PU‘UKOHOLĀ HEIAU
NATIONAL HISTORIC SITE

Pu‘ukoholā Heiau (Temple on the Whale Hill)

Hale o Kapuni Heiau (Site of submerged temple)

Pelekane (Site of Royal Courtyard)

Park Headquarters

Visitor Center

Site of John Young’s Homestead

Stone Leaning Post

Stone Leaning Post Overlook

Pu‘ukoholā Heiau (Temple on the Whale Hill)

Mailekini Heiau

To Waimea and Kailua-Kona

To Hāwī

State lands and waters within historic site

Paved trail

Unpaved trail

Road bridge

Authorized National Historic Site boundary

PACIFIC OCEAN

SAMUEL M. SPENCER PARK

State lands and waters within historic site

Paved trail

Unpaved trail

Road bridge

Authorized National Historic Site boundary

0 500 Feet

0 100 Meters

North

Front Cover Image: Royal Court at the annual Ho‘oku‘ikahi I Pu‘ukoholā Establishment Day Hawaiian Cultural Festival. (NPS)

Back Cover Image: The Arrival of Keōua to the dedication of Pu‘ukoholā Heiau in 1791. (Herb Kane; NPS Archives)
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Mission of the National Park Service

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship**: We share a commitment to resource stewardship with the global preservation community.
- **Excellence**: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- **Integrity**: We deal honestly and fairly with the public and one another.
- **Tradition**: We are proud of it; we learn from it; we are not bound by it.
- **Respect**: We embrace each other’s differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.

The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.
Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park’s purpose, significance, fundamental resources and values, other important resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Pu‘ukoholā Heiau National Historic Site can be accessed online at: http://insideparkatlas.nps.gov/.
Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, other important resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of the Park

Pu‘ukoholā Heiau National Historic Site is on the northwest coast of the island of Hawai‘i. Designated by Congress in 1972, this park encompasses just over 86 acres, approximately 25 of which are owned by the State of Hawai‘i. The Kawaihae Road (State Route 270) runs along the northeast corner of the park and separates the park’s maintenance facilities and an important park resource, the John Young Homestead, from the rest of the site; the Kawaihae Harbor is to the park’s northwest; and Samuel Spencer County Beach Park at ʻŌhai‘ula is directly to the south. Located on the “hill of the whale,” the park provides spectacular views of Kawaihae Bay to the southwest where unusually large concentrations of blacktip reef sharks (Carcharhinus melanopterus) gather.

As one of the last major temples built in the Hawaiian Islands, Pu‘ukoholā Heiau was constructed by Kamehameha the Great in 1790–91. Arguably one of the greatest leaders in Hawaiian history, Kamehameha became the first person to unite the warring islands into the Kingdom of Hawai‘i. Pu‘ukoholā Heiau played a crucial role in the unification of the Hawaiian Islands, for Kamehameha built the temple as a result of a prophecy that came through a priest named Kāpoʻūkahi. This kahuna, or priest, told Kamehameha that if he were to build a heiau on the hill known as Pu‘ukoholā and dedicate it to his family’s war god Kūkā‘ilimoku, he would be able to conquer all of the islands.

Pu‘ukoholā Heiau is a place of destiny. It is in this hallowed vicinity that Keōua Kūahu‘ula offered himself to his fate and where Kamehameha realized the clinching of his rise to conquest, domination, and ultimately, immortality. Today, this national historic site stands as the greatest historic edifice to Kamehameha’s memory—he who is regarded as the most celebrated Hawaiian who ever lived.

Cultural practitioners with their traditional pahu (drums) at the park’s annual Ho‘oku‘ikahi I Pu‘ukoholā Establishment Day Hawaiian Cultural Festival. (Kai Markell; used by permission)
It is said that thousands and thousands of men labored for nearly a year to construct this heiau. Stories that have been passed down from generation to generation indicate that the temple’s builders carried rocks from the distant Pololū Valley. Forming a human chain nearly 25 miles long, the laborers handed the water worn lava rocks one person to another up and over Kohala Mountain to this site. Without the use of mortar, cement, or other bonding materials, these skilled laborers placed these rocks in exact locations in order to meet specific building specifications and adhere to strict religious protocols.

When Puʻukoholā Heiau was completed in 1791, the temple was consecrated with human offerings, the principal sacrifice being the high chief Keōua Kūahu‘ula, Kamehameha’s cousin and principal rival who ruled the eastern half of Hawai‘i island. Major battles ensued as Kamehameha led his army and peleleu (fleet of war canoes) northward, reconquering Maui in 1794, and securing O‘ahu in 1795. Kaua‘i peacefully conceded through negotiations in 1810. For the first time in the history of Hawai‘i, the Hawaiian islands were united under one ali‘i (chief), thus forming the Kingdom of Hawai‘i and fulfilling the prophecy 19 years after the building of Puʻukoholā Heiau.

For this reason, many contemporary Hawaiians still believe that Puʻukoholā Heiau has a significant role to play as the Hawaiian people of today attempt to rebuild the Hawaiian nation and pursue a level of sovereignty and independence that once prevailed over the islands. Puʻukoholā Heiau continues to serve as a beacon of unification where hundreds of Hawaiian practitioners gather regularly to honor Kamehameha and their ancestors in traditional rituals and protocols to perpetuate these sacred practices.

In addition to preserving the remains of Puʻukoholā Heiau, the park protects other sites of historic significance, including Mailekini Heiau, a luakini and/or an agricultural heiau, which was eventually converted to a military fort; the ruins of Hale o Kapuni Heiau, a temple dedicated to sharks, which are believed to be ancestral ‘aumakua (family guardians); the Royal Court, or Pelekane, site of numerous diplomatic meetings between Kamehameha and foreign visitors; and John Young’s homestead, believed to contain the remains of the first Western-style house in Hawai‘i.
Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Pu'ukoholā Heiau National Historic Site was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established when the enabling legislation adopted by Congress was signed into law on August 17, 1972 (see appendix A for enabling legislation). The purpose statement lays the foundation for understanding what is most important about the park.

The purpose of Pu'ukoholā Heiau National Historic Site is to conserve and protect three heiau: Pu'ukoholā, Mailekini, and Hale o Kapuni; the John Young Homestead; and the surrounding cultural landscape. The park interprets these resources and their role in Hawaiian culture, including the unification of the Hawaiian kingdom under Kamehameha I.
Park Significance

Significance statements express why a park’s resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Pu’ukoholā Heiau National Historic Site and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Pu’ukoholā Heiau National Historic Site. (Please note that the sequence of the statements do not reflect the level of significance.)

1. Pu’ukoholā Heiau National Historic Site commemorates the unification of the Hawaiian islands and people under Kamehameha I, who established his supremacy after high chief Keōua Kūahu‘ula was offered here on a temple altar built to fulfill one of three prophecies predicting the destiny of Kamehameha I.

2. Pu’ukoholā Heiau National Historic Site is the only site known to encompass a concentration of three types of heiau that illustrate traditional Hawaiian religious practices. Pu’ukoholā Heiau was a ceremonial luakini, or state temple; Mailekini Heiau was either a luakini and/or an agricultural heiau; and the submerged Hale o Kapuni Heiau was dedicated to sharks, believed to be ancestral ‘aumakua (family guardians).

3. Pu’ukoholā Heiau is the last great temple that was constructed by Kamehameha I as high chief and guardian of Kū, and dedicated to the war god Kūkā‘ili‘umoku under adherence to the strictest ancient Hawaiian religious protocols.

4. Pu’ukoholā Heiau National Historic Site preserves the homestead and legacy of John Young, the only foreigner bestowed the titles of high chief and governor of Hawai‘i Island by Kamehameha I, and whose homestead contains the first known examples of western-style structures built in the islands.

5. Pu’ukoholā Heiau National Historic Site protects Hale o Kapuni, a temple where the chiefs of the ocean (sharks) and the chiefs of the land (ali‘i) came together, illustrating a spiritual connection between the land and the ocean.

6. Pu’ukoholā Heiau National Historic Site protects Pelekane, or the Royal Compound, which served as a temporary residence for ancient chiefs and historic ali‘i (royalty) including Kamehameha I, Queen Emma, Liholiho (Kamehameha II), and other important figures in 19th century Hawai‘i.

7. The mana (spiritual power) of Pu’ukoholā Heiau National Historic Site nurtures and contributes to the relevance of spiritual aspects of Hawaiian culture by inspiring continued cultural practices and ceremonies.
Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park’s legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Pu‘ukoholā Heiau National Historic Site:

- **The Three Heiau.** The park protects three heiau: Pu‘ukoholā (a designated national historic landmark), Mailekini, and Hale o Kapuni and associated features such as kikiako‘i (leaning stone post). These sacred temples embody mana (spiritual power), contributing to the ancient, historic, and contemporary relevance of this site.

- **Pelekane.** The royal compound, Pelekane was a favored governing site of many ruling chiefs as they traveled throughout their chiefdom and served as a temporary residence for ancient chiefs and other historic ali‘i (royalty) due in part to the area’s valuable attributes, which include sources of available fresh water in arid Kawaihae (the waters of wrath).

- **John Young Homestead.** The John Young Homestead, with its mixture of Hawaiian and western architectural styles and artifacts, is the best material evidence of the intense interaction of Hawaiian and Western cultures in the early years following first contact and the introduction of cultural diversity in the Hawaiian Islands. Architecturally, the household contains the earliest known examples of a Western-style structure in the Hawaiian Islands; its ruins include rare physical evidence of a kauhale (cluster of traditional structures).

- **Cultural Landscapes and Associated Features.** The park encompasses a significant segment of Alaloa (long trail), a part of Ala Kahakai National Historic Trail, that served as a transportation route through Kawaihae, connecting other heiau and communities on the island, and played a major role in the Makahiki (seasonal tribute to the god, Lono). This resource and other features associated with the cultural landscape include historic structures, archeological resources, and vegetation, which contribute to the national historic landmark designation of the park.
• **Legacies and Stories of Key Figures in Hawaiian History.** King Kamehameha I, Queen Ka'ahumanu, John Young (trusted advisor), Liholiho (King Kamehameha II), Queen Emma, high chief Keōua Kūahuʻula (cousin and rival of Kamehameha I), and high priest Kāpoʻukahi (temple architect) are among the key historical figures whose association with Pu'ukoholā Heiau National Historic Site and events that took place here represent a significant part of Hawaiian history. Stories, oral histories, museum collections, and other ethnographic resources help perpetuate their legacies and those of ancient chiefs.

• **Soundscapes and Dark Night Skies.** The general ambient quiet and the presence of dark night skies are integral to the historic ‘aina (land) of Pu‘ukoholā Heiau National Historic Site and the mana embodied at this site, maintaining the reverence of this wahi kapu (sacred place) and enabling ongoing cultural practices and ceremonies to occur in an atmosphere experienced by nā kupuna (ancestors).

• **The Legacy of Ho'oku'ikahi (Unification).** The ho'oku'ikahi (unification) that took place at Pu‘ukoholā Heiau National Historic Site affected all Hawaiian history to the present day where it fosters and enables connections with other significant sites, stories, and communities in Hawai‘i and around the world.

• **Cultural Kīpuka.** The continued presence of mana at Pu‘ukoholā Heiau National Historic Site allows the park to serve as a cultural kīpuka, or protected place where the seeds of Hawaiian culture are preserved and can grow, thrive, and be nurtured to serve other locations. The ongoing opportunities for Native Hawaiian traditional uses and adherence to traditional cultural protocols perpetuate traditional practices, knowledge, and the cultural significance of this area.

• **Immersive Cultural Experiences.** The park provides opportunities for all visitors to learn and understand the founding of the Hawaiian Kingdom, experience the living Hawaiian culture, and connect with this wahi kapu (a sacred place).

Volunteers and park employees use traditional ‘oloke’a (ladder systems) to make earthquake repairs to Mailikini Heiau. (NPS)
Other Important Resources and Values

Pu’ukoholā Heiau National Historic Site contains other resources and values that are not fundamental to the purpose of the park and may be unrelated to its significance, but are important to consider in planning processes. These are referred to as “other important resources and values” (OIRV). These resources and values have been selected because they are important in the operation and management of the park and warrant special consideration in park planning.

The following other important resources and values have been identified for Pu’ukoholā Heiau National Historic Site:

- **Marine Communities.** The marine waters of Pu’ukoholā Heiau National Historic Site provide a refuge for endemic and other native species in Hawai‘i, especially for threatened green sea turtles and shark species, including blacktip reef sharks. The park helps preserve the bay at Pelekané, which is one of two known areas in the Hawaiian Islands where unusually large concentrations of blacktip reef sharks gather, as they did in historic times.

- **Terrestrial and Freshwater Ecosystems.** The park includes native vegetation, several of which are reintroduced threatened and endangered species, terrestrial vertebrates, and freshwater communities that are part of an important hydrologic system and provide valuable habitat for native species.

A visitor paddles a double-hulled canoe during the annual Ho’oku’ikahi I Pu’ukoholā Establishment Day Hawaiian Cultural Festival. (NPS)
Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental and other important resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Pu‘ukoholā Heiau National Historic Site:

- By constructing and dedicating Pu‘ukoholā Heiau to the war god Kūkā‘ilimoku, Kamehameha I gained the mana (spiritual power) that enabled him to unify the Hawaiian Islands and people.

- John Young’s role as the king’s advisor on military, commercial, and political matters, as well as his governorship of Hawai‘i Island was very important to the ascendancy of Kamehameha I to power. Because of John Young’s influence, western goods and ideas were spread throughout the islands.

- The location, alignment, and design of Pu‘ukoholā Heiau was selected because of the mana (spiritual power) existing in the temples already on the hill and because its strategic views afforded sighting of invading enemies.

- Pu‘ukoholā Heiau continues to represent a sacred, spiritual gathering place. The Hawaiian culture and traditions representative of the era of Kamehameha I continue to be practiced today.

- Three prophecies: the birth of Kamehameha I, the lifting of the Naha stone, and the building of Pu‘ukoholā Heiau, were fulfilled when Kamehameha I conquered Hawai‘i Island in 1791 and when he became the first king of the Hawaiian Islands in 1810.

- Respect and appreciation for Native Hawaiian culture associated with the war god Kūkā‘ilimoku is demonstrated by the techniques, processes, and other religious protocols used in the initial construction and continued stabilization, maintenance, and preservation of Pu‘ukoholā Heiau.

- Marine waters are frequented by large gatherings of blacktip reef sharks. Many believe that Hale o Kapuni spiritually attracts sharks to the bay as in the years when the sharks were fed regularly at the submerged temple by the chief Alapa‘i Kupalupalu Manō.
Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental and other important resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Pu‘ukoholā Heiau National Historic Site.

Special Mandates

- **Enabling Legislation.** Congress designated Pu‘ukoholā Heiau National Historic Site on August 17, 1972, in order to restore and preserve in public ownership the historically significant temple associated with Kamehameha the Great, who founded the historic Kingdom of Hawai‘i, and the property of John Young who fought for Kamehameha the Great during the period of his ascendancy to power. The historic site’s enabling legislation (Public Law 92-388, 86 Stat. 562) authorizes acquisition of land, by donation or with donated funds, but limits acquisition to 100 acres, including subsequent boundary revisions. In 1990, a donation of 26.5 acres from the Queen Emma Foundation increased NPS lands to 80 acres at the park, which in turn was increased to 86 acres in 1996 to accommodate the road realignment protecting the three temples.

- **National Historic Landmark Designation.** Pu‘ukoholā Heiau was designated as a national historic landmark on December 29, 1962 (Register Number 66000105), due to its significance as an ancient heiau where, in the summer of 1791, King Kamehameha the Great sacrificed Keōua, his chief rival for Hawai‘i Island. This event led to the unification of the Hawaiian Islands as a single kingdom under the rule of Kamehameha I.

- **Ala Kahakai National Historic Trail Designation.** Ala Kahakai National Historic Trail was designated by Congress in 2000 for the preservation, protection, and interpretation of traditional Native Hawaiian culture and natural resources. This 175-mile corridor and trail network of cultural and historical significance, traverses through hundreds of ancient Hawaiian settlement sites and more than 200 ahupua‘a (traditional sea to mountain land divisions), including Pu‘ukoholā Heiau National Historic Site. Although managed separately by the National Park Service as part of the national trails system, Ala Kahakai National Historic Trail works with Pu‘ukoholā Heiau National Historic Site to manage the segment of trail through the park.
- **Special Management Area.** Under the State of Hawai‘i’s Coastal Zone Management Program (established through Historic Resource Study Chapter 205A), Pu‘ukoholā Heiau National Historic Site is designated within a special management area (SMA). Under this designation, the State of Hawai‘i regulates “…developments within an area along the shoreline…to avoid permanent losses of valuable resources and the foreclosure of management options, and to ensure that adequate access, by dedication or other means, to public owned or used beaches, recreation areas, and natural reserves is provided” (HRS 205A). As consistent with the national Coastal Zone Management Act, federal agencies cannot act without regard for, or in conflict with, state policies and related resource management programs that have been officially incorporated into state coastal zone management programs (15 Code of Federal Regulations [CFR] 930).

**Administrative Commitments**

- **Memorandum of Understanding for Management of Pelekane and Kawaihae-Mahukona Road.** This memorandum of understanding between the National Park Service and State of Hawai‘i clarifies responsibilities and priorities for managing the right-of-way around the road and the 22 acres of state-owned land surrounding Pelekane.

- **Memorandum of Understanding for Samuel Spencer County Beach Park at ‘Ōhai‘ula.** This memorandum of understanding between the National Park Service and State of Hawai‘i establishes a right-of-way for utilities to cross NPS land and provide the park with free county water.

- **Memorandum of Understanding for Interagency Law Enforcement.** This memorandum of understanding between the National Park Service and Hawai‘i Police Department provides cross-designation for each agency’s law enforcement officers to efficiently and effectively assist each other.

- **Cooperating Association Agreement for Interpretation and Education.** This cooperating association agreement between the National Park Service and Hawai‘i Pacific Parks Association provides park visitors with valuable interpretive and educational materials to facilitate an expanded appreciation of the national park system.
Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park’s fundamental and other important resources and values, and develop a full assessment of the park’s planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

1. analysis of fundamental and other important resources and values (see appendix B)
2. identification of key issues and associated planning and data needs
3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental and other important resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental and Other Important Resources and Values

The fundamental and other important resource or value analysis tables include current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value. Please see appendix B for the analysis of fundamental resources and values.

Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental and other important resources and values. For example, a key issue may pertain to the potential for a fundamental and other important resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but which still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Pu‘ukoholā Heiau National Historic Site and the associated planning and data needs to address them:
• **Restoration and Preservation of Heiau, John Young Homestead, and the Surrounding Cultural Landscape.** The purpose of Pu'ukoholā Heiau National Historic Site is to conserve and protect three heiau: Pu'ukoholā, Mailekini, and Hale o Kapuni; the John Young Homestead; and the surrounding cultural landscape. While the park has taken action to restore and stabilize Pu'ukoholā Heiau, little guidance exists for restoring and/or ensuring the protection of the other two heiau, the John Young Homestead, or the cultural landscape, all of which continue to be impacted by natural processes and external activities. Earthquakes and vibrations caused by increasing heavy traffic along the highway continue to threaten the stability of the Pu'ukoholā Heiau, and slumps and bulges have occurred since previous restorations. Invasive species continue to threaten the John Young Homestead, Pelekane, and the cultural landscape. Erosion control and flooding are of particular concern at Pelekane.

Additionally, increasing development and access from surrounding lands, such as the Kawaihae Harbor and Samuel Spencer County Beach Park at ‘Ōhai'ula, are negatively impacting these resources through impacts to the viewshed, night sky, and soundscapes. Beyond these immediate threats, some Native Hawaiians are writing a long-range plan that may make recommendations to the park to install permanent structures on Pu'ukoholā Heiau. The park lacks guidance for what “restoration” of the heiau (as dictated by the park’s enabling legislation) means in practice.

Although the park has developed several cultural landscape inventories of these resources, they lack the treatment guidance provided by cultural landscape reports, and guidance is needed to determine how the heiau, John Young Homestead, and Pelekane will be maintained and preserved over time. Preservation and other treatment strategies need to be documented and site planning is needed to ensure preservation of the cultural landscape.

*Associated Planning Needs: cultural landscape report / preservation plan (of heiau and John Young Homestead), invasive species management plan / restoration plan, public (or visitor) access management plan*

• **Ability to Collect Ethnographic Information.** Oral histories related to Pu'ukoholā Heiau National Historic Site are key to understanding and interpreting many of the park’s fundamental resources and values, including the stories tied to key figures in Hawaiian history and the legacy of ho’oku‘ikahi (unification). Because these stories and cultural information also explain the ancient and historic relationship between the people and the land at this site, they are also extremely useful in informing management decisions at the park, such as methods for preserving and protecting Pu'ukoholā Heiau and the other cultural resources in the park, which are critical because the integrity of the heiau is tied to procedures for how the sites are restored. The park has used, and there is opportunity in the future to continue to use, traditional techniques in stabilization or rehabilitation. However, this opportunity exists only so long as the knowledge for doing so exists within the community. As many kupuna (elders) age and pass on, the park is at risk of losing information about the resources it protects, some of which have already been lost. Therefore, collecting oral histories and photos and general cultural information from kupuna across Hawai‘i is a critical and urgent need at the park. Doing so will preserve this important resource and will broaden connections between the park and Native Hawaiians.

*Associated Data Needs: oral histories / ethnographic resources*
- **Ability to Provide Access to Site for Cultural Practitioners.** Since the park’s designation in 1972, park managers have struggled with striking a balance between protecting the temples’ physical resources and being sensitive to the needs of cultural practitioners who want access to the site for religious and cultural purposes. Out of concern for the physical resource, the park manages public access to Pu‘ukoholā and Mailekini Heiau, but this has had some negative effect on cultural practitioners hindering their ability to access the temples without constraint to perform cultural ceremonies at the heiau in line with the protocols established by Hawaiian religion. Guidance is needed to determine how to best provide functional access to the site for Hawaiian cultural practitioners to fulfill the obligations of the American Indian Religious Freedom Act, help perpetuate the Native Hawaiian culture, and ensure the protection of this physical resource.

*Associated Planning Needs:* public (or visitor) access management plan

- **Ability to Provide Safe Access to Park Resources.** Ensuring the security of park facilities and resources while providing safe and accessible visitor access to important resources is an ongoing challenge for park managers. While some key park resources, such as Pelekane, are at risk from being overly accessible from neighboring lands, access to other key resources in the park need to be enhanced through physical or interpretive improvements to provide visitors with opportunities to experience and connect with park resources. While access issues, such as Americans with Disabilities Act (ADA) accessibility and interpretive displays, could be improved near the heiau and visitor center, physical access to the John Young Homestead is of particular concern due to its physical separation from the rest of the park by the highway and lack of a designated parking area or trail to the site. These access problems are the result of law enforcement issues—where the public has unregulated access to a site or where a site is so removed from the rest of the park that it lacks the presence of regular personnel and general public access. Development of agreements between the park and surrounding land managers is needed to protect the park from incompatible uses, while, at the same time, site planning is needed to ensure safe access for visitors at sites where physical access is necessary and appropriate. Safe access to the temples by Hawaiian cultural practitioners and kupuna (elders) is also needed, especially due to the uneven walking surfaces, occasional unstable rocks forming the temple’s floor, and practitioners ascending the temples barefooted, many times in low light.

*Associated Planning Needs:* public (or visitor) access management plan, communication plan for public and employee safety

- **Guidance Needed for Comprehensive Natural Resource Management.** Pu‘ukoholā Heiau National Historic Site is experiencing a number of issues related to natural resource management, including the proliferation of invasive species, erosion along hardened trail surfaces, and large flood events at the bay at Pelekane. These issues are further compounded by climate change. While the park has a natural resource management plan and vegetation management plan, both are outdated and now inhibit the park’s ability to implement guidance and obtain funding for future work. Guidance is needed for prioritizing long-term investment in resource stewardship at Pu‘ukoholā Heiau National Historic Site. This guidance could include identifying opportunities for cooperative conservation to address external threats and developing strategies for managing invasive species.

*Associated Planning Needs:* invasive species management plan / restoration plan, resource stewardship strategy
Other Important Issues by Program Area

The following section describes other issues and challenges identified for Pu‘ukoholā Heiau National Historic Site. The information is organized by park program area. Although these issues are not the most immediate concerns at the park, they describe important challenges to be addressed by planning and management.

Park Operations.

*Strategic Planning* — Pu‘ukoholā Heiau National Historic Site currently lacks a multiyear plan for operations and funding and is currently guided by the long-term vision embedded in the institutional memory of the current park superintendent who has been at the park for over 30 years. Much of the operations and development undertaken over the last 30 years have served the park well and led to successful and significant accomplishments (e.g., removal of the old Spencer Beach park road, installation of new Spencer Beach park road, and construction of new maintenance and visitor center facilities). A strategic plan documenting the long-term vision and operational needs, analyzing funding and staffing needs, and determining the goals for the next 5 to 10 years would be beneficial.

*Communications and Emergency Response Planning for Public and Employee Safety* — Pu‘ukoholā Heiau National Historic Site needs a communications plan and emergency response plan to ensure visitor and employee safety and define procedures responding to emergencies such as tsunamis. In particular, the lack of radio and dispatch services needs to be addressed within the park. While some communication procedures are in place for holidays, a review of these standards and procedures is needed. Identification of and communication with the public about tsunami escape routes also needs to be coordinated.

*Law Enforcement Needs Assessment/Physical Security Plan* — As a small park, Pu‘ukoholā Heiau National Historic Site lacks law enforcement staff on-site. A law enforcement needs assessment is needed to identify gaps in visitor and resource protection and strategies for meeting the basic needs of the park with regard to protection services.

Cultural Resources.

*Protection of Museum Collections* — The ability to provide sufficient curatorial facilities and curation on-site is emerging as a large issue at Pu‘ukoholā Heiau National Historic Site. The park has a museum collections plan and a small collections room on the other side of the highway from the administrative offices for artifacts. Any resources that do not fit in this small space need to be sent off-site to the NPS central depository in Kaloko-Honokōhau National Historical Park, which may not be able to continue to receive materials.

Native Hawaiians are concerned about critical museum pieces leaving the site, but at the same time, more stringent requirements are emerging for the protection of these resources (i.e., more stringent regulations about curation buildings and procedures, etc.), which make it exceedingly difficult to store artifacts on-site at a small park with limited resources. Building the park’s own large curatorial facility is infeasible at this time because park funding is not sufficient to pay a full-time curator. However, the park is exploring opportunities to work with foundations, other parks, and stakeholders who are interested in building a repository to care for these artifacts and treasures.
Interpretation.

Youth Engagement and Stewardship — With the increasing NPS emphasis on youth engagement and stewardship, Pu‘ukoholā Heiau National Historic Site would benefit from an update to the current long-range interpretive plan. Written in 1999, this plan lacks guidance on work with youth or volunteers and could include more direction for online interpretation services given the advances in technology over the past 15 years.

Wayside Management Planning — Pu‘ukoholā Heiau National Historic Site needs a wayside management plan for the design and planning of new waysides and the maintenance of existing ones. Implementation of the recommendations developed by a recent review on ADA accessibility of interpretive amenities is also needed.

Partnerships.

Cooperation and Coordination with other NPS Units — Given current staffing and budget limitations and the shared priorities and issues that face many of the smaller, cultural parks in Hawai‘i, it is important for Pu‘ukoholā Heiau National Historic Site to continue to partner with local NPS units, such as Ala Kahakai National Historic Trail, Kaloko-Honokōhau National Historical Park, and Pu‘uhonua o Hōnaunau National Historical Park, whenever possible. For example, there are a number of opportunities to continue to partner with Ala Kahakai National Historic Trail to provide trail access within the park, and there are ample opportunities to collectively market and promote these parks to encourage increased visibility and visitation on the island. These four parks also share common concerns about ensuring consistent access to and use of these sites by cultural practitioners, even while acknowledging and respecting the different needs of cultural groups at the various sites.

Engagement with Local Community — Beyond these inter-NPS partnerships, Pu‘ukoholā Heiau National Historic Site needs to continue to create and maintain mutually beneficial relationships with community stakeholders to ensure protection of park resources, expand outreach efforts, and maintain the integrity of the park as a cultural kīpuka.

A young visitor watches as a volunteer demonstrates traditional bamboo stamping at the park’s annual Ho‘oku‘ikahi I Pu‘ukoholā Establishment Day Hawaiian Cultural Festival. (NPS)

Descendants of Isaac Davis gather at the park to honor the life and legacy of one of the chief foreign advisers of King Kamehameha I. (NPS)

Three times each winter, Pu‘ukoholā Heiau National Historic Site hosts volunteers like these who take part in NOAA’s Sanctuary Ocean Count. (NPS)
Planning and Data Needs

To maintain connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority, and other items identified, but not rising to the level of high priority, were listed as other important needs. These priorities inform park management efforts to secure funding and support for planning projects.

Criteria and Considerations for Prioritization.

The following criteria were used to evaluate the priority of each planning or data need:

• Greatest utility to unit management
• Ability to address multiple issues
• Emergency/urgency of the issue
• Prevention of resource degradation
• Plans that consider protection of the fundamental resources and values
• Result in a significant benefit for visitors
• Feasibility of completing the plan or study, including staffing support and funding availability
• Opportunities, including interagency partnership or assistance

High Priority Planning Needs

Cultural Landscape Report / Preservation Plan for the Three Heiau, the John Young Homestead, and Alaloa.

Rationale and scope — This plan would define “restoration” in relationship to the three heiau, the John Young Homestead, and Alaloa (long trail) and would identify preservation methods (personnel, materials, and process) for meeting the restoration goals for each of these resources, such as using traditional Hawaiian protocols in restoring and stabilizing the heiau. Because of the importance of the cultural landscape to these sites, this plan would also identify desired conditions and best management practices for protecting the viewshed, night sky, and soundscapes in light of increasing development and associated uses on external lands.
Public (or Visitor) Access Management Plan.

Rationale and scope — This plan would explore alternatives for long-term visitor access and use at the site—balancing general public access with that of cultural practitioners and the protection of natural resources. The plan would develop opportunities for providing cultural access to Pu‘ukoholā Heiau in a functional capacity while still ensuring the protection of the site’s physical resources. It would also address general physical and interpretive access within the park, from both land and water, seeking to improve ADA accessibility along trails, identify physical connections to the Blue Trail and other routes, and concentrate interpretive opportunities throughout the site through enhancements such as developing na hale (traditional houses / shade structures) in key locations. The plan would also include alternatives for improving physical and/or interpretive access to the John Young Homestead for all visitors. This last element may include the development of a development concept plan.

Invasive Species Management Plan / Restoration Plan.

Rationale and scope — Managing invasive animal and plant species in Pu‘ukoholā Heiau National Historic Site is an urgent issue because of the threat of these species on both natural and cultural resources in the park. An invasive species management plan and/or restoration plan would develop strategies to control invasive, nonnative species, restore impacted areas, and detect and prevent new infestations. Depending on available funding and resources at the time of initiating a plan, this could be incorporated within a larger resource stewardship strategy (see below) or exist as a stand-alone plan. There is also the opportunity to partner with other small parks on the Island of Hawai‘i in completing this planning effort.

Resource Stewardship Strategy.

Rationale and scope — This strategy would identify and track indicators of desired resource conditions and would recommend comprehensive strategies to achieve and maintain desired conditions for managing natural and cultural resources. As mentioned above, this plan could incorporate an invasive species management plan / restoration plan.

High Priority Data Needs

Oral Histories / Ethnographic Resources.

Rationale and scope — Collecting oral histories from kupuna across Hawai‘i is a critical and urgent need as the park is at risk of losing a generation of important cultural information about the resources it protects. In reaching out and engaging kupuna and others in telling their stories, the park will help protect the resources at Pu‘ukoholā Heiau National Historic Site, preserve and enhance its relationships with the community, improve its ability to interpret these resources, and expand its understanding of how to manage and protect these resources now and into the future. Prior to collecting oral histories, the park needs to identify what information already exists and then define the methods and standards for seeking out missing information, particularly in conjunction with working with Native Hawaiians. Oral histories could be collected directly through the National Park Service or through partnerships with other organizations in Hawai‘i.
### Planning Needs and Data Needs

<table>
<thead>
<tr>
<th>Planning or Data Needs</th>
<th>Priority (H, M, L)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cultural Resources</strong></td>
<td></td>
<td></td>
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<tr>
<td>Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural landscape report / preservation plan</td>
<td>H</td>
<td>Addresses the three heiau, the John Young Homestead, and Alaloa in a single document.</td>
</tr>
<tr>
<td><strong>Data Needs and Studies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral histories / ethnographic resources</td>
<td>H</td>
<td></td>
</tr>
<tr>
<td><strong>Natural Resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invasive species management plan / restoration plan</td>
<td>H</td>
<td>Could be combined with a broader regional planning effort addressing multiple parks or part of the resource stewardship strategy.</td>
</tr>
<tr>
<td>Resource stewardship strategy</td>
<td>H</td>
<td>Could have adequate detail to address invasive species management and restoration guidance.</td>
</tr>
<tr>
<td><strong>Visitor Use Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public (or visitor) access management plan</td>
<td>H</td>
<td></td>
</tr>
<tr>
<td><strong>Interpretation and Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long range interpretive plan – update</td>
<td>M</td>
<td>An update to the park’s long-range interpretive plan would develop strategies to improve youth engagement and stewardship in the park and would address wayside management, particularly in planning new waysides and the maintenance of the existing ones.</td>
</tr>
<tr>
<td><strong>Park Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication plan for public and employee safety</td>
<td>M</td>
<td>Needed to ensure visitor and employee safety and better define procedures for responding to emergencies such as tsunamis. The lack of radio and dispatch services needs to be addressed within the park, and a review of holiday communication standards and procedures is needed.</td>
</tr>
<tr>
<td>Law enforcement needs assessment</td>
<td>M</td>
<td>Needed to identify gaps in visitor and resource protection and strategies for meeting the basic needs of the park with regard to protection services.</td>
</tr>
<tr>
<td>Standard operating procedure for volunteer management</td>
<td>M</td>
<td>Needed to improve coordination of volunteers within the park to identify appropriate volunteer projects, advertise volunteer opportunities, ensure volunteer safety, and improve coordination with partners and other groups who may be interested in stewardship.</td>
</tr>
</tbody>
</table>
Part 3: Contributors

Puʻukoholā Heiau National Historic Site

Daniel Kawaiaea, Superintendent
Ben Saldua, Chief of Interpretation
George Enuton, Park Ranger
Greg Cunningham, Park Ranger
William Akima, Resource Management
Karen Fogarty, Administrative Officer
Bernard Gomes, Maintenance Worker
Kahau Agustin, Maintenance Laborer

NPS Pacific West Region

Amanda Kaplan, Environmental Planner
Elizabeth Boerke, Environmental Protection Specialist
Betsy Anderson, Landscape Architect

Other NPS Staff

Aric Arakaki, Superintendent, Ala Kahakai National Historic Trail
Rick Gmirkin, Archeologist, Ala Kahakai National Historic Trail
Janette Gillespie, Chief Ranger, Kaloko-Honokōhau National Historical Park
Sallie Beavers, Chief of Integrated Resources Management, Kaloko-Honokōhau National Historical Park
Adam Johnson, Chief of Resource Management, Puʻuhonua O Hōnaunau National Historical Park
John Paul Jones, Visual Information Specialist, Denver Service Center – Planning Division
Ken Bingenheimer, Editor, Denver Service Center – Planning Division

NPS Partners

Fred Keakaokalani Cachola, Board Chairman, Hawaii Pacific Parks Association; Na Aikane o Puʻukoholā Heiau Board of Directors
Cathy Schwemm, PhD, Project Ecologist, Natural Resource Condition Assessments
Joyce Keala, Sales Associate at Puʻukoholā Heiau National Historic Site, Hawaiʻi Pacific Parks Association
Appendixes

Appendix A: Enabling Legislation and Legislative Acts for Pu‘ukoholā Heiau National Historic Site

Public Law 92-388

AN ACT
To provide for the establishment of the Puukohola Heiau National Historic Site, in the State of Hawaii, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to restore and preserve in public ownership the historically significant temple associated with Kamehameha the Great, who founded the historic Kingdom of Hawaii, and the property of John Young who fought for Kamehameha the Great during the period of his ascendancy to power, the Secretary of the Interior is authorized to acquire, by donation or purchase with donated funds, such lands and interests in lands, together with structures and improvements thereon, not to exceed one hundred acres, in the vicinity of Kawaihae, Hawaii, as generally depicted on a map entitled “Boundary Map, Proposed Puukohola Heiau National Historic Site,” numbered NHS–PK 20,002, dated February 1970, which shall be on file and available for public inspection in the offices of the National Park Service, Washington, District of Columbia. The Secretary of the Interior may from time to time revise the boundaries of the proposed historic site, but the total acreage of the site shall not exceed one hundred acres.

Sec. 2. The Secretary of the Interior shall establish the area as the “Puukohola Heiau National Historic Site” at such time as he deems sufficient interests in lands have been acquired to constitute an administrable unit. Pending and after establishment, the Puukohola Heiau National Historic Site shall be administered, developed, preserved, and maintained in accordance with the provisions of the Act entitled “An Act to establish a National Park Service, and for other purposes”, approved August 25, 1916 (39 Stat. 555), as amended and supplemented (16 U.S.C. 1 et seq.), and the Act entitled “An Act to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance, and for other purposes”, approved August 21, 1935 (49 Stat. 666; 16 U.S.C. 461 et seq.).

Sec. 3. Notwithstanding the acreage limitation contained in section 1 of this Act, the Secretary of the Interior is authorized to acquire by donation, purchase, or exchange, such additional lands and interests therein outside the boundary of the site as he deems necessary to the boundary of the site, and he may construct roads on the lands so acquired and convey the same, subject to such terms and conditions as he deems necessary, to the State of Hawaii or its appropriate political subdivision. Any relocation of State and county roads shall be undertaken in accordance with an agreement between the Secretary and the State or county concerned, which shall provide, among other things, for the continued maintenance of the relocated portions of road by such State or county.

Sec. 4. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act not to exceed, however, $1,040,600 (May 1971 prices) for development, plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indexes applicable to the types of construction involved herein.

Approved August 17, 1972.
Pu‘ukoholā Heiau National Historic Site

Public Law 106–510
106th Congress

An Act

To eliminate restrictions on the acquisition of certain land contiguous to Hawaii Volcanoes National Park, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Hawaii Volcanoes National Park Adjustment Act of 2000”.

SEC. 2. ELIMINATION OF RESTRICTIONS ON LAND ACQUISITION.

The first section of the Act entitled “An Act to add certain lands on the island of Hawaii to the Hawaii National Park, and for other purposes”, approved June 20, 1938 (16 U.S.C. 391b), is amended by striking “park: Provided,” and all that follows and inserting “park. Land (including the land depicted on the map entitled ‘NPS–PAC 1997HW’) may be acquired by the Secretary through donation, exchange, or purchase with donated or appropriated funds.”.

SEC. 3. CORRECTIONS IN DESIGNATIONS OF HAWAIIAN NATIONAL PARKS.

(a) HAWAI‘I VOLCANOES NATIONAL PARK.—

(1) IN GENERAL.—Public Law 87–278 (75 Stat. 577) is amended by striking “Hawaii Volcanoes National Park” each place it appears and inserting “Hawai‘i Volcanoes National Park”.

(2) REFERENCES.—Any reference in any law (other than this Act), regulation, document, record, map, or other paper of the United States to “Hawaii Volcanoes National Park” shall be considered a reference to “Hawai‘i Volcanoes National Park”.

(b) HALEAKALĀ NATIONAL PARK.—

(1) IN GENERAL.—Public Law 86–744 (74 Stat. 881) is amended by striking “Haleakalā National Park” and inserting “Haleakalā National Park”.

(2) REFERENCES.—Any reference in any law (other than this Act), regulation, document, record, map, or other paper of the United States to “Haleakalā National Park” shall be considered a reference to “Haleakalā National Park”.

(c) KALOKO-HONOKŌHAU.—

(1) IN GENERAL.—Section 505 of the National Parks and Recreation Act of 1978 (16 U.S.C. 396d) is amended—

(A) in the section heading, by striking “KALOKO-HONOKŌHAU” and inserting “KALOKO-HONOKŌHAU”; and

Nov. 13, 2000
[S. 938]

16 USC 1 note.

16 USC 391d.

16 USC 391d note.

16 USC 395b, 396c.

16 USC 395b note.
PUBLIC LAW 106–510—NOV. 13, 2000

114 STAT. 2364

(B) by striking “Kaloko-Honokohau” each place it appears and inserting “Kaloko-Honokōhau”.

(2) REFERENCES.—Any reference in any law (other than this Act), regulation, document, record, map, or other paper of the United States to “Kaloko-Honokohau National Historical Park” shall be considered a reference to “Kaloko-Honokōhau National Historical Park”.

(d) Pu’uhonua o Hōnaunau National Historical Park.—

(1) IN GENERAL.—The Act of July 21, 1955 (chapter 385; 69 Stat. 376), as amended by section 305 of the National Parks and Recreation Act of 1978 (92 Stat. 3477), is amended by striking “Puuhonua o Hōnaunau National Historical Park” each place it appears and inserting “Pu’uhonua o Hōnaunau National Historical Park”.

(2) REFERENCES.—Any reference in any law (other than this Act), regulation, document, record, map, or other paper of the United States to “Puuhonua o Hōnaunau National Historical Park” shall be considered a reference to “Pu’uhonua o Hōnaunau National Historical Park”.

(e) Pu’ukoholā Heiau National Historic Site.—

(1) IN GENERAL.—Public Law 92–386 (86 Stat. 562) is amended by striking “Puukohola Heiau National Historic Site” each place it appears and inserting “Pu’ukoholā Heiau National Historic Site”.

(2) REFERENCES.—Any reference in any law (other than this Act), regulation, document, record, map, or other paper of the United States to “Puukohola Heiau National Historic Site” shall be considered a reference to “Pu’ukoholā Heiau National Historic Site”.

SEC. 4. CONFORMING AMENDMENTS.

(a) Section 401(8) of the National Parks and Recreation Act of 1978 (Public Law 95–625; 92 Stat. 3489) is amended by striking “Hawaii Volcanoes” each place it appears and inserting “Hawaiʻi Volcanoes”.

(b) The first section of Public Law 94–567 (90 Stat. 2692) is amended in subsection (e) by striking “Haleakalā” each place it appears and inserting “Haleakalā”.

# Appendix B: Analysis of Fundamental and Other Important Resources and Values

The following fundamental resource or value analysis tables include current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.

<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>The Three Heiau</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related Significance Statements</strong></td>
<td>Directly related to the first, second, third, fifth, and seventh significance statements.</td>
</tr>
<tr>
<td><strong>Current Conditions and Trends</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Conditions | • Pu’ukoholā Heiau National Historic Site is listed in the National Register of Historic Places. The three major sites (Pu'ukoholā Heiau, Mailekini Heiau, and John Young's House Site) are on the park’s List of Classified Structures.  
• The foundation on which Pu’ukoholā Heiau once stood is still largely intact, and was stabilized in the mid to late 1970s, and again between 2007 and 2011 in response to the October 2006 seismic event. However, the grass or ʻi thatched heiau—the hale mana (house of spiritual power), the ʻanuʻu (the prayer tower, a framework of ʻōhiʻa poles wrapped in kapa), the lele (the altar where the offerings were placed), and the kiʻi (carved wooden images) have long since disintegrated.  
• The specific location of Hale o Kapuni is currently unknown.  
• Managing visitor access to the sites is difficult given the sacredness of the site.  
• There is a conflict between ongoing cultural practices/ceremonies and adaptive use of the temples and the National Historic Preservation Act.  
• There are important archeological sites associated with the structures that need to be preserved, protected, and managed. |
| Trends | • The park’s enabling legislation speaks to restoring the heiau; however, there are some slumps and bulges that occurred since previous restorations. These areas will probably fail when the next significant earthquake occurs. |
| **Threats and Opportunities** | |
| Threats | • It is difficult to maintain the integrity of the original fabric of the heiau, particularly due to increasing threats from natural events (flooding, rain, erosion) and disasters (earthquakes), and other human-induced threats and impacts such as the vibrations from increased traffic along the highway.  
• Invasive species, particularly goats and plants (such as Kiawe), threaten the integrity of the structures.  
• Sea level rise could impact Hale o Kapuni and certainly any future restoration of the site.  
• Impacts on night sky and ambient sounds threaten the mana of the heiau.  
• Increasing development at the harbor has viewshed impacts on the heiau and their cultural values. |
| Opportunities | • The integrity of the heiau is tied to procedures for how the sites are restored. The park has used, and there is opportunity in the future to continue to use, traditional techniques in stabilization or rehabilitation. However, this opportunity exists only so long as the knowledge for doing so exists within the community.  
• Identify the location of Hale o Kapuni and define alternatives for restoration.  
• Work with the partners to write a conservation action plan to address sedimentation and its impacts on coral in the bay.  
• Determine guidance for what “restoration” means for the future of managing and protecting the heiau. |
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>The Three Heiau</th>
</tr>
</thead>
</table>
| **Existing Data and Plans Related to the FRV** | • National historic landmark designation.  
• Monitoring and condition reports.  
• GIS data.  
• Inventory and monitoring data from the Pacific Island Network. |
| **Data and/or GIS Needs** | • None identified. |
| **Planning Needs** | • Cultural landscape report / preservation plan.  
• Invasive species management plan / restoration plan. |
| **Laws, Executive Orders, and Regulations That Apply to the FRV** | **NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)** |
| | • Antiquities Act of 1906  
• Historic Sites, Buildings, and Antiquities Act of 1935  
• National Historic Preservation Act of 1966, as amended (16 USC 470)  
• Archeological and Historic Preservation Act of 1974  
• American Indian Religious Freedom Act of 1978  
• Archaeological Resources Protection Act of 1979  
• Museum Act (16 USC 18f through 18f-3)  
• Executive Order 11593, “Protection and Enhancement of the Cultural Environment”  
• Executive Order 13007, “Indian Sacred Sites”  
• “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR 79)  
• “Protection of Historic Properties” (36 CFR 800)  
• Clean Air Act (42 USC 7401 et seq.)  
• Executive Order 13112, “Invasive Species”  
• Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources”  
• Executive Order 13547, “Stewardship of the Ocean, Our Coasts, and the Great Lakes” |
| | • NPS Management Policies 2006 (chapter 5)  
• Director’s Order 24: NPS Museum Collections Management  
• Director’s Order 28: Cultural Resource Management (1998)  
• Director’s Order 28A: Archeology (2004)  
• NPS Museum Handbook, parts I, II, and III  
• The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation |

A double rainbow visible from Pu‘ukoholā Heiau National Historic Site. (Greg Cunningham; used by permission)
<table>
<thead>
<tr>
<th><strong>Fundamental Resource or Value</strong></th>
<th><strong>Pelekane</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Significance Statements</td>
<td>Directly related to the sixth significance statement and indirectly related to the seventh significance statement.</td>
</tr>
<tr>
<td>Current Conditions and Trends</td>
<td>Conditions</td>
</tr>
</tbody>
</table>
|                                 | • The state owns the Pelekane parcel. The park has an agreement with the state to manage the land (22+/- acres) within the proposed boundaries of Pu’ukoholā Heiau National Historic Site. The preferred option is to acquire the lands from the state, although they have been resistant since the early 1970s.  
• The bay at Pelekane was significantly altered by neighboring development, and sedimentation continues due to both natural and human-caused activities such as flooding.  
• The state owns the offshore waters where Hale o Kapuni is located (about 6 acres), which is also within the proposed boundaries of Pu’ukoholā Heiau National Historic Site. The preferred option is to acquire the property from the state or at least gain jurisdiction over the offshore waters. |
|                                 | Trends |
|                                 | • Documentation of archeological sites at Pelekane is limited, and some of these resources are being disturbed due to natural and human caused impacts in the bay.  
• There are concerns and issues with water quality both offshore and in the “Pelekane Pond.” The issue primarily stems from sedimentation occurring in the bay and Pelekane pond water stagnating at times, particularly when the sand berm disconnecting the pond from the ocean is not breached for a long period of time (possibly 2+ years). |
| Threats and Opportunities        | Threats |
|                                 | • The integrity of Pelekane is threatened by climate change (sea level rise) and natural disasters (flooding, storms, and tsunamis).  
• Point source pollution and invasive species (kiawe) threaten the bay and integrity of Pelekane.  
• Makeahua and Pohaukole gulches at Kawaihae are both deep and dry streambeds that occasionally carry flood waters and threaten the integrity of the site.  
• Already, impacts from increasing development at the harbor and military use are evident at Pelekane and will probably become even more so as development increases in this location. Some of these impacts are tied to access to the park from the harbor. |
|                                 | Opportunities |
|                                 | • Identify location of Queen Emma’s birthplace (on state-owned property).  
• Identify location of Hale o Kapuni.  
• Continue inventorying and monitoring protocols.  
• Monitor external development plans to proactively identify possible management actions.  
• Restore the bay’s ecosystem by removing invasive species in the area.  
• Coordinate with adjacent landowners to address threats and existing impacts.  
• Continue pursuing partnership efforts with the Kaleleonalani Foundation (Kauhale & Repository Project) proposed on private land across State Route 270.  
• Maintain close working relations with Nā Papa Kanaka o Pu’ukoholā Heiau (NPK or Traditional Royal Court Assembly of Pu’ukoholā Heiau) for continued mutual benefit and stewardship opportunities (e.g., NPK primary volunteers in the 2006 earthquake repair projects of both temples). |
| Existing Data and Plans Related to the FRV | • Although fairly limited, some archeological work has been completed.  
• Inventorying and monitoring (I&M) on water quality is being completed, as is shark monitoring.  
• There is some oral and ethnographic information about the area. |
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>Pelekane</th>
</tr>
</thead>
</table>
| **Data and/or GIS Needs**    | • Archeological surveys and testing.  
                              | • Model extent of sea level rise under climate change and model historic shoreline change. |
| **Planning Needs**           | • Cultural landscape report / preservation plan for long-term management of area. |

**Laws, Executive Orders, and Regulations That Apply to the FRV**

- Antiquities Act of 1906
- Historic Sites, Buildings, and Antiquities Act of 1935
- National Historic Preservation Act of 1966, as amended (16 USC 470)
- Archeological and Historic Preservation Act of 1974
- American Indian Religious Freedom Act of 1978
- Archaeological Resources Protection Act of 1979
- Museum Act (16 USC 18f through 18f-3)
- Executive Order 11593, “Protection and Enhancement of the Cultural Environment”
- Executive Order 13007, “Indian Sacred Sites”
- “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR 79)
- “Protection of Historic Properties” (36 CFR 800)
- Clean Water Act
- Executive Order 11988, “Floodplain Management”
- Clean Air Act (42 USC 7401 et seq.)
- Executive Order 13112, “Invasive Species”
- Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources
- Executive Order 13547, “Stewardship of the Ocean, Our Coasts, and the Great Lakes”
- Executive Order 13089, “Coral Reef Protection”

**NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)**

- NPS Management Policies 2006 (chapter 5)
- Director’s Order 24: NPS Museum Collections Management
- Director’s Order 28: Cultural Resource Management (1998)
- Director’s Order 28A: Archeology (2004)
- NPS Museum Handbook, parts I, II, and III
- The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation
- Director’s Order 77-2: Floodplain Management

View of Pu‘ukoholā Heiau across Pelekane Bay with full moon rising. (Greg Cunningham; used by permission)
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>John Young Homestead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Significance Statements</td>
<td>Directly related to the fourth significance statement.</td>
</tr>
</tbody>
</table>

**Current Conditions and Trends**

**Conditions**
- Pu‘ukoholā Heiau National Historic Site is listed in the National Register of Historic Places. The three major sites (Pu‘ukoholā Heiau, Mailekini Heiau, and the John Young’s Homestead) are on the park’s List of Classified Structures.
- Only portions of walls of the original homestead remain.
- The homestead is isolated from the rest of the park, separated by a highway, and it is difficult, if not hazardous, to access for both park managers and the public. The only way to access the site is to park at the maintenance facility (no official visitor parking here) and walk along the highway for approximately 100 feet to the homestead.
- Due to its location, there is a general lack of awareness and visitor connection to the site, regardless of the site’s importance.

**Trends**
- The site is surrounded by invasive kiawe trees, which pose a threat to cultural resources.

**Threats and Opportunities**

**Threats**
- Vandalism is an issue at the site due to its separation from the rest of the park and the lack of visitor and resource protection staff on-site.
- Highway vibrations threaten the stability of the site and are expected to increase as traffic, particularly heavy vehicle traffic, is also expected to increase.
- Similarly, a County of Hawaii-contracted bulldozer damaged the site a number of years ago while responding to a threatening wildfire.
- Natural threats, such as floods, hurricanes, and earthquakes, are a threat to the site’s integrity.
- Invasive species, particularly goats and kiawe trees, threaten the site as well, especially as tree roots impact the site and archeological resources in the area.

**Opportunities**
- The site could be restored as only portions of walls of the original homestead remain.
- Remove invasive species in and around the site.
- Improve visitor access to the site through physical improvement or enhanced interpretation.
- Continue ongoing communication and cooperation with Hawai‘i Department of Transportation for managing the highway.

**Existing Data and Plans Related to the FRV**
- Monitoring reports.
- Cultural landscape inventories.
- GIS data.
- Condition reports.

**Data and/or GIS Needs**
- None identified.

**Planning Needs**
- Invasive species management plan / restoration plan.
- Cultural landscape report / preservation plan.
- Public (or visitor) access management plan.
- Physical security plan.
- Long-range interpretive plan – update.
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>John Young Homestead</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Laws, Executive Orders, and Regulations That Apply to the FRV</strong></td>
<td></td>
</tr>
<tr>
<td>• Historic Sites, Buildings, and Antiquities Act of 1935</td>
<td></td>
</tr>
<tr>
<td>• National Historic Preservation Act of 1966, as amended (16 USC 470)</td>
<td></td>
</tr>
<tr>
<td>• Archeological and Historic Preservation Act of 1974</td>
<td></td>
</tr>
<tr>
<td>• Executive Order 11593, “Protection and Enhancement of the Cultural Environment”</td>
<td></td>
</tr>
<tr>
<td>• “Protection of Historic Properties” (36 CFR 800)</td>
<td></td>
</tr>
<tr>
<td>• Americans with Disabilities Act of 1990</td>
<td></td>
</tr>
</tbody>
</table>

**NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)**

- NPS Management Policies 2006 (chapter 5)
- Director’s Order 28: Cultural Resource Management (1998)
- Director’s Order 28A: Archeology (2004)
- The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation
- NPS Management Policies 2006 (chapters 7, 8, 9, and 10)
- Director’s Order 6: Interpretation and Education
- Director’s Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services
- NPS Transportation Planning Guidebook

Earthquake stabilization project at the John Young Homestead. (NPS)
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>Cultural Landscapes and Associated Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related Significance Statements</strong></td>
<td>Directly related to the second, fourth, and sixth significance statements. Indirectly related to the first, third, fifth, and seventh significance statements.</td>
</tr>
</tbody>
</table>
| **Current Conditions and Trends** | **Conditions**  
• The park only manages about 86 acres of land, a portion (22 acres) of which is managed through a memorandum of agreement with the State of Hawai‘i. Development on lands outside the NPS boundary impacts the cultural landscape, but the National Park Service has no authority to prohibit uses on these surrounding lands.  
• Contributing elements of the cultural landscapes are separated by the state highway.  
**Trends**  
• Uses on surrounding lands continue to impact the integrity of the cultural landscape.  
• Invasive species currently dominate the landscape, impacting the viewshed, seascape, dark night skies, and archeological sites. |
| **Threats and Opportunities** | **Threats**  
• The park is experiencing several threats to cultural landscapes in the park from natural disasters (flooding and wildland fire), invasive species, external development (particularly viewshed, soundscape, and night sky impacts from the highway and development at the neighboring harbor), and vandalism.  
• Recreation on surrounding lands and in the water can affect nearshore areas within the cultural landscape.  
**Opportunities**  
• Remove all invasive vegetation species within the park and restore the terrestrial ecosystem with natural vegetation.  
• Work with neighboring landowners and the county to improve land management practices upstream of the bay. |
| **Existing Data and Plans Related to the FRV** | • Monitoring reports.  
• Cultural landscape inventories.  
• Site databases and information.  
• Water quality information.  
• GIS data.  
• Condition reports.  
• Information from and cooperation with Ala Kahakai National Historic Trail. |
| **Data and/or GIS Needs** | • Collect information on storm vulnerability.  
• Refine GIS data. |
| **Planning Needs** | • Cultural landscape report / preservation plan.  
• Resource stewardship strategy.  
• Invasive species management plan / restoration plan. |
| **Laws, Executive Orders, and Regulations That Apply to the FRV** | • National Historic Preservation Act of 1966, as amended (16 USC 470)  
• American Indian Religious Freedom Act of 1978  
• Executive Order 11593, “Protection and Enhancement of the Cultural Environment”  
• Executive Order 13007, “Indian Sacred Sites”  
• “Protection of Historic Properties” (36 CFR 800) |
| **NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)** | • NPS Management Policies 2006 (chapter 5)  
• Director’s Order 28: Cultural Resource Management (1998)  
• The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation
<table>
<thead>
<tr>
<th><strong>Fundamental Resource or Value</strong></th>
<th><strong>Legacies and Stories of Key Figures in Hawaiian History</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related Significance Statements</strong></td>
<td>Directly related to the first, second, third, fourth, fifth, and sixth significance statements. Indirectly related to the seventh significance statement.</td>
</tr>
<tr>
<td><strong>Current Conditions and Trends</strong></td>
<td><strong>Conditions</strong>&lt;br&gt;• Some books, records, oral histories, and maps exist to document the stories and facts of this place and its key figures.&lt;br&gt;• The park has a small curatorial facility onsite, but most museum materials are stored at a centralized facility at Kaloko Honokōhau National Historical Park.</td>
</tr>
<tr>
<td></td>
<td><strong>Trends</strong>&lt;br&gt;• The park has limited curatorial facilities for artifacts, and there are cultural sensitivities around moving materials offsite, especially off-island. A shortage of curatorial space is anticipated.</td>
</tr>
<tr>
<td><strong>Threats and Opportunities</strong></td>
<td><strong>Threats</strong>&lt;br&gt;• Kupuna, who know many of these stories and are a part of this legacy, are aging and information is being lost.</td>
</tr>
<tr>
<td></td>
<td><strong>Opportunities</strong>&lt;br&gt;• Research and documentation of oral histories from kupuna are needed as the park is at risk of losing a generation of knowledge.&lt;br&gt;• Identify other resources such as libraries; electronic records; research; and state, national, and international collections that may contain additional information to document these stories.&lt;br&gt;• Continue to pursue and explore opportunities to partner with other parks or outside foundations to create a curatorial facility and provide curatorial services to ensure the protection of museum collections on the Island.</td>
</tr>
<tr>
<td><strong>Existing Data and Plans Related to the FRV</strong></td>
<td>• Books, records, oral histories, maps.&lt;br&gt;• <em>West Hawai‘i Parks Museum Management Plan</em>.</td>
</tr>
<tr>
<td><strong>Data and/or GIS Needs</strong></td>
<td>• Oral histories / ethnographic resources.</td>
</tr>
<tr>
<td><strong>Planning Needs</strong></td>
<td>• None identified.</td>
</tr>
<tr>
<td><strong>Laws, Executive Orders, and Regulations That Apply to the FRV and NPS Policy-level Guidance</strong></td>
<td><strong>Laws, Executive Orders, and Regulations That Apply to the FRV</strong>&lt;br&gt;• National Historic Preservation Act of 1966, as amended (16 USC 470)&lt;br&gt;• Archeological and Historic Preservation Act of 1974&lt;br&gt;• Archaeological Resources Protection Act of 1979&lt;br&gt;• Museum Act (16 USC 18f through 18f-3)&lt;br&gt;• Executive Order 11593, “Protection and Enhancement of the Cultural Environment”&lt;br&gt;• “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR 79)</td>
</tr>
<tr>
<td>Fundamental Resource or Value</td>
<td>Soundscapes and Dark Night Skies</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Related Significance Statements</strong></td>
<td>Directly related to the second and seventh significance statements. Indirectly related to the third, fourth, fifth, and sixth significance statements.</td>
</tr>
</tbody>
</table>
| **Current Conditions and Trends** | **Conditions**  
  - During soundscape monitoring conducted in 2003, human sounds were present at sites in Pu'ukoholā Heiau National Historic Site for approximately 70% of the monitoring period. Aircraft were audible for 13% of the time at one site and for 19% of the time at another site.  
  - Existing ambient sound levels are highest around the highway and the entrance road that also leads to Samuel Spencer County Beach Park at ‘Ōhai’ula.  
  - The park is experiencing impacts on night skies and soundscapes from the lights and sounds (amplified equipment) at Samuel Spencer County Beach Park at ‘Ōhai’ula.  
| **Trends**  
  - The area and lands surrounding Pu’ukoholā Heiau National Historic Site are experiencing increasing urbanization, commercialization, and rezoning of lands for high-density and more intensive uses. These activities have a direct impact on night skies and soundscapes.  
  - The harbor also has plans for expansion to become a recreational harbor with 24/7 access and use. |
| **Threats and Opportunities** | **Threats**  
  - The Kauhale project across the highway (Kaleleonalani Foundation) has the potential to impact these resources.  
  - The expansion at the harbor could further affect both soundscapes and the night sky within the park.  
  - The alignment of the highway threatens impacts on night skies and soundscapes, especially as traffic increases and street lights are added, etc.  
  - Soundscapes are particularly affected by air traffic from helicopters, fixed-wing aircraft, and military aircraft.  
| **Opportunities**  
  - Complete night sky and additional soundscape monitoring. A University of Hawai‘i doctorate student conducted a study of sensory levels in the park beginning in 2014.  
  - Present and provide findings collected by University of Hawai‘i on establishing historic and modern baseline sensory information at heiau to the National Park Service. Use the data collected here to establish baselines on the condition of soundscapes and night skies in the park.  
  - Identify the needed conditions for kupuna / practitioners to maintain the sanctity of ceremonies and practices and other related cultural activities. Monitor the site to ensure these conditions are met.  
  - Work with state and county land use commissioners to prevent detrimental encroachment on the current and possible future boundaries of the park.  
  - Work with the county to establish and develop acceptable levels of noise and lights at Samuel Spencer County Beach Park at ‘Ōhai’ula.  
  - Work with neighboring landowners to reduce impacts on the night sky.  
  - Improve education and interpretation on these resources.  
  - Assess effectiveness of current boundaries.  
| **Existing Data and Plans Related to the FRV** | • Baseline ambient sound levels in Pu'ukoholā Heiau National Historic Site (2003); NPS soundscape data.  
  • Night sky imagery.  
<p>| <strong>Data and/or GIS Needs</strong> | • Boundary analysis. |</p>
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>Soundscapes and Dark Night Skies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Needs</td>
<td>• Resource stewardship strategy.</td>
</tr>
<tr>
<td></td>
<td>• Air tour management plan with the Federal Aviation Administration.</td>
</tr>
</tbody>
</table>

**Laws, Executive Orders, and Regulations That Apply to the FRV**
- National Parks Air Tour Management Act of 2000
- National Parks Overflight Act of 1987 (Public Law. 100-91)
- “Audio Disturbance” (36 CFR Section 2.12)
- “Maximum Noise Level for Operation of Boats” (36 CFR Section 3.15)
- Clean Air Act
- Executive Order 13547, “Stewardship of the Ocean, Our Coasts, and the Great Lakes”

**NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)**
- NPS Management Policies 2006 (4.9) Soundscape management policies require park managers to strive to preserve the soundscape
- NPS Management Policies 2006 (4.10) recognizes that natural lightscapes are natural resources and values that contribute to visitor experience. The policy further states that 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.
- NPS Management Policies 2006 (4.7) and NPS Natural Resource Management Reference Manual 77 provide further direction on the protection of air quality and related values for park units
- NPS Management Policies 2006 (5.3.1.7) “Cultural Soundscape Management”
- Director’s Order 47: Soundscape Preservation and Noise Management
- NPS Management Policies 2006 (8.4) “Overflights and Aviation Uses”
- NPS Management Policies 2006 (8.2.3) “Use of Motorized Equipment”

School children interact with the “rock lifting” exhibit at the park’s Visitor Center. (NPS)
### Fundamental Resource or Value

<table>
<thead>
<tr>
<th>Related Significance Statements</th>
<th>Legacy of Ho’oku’ikahi (Unification)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly related to the first significance statement. Indirectly related to the third, fourth, sixth, and seventh significance statements.</td>
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</tr>
</tbody>
</table>

### Current Conditions and Trends

**Conditions**
- The park works with the local community and park partners to host an annual Ho’oku’ikahi I Pu’ukoholā Establishment Day Hawaiian Cultural Festival that celebrates, in particular, this legacy of unification. Large numbers of people (2,000-3,500) gather at this annual event.
- Effort of unification is based on the words muttered by Kamehameha I on his deathbed in 1819, “E oni wale no ‘oukou i ku’u pono ‘a’ole e pau” (Continue to complete my unfinished good deeds). It is believed that Kamehameha’s effort of unifying not only the Hawaiian people, but all the people of Hawai‘i continues today.
- The original Ho’oku’ikahi I Pu’ukoholā ceremonies conducted in 1991 (200th anniversary ceremonies of the building of Pu’ukoholā) had many themes and underlying facets, including the reconciliation of the families from Kohala (Kamehameha) and Ka’ū (Keoua Kū’ahu’ula); re-establishing a new slate and foundation for the next eight generations of Hawaiians to move forward in the spirit of Ho’oku’ikahi (to unify as one); and to formally organize Nā Papa Kanaka o Pu’ukoholā Heiau to perpetuate and defend the traditional Hawaiian practices and protocols associated with Pu’ukoholā and Kamehameha. Nā Papa Kanaka o Pu’ukoholā Heiau (NPK or Traditional Royal Court Assembly of Pu’ukoholā Heiau) has taken an oath with the drinking of the sacred awa (ceremonial drink) to fulfill this mission for the next eight generations.
- Since 1991, Pu’ukoholā has become a symbol of unification respected and honored by native peoples around the world, including “cousins” from the South Pacific and American Indians from the continental United States and First Nations of Canada.
- In February 2015, Makahiki I Pu’ukoholā will be presented for the first time to highlight how temples such as Pu’ukoholā and Mailekini were used during the “season” of the god Lono, and engage in traditional practices, ceremonies, and protocols of this season.

**Trends**
- Pu’ukoholā Heiau National Historic Site has established a high level of standards for traditional Hawaiian ceremony and rituals amongst the Hawaiian community. This standard continues to be practiced and elevated by park partners.
- Numerous benefits have been experienced working in partnership with the various park partners and community. Maintaining this working relationship for mutual benefit is crucial to perpetuating a living Hawaiian history and culture at Pu’ukoholā Heiau National Historic Site, and to foster positive alliances with the Native Hawaiian community.
- Large assemblies of Hawaiian practitioners, including representatives from native peoples around the world, will continue to occur at Pu’ukoholā Heiau National Historic Site. It has become a mecca for people to unify as one, to gain the mana (spiritual power) and continue to honor and practice the ways of the Hawaiian people.

### Threats and Opportunities

**Threats**
- Historic preservation laws can prevent/hinder ceremonies/practices (an important aspect of the cultural resource) in an effort to protect the physical resource.
- With historic preservation laws possibly conflicting with living Native Hawaiian cultures (e.g., adaptive use of historic temples and features), is the National Park Service impairing a Native Hawaiian culture from practicing their traditional cultural practices and rituals?

**Opportunities**
- Revise/improve section 106 administration to acknowledge importance of cultural practices.
- Improve documentation of the story of unification.
- Develop interpretive strategies or programs about unification.
- Develop implementation plans to enhance these interpretation and education opportunities.
### Fundamental Resource or Value

<table>
<thead>
<tr>
<th>Legacy of Ho’oku’ikahi (Unification)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Administrative records pertaining to ho’oku’ikahi.</td>
</tr>
<tr>
<td>• Cultural practitioners’ knowledge.</td>
</tr>
</tbody>
</table>

### Existing Data and Plans Related to the FRV

- Administrative records pertaining to ho’oku’ikahi.
- Cultural practitioners’ knowledge.

### Data and/or GIS Needs

- Gather more information about the story of unification.

### Planning Needs

- Implementation plans to enhance interpretation and education opportunities.

### Laws, Executive Orders, and Regulations That Apply to the FRV

- Historic Sites, Buildings, and Antiquities Act of 1935
- National Historic Preservation Act of 1966, as amended (16 USC 470)
- Archeological and Historic Preservation Act of 1974
- American Indian Religious Freedom Act of 1978
- Archaeological Resources Protection Act of 1979
- Museum Act (16 USC 18f through 18f-3)
- Executive Order 11593, “Protection and Enhancement of the Cultural Environment”
- Executive Order 13007, “Indian Sacred Sites”
- “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR 79)
- “Protection of Historic Properties” (36 CFR 80)

### NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)

- NPS Management Policies 2006 (chapter 5)
- Director’s Order 24: NPS Museum Collections Management
- Director’s Order 28: Cultural Resource Management (1998)
- Director’s Order 28A: Archeology (2004)
- NPS Museum Handbook, parts I, II, and III
- The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation

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Aunty Martha Zacho performs a hula at the park’s annual Pacific Islander Heritage Day. (NPS)
## Pu’ukoholā Heiau National Historic Site

<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>Cultural Kīpuka</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Related Significance Statements</strong></td>
<td>Directly related to the seventh significance statement. Indirectly related to the first, second, third, fifth, and sixth significance statements.</td>
</tr>
</tbody>
</table>

### Current Conditions and Trends

**Conditions**
- Cultural practitioners have access to heiau.
- As demonstrated with previous repairs to the heiau (most recently 2007–10), Hawaiian practitioners are a significant partner in protecting and preserving the heiau (rebuilding, active living / presentation of Hawaiian culture at Pu’ukoholā Heiau National Historic Site).

**Trends**
- An increasing number of Hawaiians want to use the park as a place to restore and practice their cultural rituals, some of whom would like to restore historic structures in temples. This interest places pressure on the National Park Service to more stringently manage use in an effort to preserve and protect the physical heiau.
- The Kaleleonalani Foundation (Kauhale and Repository Project) proposed on private land across State Route 270 will help to reduce pressure on the resources and carrying capacity of Pu’ukoholā Heiau National Historic Site.

### Threats and Opportunities

**Threats**
- There are inherent conflicts between federal law (such as the National Historic Preservation Act) and NPS policies and the needs and rights of cultural practitioners, creating tension between the needs of ongoing cultural practices/ceremonies and the NPS need to comply with law and policy to serve the general public. The National Park Service is in the position of preservation and serving the general public and cannot give preferential treatment or access to Native Hawaiian practitioners who believe they have the inherent right under the American Indian Religious Freedom Act.
- Many Native Hawaiians associate the National Park Service with the federal government or entity that overthrew Queen Liliu’okalani and the Hawaiian Kingdom in 1893 and with a federal agency controlling access to the heiau—inherent conflicts and distrust persist.
- Increasing urbanization, commercialization, and rezoning of lands around Pu’ukoholā Heiau National Historic Site physically shrinks the metaphorical cultural kīpuka through impacts on the cultural landscape, viewshed, night skies, and soundscapes.

**Opportunities**
- Offer more comprehensive and updated Ho’oku’ikahi ceremonies and activities (VHS, DVDs, ethnographic / oral history from practitioners).
- Identify the conditions needed for kupuna/practitioners to maintain the sanctity of ceremonies and practices and other related cultural activities. Monitor the site to ensure these conditions are met.
- Expand “live in” accommodations for extended periods to support cultural practices.
- Opportunity of Kaleleonalani Foundation (Kauhale project across highway) to divert some pressures.
- Continue to work with the Hawaiian legacy program to make it relevant to larger/wider audiences and future generations.
- Consider a boundary expansion to create a buffer between the park and external development.
- Work with state and county land use commissioners to prevent detrimental encroachment on the current and possible future boundaries of the park.
- Assertively pursue a park manager and key staff who have the skills and patience to collaboratively and effectively work with a host culture under the unique conditions and circumstances present at Pu’ukoholā Heiau National Historic Site.
### Fundamental Resource or Value

<table>
<thead>
<tr>
<th><strong>Existing Data and Plans Related to the FRV</strong></th>
<th><strong>Cultural Kipuka</strong></th>
</tr>
</thead>
</table>
| • Twenty-plus years of annual Ho’oku’ikahi ceremonies and activities (VHS, DVDs, ethnographic / oral history from practitioners).  
  • Current special use permit practices. | |

<table>
<thead>
<tr>
<th><strong>Data and/or GIS Needs</strong></th>
<th><strong>Cultural Kipuka</strong></th>
</tr>
</thead>
</table>
| • Identify the conditions needed for kupuna/practitioners to maintain the sanctity of ceremonies and practices and other related cultural activities. Monitor the site to ensure these conditions are met.  
  • Boundary analysis. | |

<table>
<thead>
<tr>
<th><strong>Planning Needs</strong></th>
<th><strong>Cultural Kipuka</strong></th>
</tr>
</thead>
</table>
| • Cultural landscape report / preservation plan.  
  • Public (or visitor) access management plan. | |

- **Laws, Executive Orders, and Regulations That Apply to the FRV**
  - Historic Sites, Buildings, and Antiquities Act of 1935
  - National Historic Preservation Act of 1966, as amended (16 USC 470)
  - Archeological and Historic Preservation Act of 1974
  - American Indian Religious Freedom Act of 1978
  - Archeological Resources Protection Act of 1979
  - Museum Act (16 USC 18f through 18f-3)
  - Executive Order 11593, “Protection and Enhancement of the Cultural Environment”
  - Executive Order 13007, “Indian Sacred Sites”
  - “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR 79)
  - “Protection of Historic Properties” (36 CFR 800)

- **NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders)**
  - NPS Management Policies 2006 (chapter 5)
  - Director's Order 24: NPS Museum Collections Management
  - Director's Order 28: Cultural Resource Management (1998)
  - NPS Museum Handbook, parts I, II, and III
  - The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation

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**Early morning ceremony during the park's annual Ho'oku'ikahi I Pu'ukoholā Establishment Day Hawaiian Cultural Festival.**  
(Greg Cunningham; used by permission)
<table>
<thead>
<tr>
<th>Fundamental Resource or Value</th>
<th>Immersive Cultural Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Significance Statements</td>
<td>Directly related to all significance statements.</td>
</tr>
<tr>
<td><strong>Current Conditions and Trends</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td>• The visitor center is newly constructed and is very effective in its function.</td>
</tr>
<tr>
<td></td>
<td>• Many of the trails, although paved, are not ADA accessible.</td>
</tr>
<tr>
<td></td>
<td>• Ensuring visitor safety (for example, at Pelekane considering regular flooding) is an ongoing issue, particularly given the lack of protection staff on-site.</td>
</tr>
<tr>
<td></td>
<td>• General public access to the heiau is currently limited. There are inherent tensions in managing access to heiau for cultural practitioners and the general public due to cultural needs and nondiscriminatory laws.</td>
</tr>
<tr>
<td><strong>Threats and Opportunities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td>• The park has a porous boundary that, while providing access, also creates protection issues. Providing security and ensuring the protection of physical resources, especially after hours, is an issue without any protection staff on-site.</td>
</tr>
<tr>
<td></td>
<td>• There are other recreation opportunities nearby (i.e., Samuel Spencer County Beach Park at ‘Ōhai’ula) that attract visitors to the area and serve recreational needs that the park does not provide, but these areas also increase access for visitors who may not understand the sensitivity of the site.</td>
</tr>
<tr>
<td></td>
<td>• Noise from traffic, air tours, drone aircraft, and the harbor impact visitor experience.</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>• ADA accessibility could be improved along some trails in the park. In particular, signs could be improved to notify visitors of sections that could be difficult to access.</td>
</tr>
<tr>
<td></td>
<td>• Improve connections with Ala Kahakai National Historic Trail for the public.</td>
</tr>
<tr>
<td></td>
<td>• Increase the presence of protection staff at the park.</td>
</tr>
<tr>
<td></td>
<td>• Work with the harbor to address issues related to access, which could include improved signs and education at the harbor.</td>
</tr>
<tr>
<td></td>
<td>• Improve signs between the park and surrounding lands that have access points to the park.</td>
</tr>
<tr>
<td></td>
<td>• Expand youth programs.</td>
</tr>
<tr>
<td><strong>Existing Data and Plans Related to the FRV</strong></td>
<td>• NPS visitor use statistics.</td>
</tr>
<tr>
<td></td>
<td>• Long-range interpretive plan – update, including comprehensive wayside planning.</td>
</tr>
<tr>
<td><strong>Data and/or GIS Needs</strong></td>
<td>• None identified.</td>
</tr>
<tr>
<td><strong>Planning and Data Needs</strong></td>
<td>• Public (or visitor) access management plan.</td>
</tr>
<tr>
<td></td>
<td>• Long-range interpretive plan – update.</td>
</tr>
<tr>
<td><strong>Laws, Executive Orders, and Regulations That Apply to the FRV and NPS Policy-level Guidance</strong></td>
<td><strong>Laws, Executive Orders, and Regulations That Apply to the FRV</strong></td>
</tr>
<tr>
<td></td>
<td>• Americans with Disabilities Act of 1990</td>
</tr>
<tr>
<td></td>
<td>• Architectural Barriers Act of 1968</td>
</tr>
<tr>
<td></td>
<td>• Architectural Barriers Act Accessibility Standards 2006</td>
</tr>
<tr>
<td></td>
<td>• Rehabilitation Act of 1973</td>
</tr>
<tr>
<td></td>
<td>• NPS Concessions Management Improvement Act of 1998</td>
</tr>
<tr>
<td><strong>NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)</strong></td>
<td>• NPS Management Policies 2006 (chapters 7, 8, 9, and 10)</td>
</tr>
<tr>
<td></td>
<td>• Director’s Order 6: Interpretation and Education</td>
</tr>
<tr>
<td></td>
<td>• Director’s Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services</td>
</tr>
<tr>
<td></td>
<td>• NPS Transportation Planning Guidebook</td>
</tr>
</tbody>
</table>
### Analysis of Other Important Resources and Values

<table>
<thead>
<tr>
<th>Other Important Resource or Value</th>
<th>Marine Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Significance Statements</td>
<td>Related to the fifth and sixth significance statements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Conditions and Trends</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditions</strong></td>
<td>• Blasting and dredging activities during construction of the Kawaihae Boat Harbor in 1969–70 destroyed 80% of the natural reef within the embayment and adjacent areas. Sand channels and reef debris now dominate the area although there are few live coral heads in the seaward portion of the embayment. About half of the area is silted over by alluvium, deposited in part by local runoff.</td>
</tr>
<tr>
<td></td>
<td>• Water turnover within the embayment is slight, and as a consequence of the silty substratum, fine sediments in suspension reduce visibility to a mere few centimeters in some parts of the embayment.</td>
</tr>
<tr>
<td></td>
<td>• Green sea turtles are common and frequent in the bay area, on occasion sunbathing on Pelekane beach. There has been a rare sighting of Hawksbill turtles (two juveniles in shallows off Pelekane Beach confirmed by a credible researcher) in approximately 1989 or 1990.</td>
</tr>
<tr>
<td></td>
<td>• There have been unconfirmed sightings of monk seals in the bay, but none observed or verified on Pelekane beach itself.</td>
</tr>
<tr>
<td></td>
<td>• Sharks are frequently seen in the area. Grey reef sharks (<em>Carcharhinus amblyrhynchos</em>), blacktip reef sharks (<em>Carcharhinus melanopterus</em>), and whitetip reef sharks (<em>Triaenodon obesus</em>) have been documented.</td>
</tr>
<tr>
<td></td>
<td>• A few small moray eels are present inshore among the coral heads and boulders; the toxic echinoids are common in shallow waters facing the rocky natural shoreline (hazardous to swimmers or waders in the area).</td>
</tr>
<tr>
<td></td>
<td>• Kawaihae’s shoreline is subject to tsunamis originating from earthquakes in Japan, the Aleutian Islands, the South American coast, and from tsunamis generated by Hawaiian Island earthquakes; however, Pu’ukoholā Heiau itself should not suffer much tsunami inundation due to its site on a hill.</td>
</tr>
<tr>
<td></td>
<td>• No specific studies have been conducted quantifying fresh water input entering the Pelekanbe Bay and offshore waters through subterranean flow / fresh water springs.</td>
</tr>
<tr>
<td></td>
<td>• As of a 2010 University of Hawai‘i at Mānoa study, no invasive marine algae have been documented in the park.</td>
</tr>
<tr>
<td>Trends</td>
<td>• Invasive species (fish, some marine plants, insects) are out-competing native and/or endemic species.</td>
</tr>
<tr>
<td></td>
<td>• Understanding the condition of fresh water inputs is an area of interest for the park as it may be impacted in the future if upland development occurs. As for freshwater input caused by surface flow, sedimentation is a major concern. It is believed that as late as the early 1900s, the local streams in the area were still perennial. Given this information, freshwater input from surface flows (since historic days) are likely in poor condition, though sub-surface may still be good.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threats and Opportunities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Threats</strong></td>
<td>• Natural events (flood, rain, erosion) and human-caused impacts (military practices, harbor expansion, and increasing development in surrounding lands) threaten the health of marine communities off the shores of Pu’ukoholā Heiau National Historic Site.</td>
</tr>
<tr>
<td></td>
<td>• The Tōhoku earthquake and tsunami in Japan may impact marine communities through increased pollution and foreign debris.</td>
</tr>
<tr>
<td></td>
<td>• Climate change is an ongoing threat to marine life because of sea level rise, ocean temperature rise, and ocean acidification.</td>
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</tr>
</tbody>
</table>
## Threats and Opportunities

### Threats (continued)
- The Tōhoku earthquake and tsunami in Japan may impact marine communities through increased pollution and foreign debris.
- Climate change is an ongoing threat to marine life because of sea level rise, ocean temperature rise, and ocean acidification.
- Sedimentation is an ongoing threat to the park's marine waters: satellite photographs illustrate increasing sedimentation impacts from the uplands.
- Concerns about threats to fish communities exist as anecdotal observations note there are fewer schools of fish present than in past decades. No formal data about fish populations have been documented but the park and state are working to understand impacts on fish communities from fishing and other activities and/or environmental factors.

### Opportunities
- Continue inventory and monitoring program.
- Complete studies to understand why the sharks gather in the bay.

## Existing Data and Plans Related to the OIRV

- Inventorying and monitoring of water quality and quantity are being completed, as is shark monitoring.

## Data and/or GIS Needs

- Continue monitoring water quality and quantity, and sharks.
- Conduct a sedimentation study to determine natural and historic sedimentation and deposition rates in the marine waters of the park.

## Planning Needs

- Resource stewardship strategy.

## Laws, Executive Orders, and Regulations That Apply to the OIRV and NPS Policy-level Guidance

- Marine Mammal Protection Act of 1972, as amended
- Magnuson-Stevens Fishery Conservation and Management Act
- Endangered Species Act of 1973, as amended
- National Invasive Species Act
- Lacey Act, as amended
- Federal Noxious Weed Act of 1974, as amended
- Clean Water Act
- Clean Air Act (42 USC 7401 et seq.)
- National Environmental Policy Act of 1969
- Executive Order 13112, “Invasive Species”
- Secretarial Order 3289, “Addressing the Impacts of Climate Change on America’s Water, Land, and Other Natural and Cultural Resources”
- Executive Order 13547, “Stewardship of the Ocean, Our Coasts, and the Great Lakes”
- Executive Order 13089, “Coral Reef Protection”
- “Fishing” (36 CFR 2.3)
- Hawai‘i State Fishing Regulations

## NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)

- *NPS Management Policies 2006* (1.6, 4.1, 4.1.4, 4.4.1, 4.7.2, 8.1, 8.2.2.5)
- *NPS Natural Resource Management Reference Manual* 77
<table>
<thead>
<tr>
<th>Other Important Resource or Value</th>
<th>Terrestrial and Freshwater Ecosystems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Significance Statements</td>
<td>Related to the third and sixth significance statements.</td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td><strong>Related Conditions</strong></td>
</tr>
<tr>
<td>• Today's natural environment is tending toward less precipitation and more heat compared to the natural environment circa 1791 when Pu‘ukoholā Heiau was built.</td>
<td>• The native coconut trees (<em>Cocos nucifera</em>) grow near the shore where there is brackish water. The native shrub ilima (<em>Sida</em> sp.) also grows in the heiau vicinity.</td>
</tr>
<tr>
<td>• The native coconut trees (<em>Cocos nucifera</em>) grow near the shore where there is brackish water. The native shrub ilima (<em>Sida</em> sp.) also grows in the heiau vicinity.</td>
<td>• Where groundwater is available near the shore, the introduced monkeypod (<em>Samanea saman</em>) and mango (<em>Manifera indica</em>) grow. The introduced sisal (<em>Agave sisalana</em>) is found in thick stands inland of the park area along dry gulches where surface water accumulates from time to time. Introduced cactus (<em>Opuntia megantha</em>) dot the barren slopes inland.</td>
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<td>• The introduced kiawe trees (an algaroba tree, <em>Prosopis</em> sp.) compound the natural dryness of the Kawaihae shoreline by removing moisture from the soil—moisture that would be retained if the numerous and large kiawe trees were not present. These trees, which now dominate the water's edge, are prone to fall during rare wind storms, with down trunks continuing to grow. Some kiawe trees are thorny, and kiawe thickets behind shorelines impede passage and block views. Thick stands of haole-koa can also block access and passage.</td>
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<td>• The birds seen in the park include white-eye, house sparrow, mynah, doves, cardinals, francolin (partridge family), and owls.</td>
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<td>• The birds seen in the park include white-eye, house sparrow, mynah, doves, cardinals, francolin (partridge family), and owls.</td>
<td>• Introduced mongooses, field mice, and rats are seen in the area. The most common rats are the black rat and brown or Norway or wharf rat. Both feral and domesticated cats are seen and heard on rare occasions.</td>
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<td>• Introduced mongooses, field mice, and rats are seen in the area. The most common rats are the black rat and brown or Norway or wharf rat. Both feral and domesticated cats are seen and heard on rare occasions.</td>
<td>• Hardened trail surfaces in the park create erosion, which is becoming increasingly apparent and threatens other resources beyond the terrestrial ecosystem.</td>
</tr>
<tr>
<td>• Hardened trail surfaces in the park create erosion, which is becoming increasingly apparent and threatens other resources beyond the terrestrial ecosystem.</td>
<td>• Species of concern are Pololei (Adders Tongue Fern) and possibly Pa‘u o Hi‘iaka.</td>
</tr>
<tr>
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<td>• Geologic information, including information on lava flows can be found in “Pu‘ukoholā Heiau National Historic Site Geologic Resources Inventory Report – Natural Resource Report NPS/NRPC/GRD/NRR—2011/386” (NPS Geological Resources Division).</td>
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<td><strong>Trends</strong></td>
</tr>
<tr>
<td><strong>Trends</strong></td>
<td>• Invasive species (plants, animals, insects) are out-competing native and/or endemic species, some of which are threatened and endangered.</td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td><strong>Threats</strong></td>
</tr>
<tr>
<td>• Natural events (flood, rain, wildfire, erosion) and human-caused (including climate change) impacts (water bar, harvesting, surrounding development) threaten the health of the terrestrial ecosystem.</td>
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<tr>
<td>• Natural events (flood, rain, wildfire, erosion) and human-caused (including climate change) impacts (water bar, harvesting, surrounding development) threaten the health of the terrestrial ecosystem.</td>
<td>• Increased irrigation beyond park boundaries could impact hydrology within the park and the flora and fauna that rely on this natural system.</td>
</tr>
<tr>
<td>• Increased irrigation beyond park boundaries could impact hydrology within the park and the flora and fauna that rely on this natural system.</td>
<td>• Climate change is an ongoing threat to the terrestrial ecosystem.</td>
</tr>
<tr>
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<td><strong>Opportunities</strong></td>
</tr>
<tr>
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</tr>
<tr>
<td>• Conduct additional inventorying and monitoring of native species.</td>
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</tr>
<tr>
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<td>• Particular points of interest for future monitoring include sedimentation in Pelekane Bay, invasive terrestrial flora and fauna, and understanding the status of invasive marine algae.</td>
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<tr>
<td>• Particular points of interest for future monitoring include sedimentation in Pelekane Bay, invasive terrestrial flora and fauna, and understanding the status of invasive marine algae.</td>
<td>• Work with the county to improve management of water resources.</td>
</tr>
<tr>
<td>• Work with the county to improve management of water resources.</td>
<td>• Remove invasive species and restore terrestrial ecosystem by replanting with native vegetation.</td>
</tr>
</tbody>
</table>
Pu’ukoholā Heiau National Historic Site

**Other Important Resource or Value**

<table>
<thead>
<tr>
<th>Terrestrial and Freshwater Ecosystems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Data and Plans Related to the OIRV</strong></td>
</tr>
<tr>
<td>• Inventories reported.</td>
</tr>
<tr>
<td>• Monitoring reports.</td>
</tr>
<tr>
<td>• GIS data.</td>
</tr>
<tr>
<td><strong>Data and/or GIS Needs</strong></td>
</tr>
<tr>
<td>• None identified.</td>
</tr>
<tr>
<td><strong>Planning Needs</strong></td>
</tr>
<tr>
<td>• Invasive species management plan / restoration plan.</td>
</tr>
<tr>
<td>• Resource stewardship strategy.</td>
</tr>
</tbody>
</table>

**Laws, Executive Orders, and Regulations That Apply to the OIRV**

- Endangered Species Act of 1973, as amended
- National Invasive Species Act
- Lacey Act, as amended
- Federal Noxious Weed Act of 1974, as amended
- Clean Water Act
- Clean Air Act (42 USC 7401 et seq.)
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**NPS Policy-level Guidance (NPS Management Policies 2006 and Director’s Orders)**

- NPS Management Policies 2006 (1.6, 4.1, 4.1.4, 4.4.1, 4.7.2)
- NPS Natural Resource Management Reference Manual 77

Visitors enjoy free canoe rides from Pelekane Beach during the park’s annual Ho’oku’ikahi I Pu’ukoholā Establishment Day Hawaiian Cultural Festival. (NPS)
Park maintenance worker Miho Fujii wearing a lei po’o at the park’s annual Pacific Islander Heritage Day. (NPS)
As the nation’s principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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