	58180	DOH
Residence: DOH Administrator	Bayview	1936	11BV	56511	49848	DOH
Bayview Home Dining Hall	Bayview	1937	5BV	21046	57602	NPS
Garage	Bayview	1937	513BV	55723	58188	NPS
Garage	Bayview	1937	512BV	55722	58187	Private
Patients Restroom	Bayview	1940	523BV	22638	49845	DOH
Quonset Dormitory	Bayview	1950	10BV	338860	58179	DOH
Garage	Bayview	1950	525BV	55719	49844	Private
Garage	Bayview	1950	524BV	55718	49846	Private

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Toolshed	Bayview	1969	3aBV	573881	59209	Private
Telephone Station	Bayview	1969	522BV	59993	49843	DOH
Carport	Bayview	1970	526BV	55720	49850	DOH
Old Stone Church: Re-use NPS Ranger Station	Beretania St.	1853	301	21064	49083	NPS
Paschoal Hall (Social Hall/Movie House)	Beretania St.	1915	304	21065	57605	NPS
Craft and Storage Building (former Bakery)	Beretania St.	1931	300	22634	49084	NPS
Police Headquarters	Beretania St.	1932	303	22636	57604	NPS
Jail	Beretania St.	1932	302	22635	60246	NPS
Construction Camp Wash House	Beretania St.	1940	656	55786	58682	NPS
Construction Camp Residence	Beretania St.	1950	657a	55813	58684	NPS
Administration Building: Department of Health	Beretania St.	1961	270-61	56608	49087	DOH
NPS Garage	Beretania St.	2005	301a	NH	57603	NPS
Curatorial Storage Facility	Beretania St.	2006	313*		93491	NPS
Residence: Barbara Marks	Bishop Home	1933	3BH	56499	58538	DOH
Residence: (Anita Una)	Bishop Home	1933	4BH	56500	58540	DOH

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Sisters Convent	Bishop Home	1934	15BH	21041	58541	NPS
St. Elizabeth Chapel	Bishop Home	1934	16BH	21042	58543	Partner
Carport	Bishop Home	1969	3aBH	573877	99504	Private
Garage	Bishop St.	1920	622	55740	58423	Private
Garage	Bishop St.	1930	621	55738	58425	Private
Residence: Paul and Winnie Harada	Bishop St.	1962	122-62	56609	58426	DOH
Residence: John Arruda	Bishop St.	1964	121-64	55802	58422	DOH
St. Francis Catholic Church	Damien Rd.	1908	291	21063	49838	Partner
Damien Hall: St. Francis Church Hall/Library	Damien Rd.	1909	292	56536	49837	Partner
Water Tank (below ground)	Damien Rd.	1925	854*	573952	99317	NPS
Carpenter Shop (Laundry)	Damien Rd.	1930	264	59978	58267	DOH
Comfort Station (Pier)	Damien Rd.	1930	640	59988	58279	DOH
NPS Carpenter Shop (ops Shop)	Damien Rd.	1931	265	59979	58269	NPS
St. Francis Catholic Church Rectory	Damien Rd.	1931	294	56502	49192	DOH
Ice Plant: aka Butcher Shop/ Freezer— Re-use Electrical Shop	Damien Rd.	1932	267/ 268	59980	58276	NPS

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
General Warehouse (located at Pier)	Damien Rd.	1932	271	59981	58923	DOH
Residence:	Damien Rd.	1932	26	59952	58631	NPS
Patient Store	Damien Rd.	1934	272	59982	49191	DOH
Gas Station	Damien Rd.	1934	273	59984	49839	DOH
Crematory: Re-use Storage	Damien Rd.	1938	262	59975	58265	DOH
Residence: (Louie and Sarah Benjamin)	Damien Rd.	1939	30	59953	58666	NPS
Oceanside Pavilion (located near pier)	Damien Rd.	1939	638	59986	49840	DOH
Plumbing Warehouse	Damien Rd.	1939	263	59976	60254	DOH
St. Francis Church Garage	Damien Rd.	1939	647	56537	49193	Private
Electrical Transformer Station	Damien Rd.	1940	519BV	342032	58194	NPS
Shelter/Garage	Damien Rd.	1940	533	55665	58492	Private
Garage	Damien Rd.	1940	531	55664	58496	Private
Garage	Damien Rd.	1940	547	55702	58588	Private
Quonset: Lumber Warehouse	Damien Rd.	1950	263a	59977	58271	DOH
Residence: (Sumi Sumida)	Damien Rd.	1956	111-56	55698	58483	DOH

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Residence: (Hideo Matsuda)	Damien Rd.	1956	112-56	55699	58479	DOH
Residence: Meli Watanuki	Damien Rd.	1956	108-56	55695	58491	DOH
Residence: Katherine Puahala	Damien Rd.	1956	107-56	55663	58493	DOH
Residence: (Duarte)	Damien Rd.	1962	159-62	55700	58464	DOH
Residence: Clarence and Ivy Kahilihiwa	Damien Rd.	1962	106-62	55662	58495	DOH
Residence: Richard Pupule	Damien Rd.	1962	105-62	55644	58537	DOH
Residence: (Mary Kailiwai)	Damien Rd.	1964	110-64	55697	58487	DOH
Residence: (Eracleo Augustine)	Damien Rd.	1964	311-64	55701	58628	NPS
Garage (between #111 and #110)	Damien Rd.	1969	557	55707	58486	Private
St. Francis Church Hothouse	Damien Rd.	1972	648	573929	49194	Private
Carport (behind #106)	Damien Rd.	1977	532	573523	58494	Private
Storage Shed	Damien Rd.	1978	532a	573908	238968	Private
Store Warehouse (Replaced Bldg. #272a)	Damien Rd.	1980	312*	NH	99326	DOH
Kal Memorial Hospital	Damien Rd.	1981	814	56606	59074	DOH
Beach House (Richard Marks)	East Coast Peninsula	1969	856*	573955	99319	Private

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Outhouse for #856	East Coast Peninsula	1969	857*	573956	99320	Private
Residence: (Leonardo Nono)	Goodhue St.	1931	115	59957	57589	NPS
Residence: (Clarence Naia)	Goodhue St.	1931	114	22630	57588	DOH
Residence: Elaine Remigio	Goodhue St.	1931	116	59958	57590	DOH
Shed: Sagadraca Poker Room	Goodhue St.	1940	605	55807	57610	NPS
Garage	Goodhue St.	1950	613	55805	57617	Private
Garage	Goodhue St.	1950	614	55803	57618	Private
Garage	Goodhue St.	1950	609	55808	57613	Private
Storage Shed	Goodhue St.	1950	612	338619	57616	Private
Residence: (Antonio Sagadraca)	Goodhue St.	1962	117-62	55804	57591	NPS
Storage Shed	Goodhue St.	1969	611	55806	57615	Private
Garage	Haleakala St.	1930	587	55773	58568	Private
Garage	Haleakala St.	1969	566	573911	58578	Private
Shed (In Bus Storage Area)	Haleakala St.	1969	598	573915	99552	Private
Garage	Kaiulani St.	1920	564	55783	58574	Private
Garage	Kaiulani St.	1920	568	344990	58580	Private
Garden House	Kaiulani St.	1920	569	102323	58581	Private
Garage	Kaiulani St.	1930	570	55815	58582	Private

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Residence: Pauline Chow	Kaiulani St.	1931	185-71	59967	58615	DOH
Residence: (Domingo Soria)	Kaiulani St.	1931	190-66	59969	58625	NPS
Residence: Sebas- tiana Fernandez	Kaiulani St.	1931	192	59970	58632	DOH
Residence: Kuulei Bell	Kaiulani St.	1932	189	59968	58623	DOH
Garage	Kaiulani St.	1940	563	55817	58573	Private
Residence: Gloria Marks (Kaliko)	Kaiulani St.	1964	186-64	55782	58617	DOH
Residence: Richard Marks	Kaiulani St.	1964	187-64	55780	58620	DOH
Carport: Richard Marks	Kaiulani St.	1969	187b *	573904	59401	Private
Bottle House (enclosed carport): Richard Marks	Kaiulani St.	1969	187a *	573890	59402	Private
Garage	Kaiulani St.	1969	571	55779	58633	Private
Storage Shed	Kaiulani St.	1969	572	344095	58634	Private
Storage Shed	Kaiulani St.	1970	573	55778	58635	Private
Storage Shed	Kaiulani St.	1971	574a	573912	99300	Private
St. Philomena Church	Kalawao	1872	711	21068	58852	Partner
Siloama Restroom	Kalawao	1945	720	59992	58874	Partner
Kalawao Pavillion: Judd Park	Kalawao	1950	719	342332	60255	NPS
Picnic Shelter 1	Kalawao	1955	725*	573935	239502	NPS
Picnic Shelter 2	Kalawao	1955	726*	573935	239504	NPS
Siloama Church	Kalawao	1966	710	21067	58859	Partner
Shed (near Judd Park Pavilion)	Kalawao	1991	723	NH	99507	Private

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Kanaana Hou Church	Kamehameha St.	1915	286	21062	57596	Partner
Beach House: Olivia Breitha	Kamehameha St.	1930	671	55729	60244	Private
Residence: Plume- ria House	Kamehameha St.	1930	22	55724	58674	Private
Residence: (Miriam Mina)	Kamehameha St.	1931	2	235713	58660	NPS
Residence: (Silva)	Kamehameha St.	1931	7	55800	58663	DOH
Residence: (Keao)	Kamehameha St.	1931	9	56104	58665	DOH
Residence: (Cambra)	Kamehameha St.	1931	4	341955	58662	DOH
Kamahana Store	Kamehameha St.	1932	260	59990	59252	Private
Calvinist Mission House: aka Cal- vinist Parsonage	Kamehameha St.	1932	288	59994	57598	DOH
Residence: (Brown)— moved from Mc Veigh 1965	Kamehameha St.	1933	3	333837	58661	NPS
Post Office and Court House	Kamehameha St.	1934	290	22687	49088	DOH
Residence: Latter Day Saints Rectory	Kamehameha St.	1935	256	59971	58657	Partner
Garage (near Calvinist Mission House)	Kamehameha St.	1935	289	573907	59076	Private
Fumigation Hall	Kamehameha St.	1935	283BH	22633	57594	NPS

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
AJA Buddhist Hall: Re-use Bookstore/ Museum	McKinley St.	1910	308	21066	58442	NPS
AJA Outbuilding: Re-use Bookstore—Storage	McKinley St.	1910	309	22637	58443	NPS
Garage	McKinley St.	1920	592	101950	58434	Private
Storage Shed	McKinley St.	1920	590	55814	58431	Private
Garage	McKinley St.	1930	593	55819	58603	Private
Residence: (Alice Kamaka)	McKinley St.	1932	155	59962	58451	DOH
Residence: Henry Nalaelua	McKinley St.	1932	157	59964	58458	DOH
Residence: Bernard Punikaia	McKinley St.	1933	154	59961	58439	NPS
Residence: (Nicky Ramos)	McKinley St.	1937	151	59959	58429	NPS
Residence: (Bernard Punikaia)	McKinley St.	1938	152	59960	58435	DOH
Guest House (Ramos)	McKinley St.	1949	591	573913	58432	Private
Residence: Lourdes Taghoy	McKinley St.	1956	153-56	55769	58437	DOH
Residence: Lucy Kaona	McKinley St.	1956	156-56	55810	58454	DOH
Storage Shed	McKinley St.	1956	602	573917	58600	Private
Carport (Replaced Garage #603)	McKinley St.	1969	721	NH	107978	Private

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Garage: (Moved on-site)	McKinley St.	1982	620	573919	58427	Private
Kato Workshop	McVeigh Home	1920	508M	55710	58353	Private
Storage Shed	McVeigh Home	1920	507M	55712	58347	Private
Dormitory	McVeigh Home	1929	28M	21056	58325	NPS
Recreation Hall	McVeigh Home	1929	23M	21054	58320	DOH
Apartments (4)	McVeigh Home	1929	12M	21053	58309	DOH
Residence: (Henry Nalaelua)	McVeigh Home	1930	30M	56549	58327	DOH
Wash House	McVeigh Home	1930	33aM	55717	58330	Private
Shed (near Wash House)	McVeigh Home	1930	33bM	56552	99553	Private
Storage Shed	McVeigh Home	1930	502M	331233	58338	Private
Residence: (Ed Kato Studio)	McVeigh Home	1931	11M	56501	58308	NPS
Boiler Room	McVeigh Home	1931	22M	56510	58319	DOH
Pool Hall	McVeigh Home	1932	24M	21055	58321	NPS
Residence: (Perfecto Leabata)	McVeigh Home	1932	16M	56546	58314	NPS
Residence: (William Kaakimaka)	McVeigh Home	1932	25M	56548	58322	NPS
Residence: (Brede)	McVeigh Home	1932	14M	56545	58311	NPS

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Residence: Elizabeth Kahihikolo	McVeigh Home	1932	15M	56506	58312	DOH
Card Room: (Sam Kahikina)	McVeigh Home	1932	27M	56509	58324	NPS
Residence: (G and P Chow)	McVeigh Home	1933	2M	a2	58296	NPS
Residence: (Kahikina)	McVeigh Home	1933	5M	56503	58303	DOH
Residence: (Edward Kato)	McVeigh Home	1933	9M	56543	58306	NPS
Residence: Edwin Lelepali	McVeigh Home	1933	8M	56542	58305	DOH
Residence: Nancy and James Brede	McVeigh Home	1933	10M	56544	58307	DOH
Residence: Gertrude Kaauwai	McVeigh Home	1933	20M	56547	58318	DOH
Residence: (Kanaapu)	McVeigh Home	1933	6M	56541	58304	DOH
Residence: (Mahie McPherson)	McVeigh Home	1933	1M	56508	58294	DOH
Residence:	McVeigh Home	1933	13M	56507	58310	DOH
Garage	McVeigh Home	1933	3M	56504	58299	DOH
Residence: Daniel Hashimoto (Theodore Gaspar)	McVeigh Home	1934	33M	56551	58329	DOH
Residence: (D. Hashimoto)	McVeigh Home	1934	32M	56550	58328	DOH
Garage	McVeigh Home	1934	35M	56554	58334	DOH
Laundry/Storage Room	McVeigh Home	1934	18M	55713	58316	NPS

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Residence: (Nahoopii)	McVeigh Home	1936	34M	56553	58331	DOH
Garage	McVeigh Home	1959	4aM	55711	58302	Private
Carport Storage (Behind #20M–Gertrude)	McVeigh Home	1969	74M	NH	99289	Private
Shed (Near #25M)	McVeigh Home	1969	73M	NH	99288	NPS
Storage Shed	McVeigh Home	1969	505M	331178	58344	Private
Carport (Near #25M)	McVeigh Home	1970	72M	NH	99287	NPS
Hothouse	Puahi St.	1930	521	55642	58196	Private
Residence: (Rachel and Manuel Souza)	Puahi St.	1931	61	59955	57586	DOH
Residence: (Kenso Seki)	Puahi St.	1931	281	22632	58186	NPS
Rea's Bar: aka Elaine's and Fuesaina's	Puahi St.	1939	62	59956	57587	Private
Rea Tavern Storage: aka Rea's Store	Puahi St.	1939	298a	59985	57600	Private
Garage	Puahi St.	1940	515	55643	58190	Private
Storage Building	Puahi St.	1940	520	55641	58195	Private
Slaughterhouse/ Restrooms	Puahi St.	1953	258	59996	58688	DOH
Slaughterhouse	Puahi St.	1953	630	59997	58689	DOH
Residence: Olivia Breitha	Puahi St.	1962	101-62	55639	58184	DOH

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Residence: Katherine Costales	Puahi St.	1964	103-64	55640	59208	DOH
Library	Puahi St.	1965	296	56607	57599	NPS
Rea's Bar Restroom	Puahi St.	1980	624	342014	57621	Private
Garage: Kenso Seki	Puahi Street	1910	516	56538	57608	NPS
Outpatient Clinic: aka Promin Building—Re-use NPS Headquarters	Puahi Street	1946	7BH	22628	57582	DOH
Storage Shed	Puahi Street	1950	623	55809	57607	Private
Rock Crusher	Puahi Street (Baldwin Home)	1950	635	59998	58690	DOH
Storage Shed	School St.	1920	637	101951	57623	Private
Residence: (Maximo and Katie Cabane)	School St.	1937	119-60	22639	57593	NPS
Residence: (Harry Yamamoto)	School St.	1962	120-62	55739	58424	NPS
Residence: (Hatori)	School St.	1962	123-62	55801	58428	DOH
Hothouse	School St.	1969	636		57622	Private
Central Kitchen	Staff Row	1900	5SR	21057	58164	DOH
Garage	Staff Row	1900	629	333513	58178	Private
Asst. Residence Physician: Re-use Head Nurse Residence	Staff Row	1905/06	14SR	21060	59182	DOH

Description	Street/ Location	Date Built	Build- ing #	LCS #	FMSS #	Mgmt
Resident Physician Residence: aka Doctors House	Staff Row	1930	10SR	21059	58168	DOH
Carport	Staff Row	1930	618	329385	58174	Private
Residence: (Electrician)	Staff Row	1931	16SR	59995	58171	DOH
Residence for Single Women	Staff Row	1932	1SR	22627	58158	DOH
Laundry/ Apartment	Staff Row	1940	3SR	329371	58160	DOH
Guest Cottage: aka Vets Cottage	Staff Row	1950	1aSR	56540	58159	DOH
Carport (11SR)	Staff Row	1969	69SR	NH	99323	DOH
Carport (15SR)	Staff Row	1969	70SR	NH	99324	DOH
Carport (7SR)	Staff Row	1969	68SR	NH	99327	DOH
Carport (4SR)	Staff Row	1970	67SR	NH	99322	DOH
Storage Shed	Staff Row	1974	71SR*	NH	99325	DOH
Freezer Shelter	Staff Row	1975	66SR*	NH	99321	DOH
Dentist's Residence	Staff Street	1892	8SR	21058	58167	NPS
Well Pump House	Water Well Rd.	1985	724	NH	231108	NPS
Well Pump House Fuel Storage	Water Well Rd.	1993	724a	NH	238969	NPS

Appendix G: Instructions for Visitors

Sponsor Responsibilities and Penalties

Visitor permits must be made three (3) State Office business days or more in advance scheduled visit.

Exceptions to three (3) business day rule is for emergency purposes only as determined by the Administrator.

All guests/visitors must be registered with their full name on the form provided and each form shall be complete with sponsor signature before approval.

All guests/visitors must have identification that includes date of birth and current address.

Visitor passes must be picked up on a state office business day prior to the scheduled visit if the state office is closed on the visitor arrival date.

Visitor guest list must be brought to the Administration Office the first business day after the visitor's arrival. Visitor passes/tags must be returned the first business day after departure.

All visitor passes/tags must be returned to Administration Office for verification.

Failure to return visitor passes/tags in a timely manner will result in revocation of invitation privileges as follows:

- First failure: will not be allowed to sponsor any guests for 3 months
- Second failure: will not be allowed to sponsor any guests for 6 months
- Third failure: will not be allowed to sponsor any guests for 12-24 months

Additional sanctions may be made at the discretion of the Administrator

Sponsor(s) are responsible for all actions of visitors/guests, including infractions of Kalaupapa rules and regulations.

Rules and Regulations Governing All Visitors to Kalaupapa Settlement

If you are going to be driving during your visit in Kalaupapa, we ask you to use extra caution since many of our residents have visual and hearing impairments. On occasion deer and wild boar are in the settlement. Please be careful and cautious!

SPONSORS:

Only residents of Kalaupapa may sponsor guests.

GUESTS:

All visitors must present some type of photo identification upon sign-in at the state Administration Office (i.e. driver's license, state ID, etc.). ALL IDs MUST HAVE BIRTH DATE ON THEM.

REGISTRATION:

Registration at the State of Hawai'i Administration Office is required of ALL guests. Guests are required to sign the Department of Health permit to enter the settlement. Anyone visiting the settlement without a sponsor and signed permit is TRESPASSING and subject to legal action.

MAXIMUM STAY:

The maximum stay for each guest is limited to seven (7) days and six (6) nights at the Visitors' Quarters. NO VISITOR is allowed to visit Kalaupapa Settlement more than thirteen (13) days in a calendar quarter.

HOSTS/SPONSORS:

Unescorted walking or riding beyond the settlement proper is strictly prohibited. Guests must be in the company of their sponsor at all times when outside the airport terminal area and the cattle guards beginning at the road to Kalawao (where the pavement ends and dirt road begins), beyond the cemetery sites near ocean view, and beyond the bridge leading to the trail. ***Visitors are permitted to travel between the bridge cattle guard and trailhead for access to sign-in at the Administration Office, departure from settlement property, or to meet sponsors.

VISITATION OF MINORS:

Children under the age of sixteen (16) are not permitted in Kalaupapa Settlement.

PHOTOGRAPHS:

Photographs of patients may not be taken without their written permission. This includes their property. Permits may be picked up at the State of Hawai'i Administration Office.

HOSPITAL:

THERE ARE NO MEDICAL SERVICES AVAILABLE TO VISITORS AT KALAUPAPA.

RESTROOMS:

Public restrooms are located at the Airport Terminal, Administration Building, Lion's Club "Ocean View Pavilion," Kalaupapa Pier, the National Park Service's Kalawao Pavilion, and Fuesaina's Bar.

VISITORS' QUARTERS:

Check-in 2:00 pm; check-out 12:00 noon

FOOD:

There are no restaurants in Kalaupapa so it is necessary for guests to provide their own food, beverages, and sundry items. Beer, wine, water, juice, ice cream, cigarettes, film, single-use cameras, and T-shirts are available at Fuesaina's Bar. Hours are Monday–Saturday, 9–11am (no alcohol served), and 4–8pm Monday–Wednesday and Saturday. Closed Sunday.

All visitor trash/garbage must be packed out when visitors leave Kalaupapa.

Visitors may purchase a soda, candy, or bag of chips per day at the Kalaupapa Store, but shopping for groceries is PROHIBITED. Sponsors must provide for their visitors. The Kalaupapa State Main Kitchen is for patients, state workers, and approved contractors only.

LIBRARY:

The library is open to the public. Please have your sponsor check with the Administration Office if you wish to check out any books or movies. Only patients may remove materials from the library.

SPEED LIMITS:

- 1) 15 mph: Hospital Zone and Unit Home Drives
- 2) 25 mph within the settlement
- 3) 35 mph outside the settlement

HUNTING:

Visitors are NOT PERMITTED to hunt. Visitors are NOT PERMITTED to carry firearms. Visitors may accompany approved resident hunters after registering with the Administration Office.

CAMPING:

Camping is NOT ALLOWED anywhere.

USE OF NATURAL RESOURCES:

Visitors of patient residents, visitors of employees, and short-term volunteers may only fish with poles. NO NET fishing by any guests will be allowed. State and federal fish and game rules must be respected. Visitors MAY NOT take any marine life on behalf of patients, employee residents, or resident volunteers, or exercise their privileges. Any violations of the Kalaupapa fishing policy or fish and game rules will result in the visitor being declared unwelcome and banned from future visits to Kalaupapa.

No fishing equipment or the cleaning of fish in any building is allowed. Harvesting and removal of sea salt is to be under the supervision of the sponsor.

No diving tanks or scuba allowed. No surfboarding or boogie boards.

No 'opihi picking. No pets allowed. No diving off the pier.

NO LITTERING:

Please be respectful of this Mākanalua Peninsula. Do your part to maintain the pristine beauty, as a steward for the 'āina (land) and all that lives and grows here.

ATTITUDE:

Honor and respect the history of those who once lived here and particularly those who reside here and call this special place "Home."

NO TRESPASSING:

Trespassing onto personal property is strictly prohibited. This includes any fruit, vegetable, or flower picking.

ANY VIOLATION OF THESE RULES GOVERNING ALL VISITORS WILL RESULT IN DISCIPLINARY ACTION AND SUSPENSION OF VISITATION AND SPONSORSHIP PRIVILEGES.

Violations of the Kalaupapa fishing policy should be reported to the Kalaupapa settlement administrator immediately following the alleged violation. Violations of the Kalaupapa fishing policy may be reported up to three (3) months after the alleged date of the incident. Any violation after that time will not be investigated.

Revised: 01/22/2011

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491/125097 APRIL 2015



