National Park Service U.S. Department of the Interior

Haleakalā National Park Island of Maui, Hawai'i

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Foundation Document Part 1

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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 401 park 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 – this will be a sidebar when formatted.]

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, 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 Haleakalā National Park 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, 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**

Haleakalā National Park is on the eastern side of Maui, the second largest island in the Hawaiian chain. The park is characterized by starkly contrasting mountain and coastal environments. Within a few miles from the coast the park rises dramatically in elevation to 10,023 feet at the summit of the dormant Haleakalā Volcano. Moisture-bearing trade winds bring upwards of 400 inches of annual precipitation to windward mountain slopes, while some leeward areas only receive an average of 10 inches or less. Wind, rain, temperature, and altitude contribute to shape the widely diverse character and composition of the park's natural ecosystems, microhabitats and vegetation zones that transition from humid subtropical lowlands, cloud forests, to sparsely vegetated subalpine desert at the summit. The northern and eastern slopes of Haleakalā and the rainforests of the Kīpahulu Valley are among the richest botanical regions in Hawai'i. More than 90% of the native biota found in the park is endemic to the Hawaiian Islands and nearly 50% is endemic to Maui. The park is further renowned for its exceptional air quality and dark night skies. The remarkable ecological diversity of the park is recognized by its designation as a United Nations International Biosphere Reserve.

Haleakalā National Park was originally established in 1916 as part of Hawai'i National Park. At that time the park included lands on both the islands of Hawai'i (now part of Hawai'i Volcanoes National Park) and Maui. The Maui portion of the park was established as a separate NPS unit in 1961 (P.L. 86-744, 74 Stat. 88). Of the park's 33,222 total acres, approximately 24,000 acres (72% of the park) are designated wilderness. Park managers face an ongoing challenge in protecting and balancing the natural and untrammeled qualities of wilderness. Although the park's ecosystems retain a high percentage of unique and endemic species found nowhere else in the world, the introduction of alien plants and animals primarily by human activities has led to the extinction or severe decline of many native species. Haleakalā's wildlife and vegetation are therefore intensively managed to prevent further species declines and extinctions. Among these measures, fences have been placed along the park boundaries to keep nonnative grazing species such as wild boar and goats from damaging park resources.

The Haleakalā Volcano is the larger of the two volcanoes that form the island of Maui. Its crater measures about 20 miles in circumference and dominates the volcanic landscape at the summit. In several places the rim of the crater rises more than 2,500 feet above the crater floor. Rain clouds drift in on trade winds over the volcano's lower eastern rim, and often accumulate in the center of the crater. Radiocarbon testing conducted by USGS researchers of the volcano's youngest lava flows suggests it was last active sometime between A.D. 1480 and 1600. Haleakalā's western slopes are crossed by intermittent rain-fed streambeds, and rise gently to the summit at Red Hill. The heavily eroded terrain of the mountain's eastern flank is marked by deep valleys and gorges. From the volcano's rim, lava once poured down its flanks to the sea, following the paths of the Ke'anae and Kaupo valleys.

The Kīpahulu area of the park protects Kīpahulu Valley and the scenic stream system ending at 'Ohe'o Gulch. From east of the volcano rim, the valley drops thousands of feet down to the coast. The Kīpahulu coastal area is set in a tropical rainforest atop a seaside cliff and was first farmed by early Polynesians more than 1,200 years ago. The upper Kīpahulu Valley is designated a biological reserve and is home to a vast profusion of flora and fauna, including some of the world's rarest birds, plants, and invertebrates. Some insects and plants that evolved in the Kīpahulu Valley live nowhere else. The general public is restricted form accessing the fragile rainforest of the biological reserve. Visitors can reach the lower valley of Kīpahulu via the long winding Hana Highway.

Haleakalā National Park is a sacred place to *kānaka maoli* (Native Hawaiians) and is fundamentally linked to their traditional and contemporary beliefs, practices, and way of life. The concept of *kuleana* (responsibility) is central to these beliefs, passed on from the *kūpuna* (ancestors) to future generations to ensure stewardship and respect for all things spiritual and physical. Closely connected to kuleana is the concept of *mālama* '*āina*, caring for and nurturing the land so it continues to provide the essential means and resources necessary to sustain life for present and future generations. For Native Hawaiians, the summit of Haleakalā is the *Wao Akua* ("Place of the Gods") where the demi-god Maui snared the sun. Tangible and intangible cultural resources and values, place names, oral traditions/history, and features of the landscape are invaluable parts of Hawaiian culture. At the *piko* (navel) of East Maui, traditional Hawaiian land districts (*moku*) converge at a place called Pōhaku Pālaha. From ancient times to the present, Native Hawaiians have used particular areas, sites and features within the current park boundaries for a broad range of activities, cultural practices and protocols including ceremonies, spiritual training, practices related to birth and burial, resource collection, and travel across East Maui.

The Haleakalā Wilderness is part of an historic district listed in the National Register of Historic Places in recognition of its significant archeological resources and historic sites. The summit of Haleakalā, including Kīpahulu Valley and Kaupō Gap, is also eligible for the national register as a traditional cultural property for its association with the cultural landscape of Maui and because of its known uses, oral history, *mele* (chants or poems), and legends. It remains a source of traditional materials and sacred uses, and a place of profound spiritual power.

Approximately 1.2 million visitors annually come to Haleakalā National Park to experience its natural and cultural wonders. Between 15% and 30% of these visitors arrive on commercial tours. The majority of visitors who travel to the summit and headquarters / visitor center are drawn there to witness the awe-inspiring sunrise. In addition to these activities, guided hiking and horseback riding are available along 38 miles of trails. On clear nights, many enjoy world renowned star gazing and astronomy-oriented activities because of the exceptional viewing conditions. Two primitive campgrounds and three public use historic cabins are available for reserved visitor use in the designated wilderness area.

### PARK PURPOSE

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Haleakalā National Park was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. On September 13, 1960 Congress signed legislation (Public Law 86-744) that authorized the establishment of the park (the park was established the following year). However, approximately 21,150 acres of land now contained within the boundary of Haleakalā National Park initially was protected within Hawai'i National Park, an earlier unit of the national park system that was established by Congress in August 1916. This earlier designation also included lands on the Island of Hawai'i, which are now protected

within Hawai'i Volcanoes National Park (see appendix A for enabling legislation and subsequent amendments). The purpose statement lays the foundation for understanding what is most important about Haleakalā National Park.

For the inspiration of current and future generations, Haleakalā National Park protects a wild volcanic landscape with a wide array of fragile and diverse native ecosystems, including plant and animal species found nowhere else on earth. Our stewardship perpetuates the unique and continuing connections between Hawaiian culture and this sacred and evolving land.

### 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 Haleakalā National Park, 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 Haleakalā National Park. (Please note that the sequence of the statements does not reflect the level of significance.)

- 1. Rising 10,000 feet from the sea to the summit of Haleakalā, the park protects a striking variety of natural landscapes, ranging from tropical rainforest to subalpine desert. Within these lands, extreme gradients of rainfall and temperature shape the park's remarkable biodiversity.
- 2. Haleakalā National Park preserves unrivaled examples of native Hawaiian ecosystems, providing a home for diverse threatened and endangered species, including some that exist nowhere else in the world, and still others yet to be discovered.
- 3. From its windswept cinder fields to its lush rainforest, the Haleakalā Wilderness provides a panorama of exceptional grandeur where visitors may find solitude and inspiration within a vast and colorful landscape.
- 4. Haleakalā National Park preserves places, resources, stories, and intangible elements of profound sacred importance to Native Hawaiians. Collectively, these are linked by the piko, the life-line that honors the past and connects the living Hawaiian culture of today to future generations.
- 5. Haleakalā National Park is known for its exceptional scenery, including sunrises and sunsets above the clouds; coursing waterfalls, clear pools, and crashing waves; lush rainforests; and sparkling, star-filled skies. These and countless other sights and scenes provide transformational experiences for residents and visitors alike.
- 6. Visitors to the park can enjoy a broad spectrum of natural sounds, including a rare opportunity to experience intense quiet inside the Haleakalā Crater. Sound levels in the crater are among the lowest recorded in any national park.

- 7. The Haleakalā shield volcano, one of the highest peaks in the Pacific, is the result of countless volcanic eruptions during the past two million years, and unique erosion in action.
- 8. At Haleakalā, the volcano's height, landscape, air quality, and location on earth provide for excellent, clear night skies. From ancient Polynesian navigators to current-day astronomers, people have and continue to use the summit of Haleakalā to study and view the night sky. Numerous light-sensitive species, whose lives are negatively impacted by artificial light, depend on Haleakalā's natural lightscapes for survival.

### 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 Haleakalā National Park:

Natural Sounds, Viewsheds, and Dark Night Skies – Natural sounds, panoramic views, and dark night skies greatly contribute to Haleakalā's unique sense of place. Ambient sound levels in the Haleakalā Crater are so low that they approach the threshold of human hearing, and the crater and summit offer world-renowned stargazing opportunities. Visitors flock to the summit to witness spectacular sunrises over the park's natural landscape—this and other views in the park are supported by its excellent air quality. In addition to being highly desired values for visitors, dark night skies and natural soundscapes are vital components of a healthy, intact, biological community. Each plays an important role in wildlife communication and behavior. The preservation of natural sounds, viewsheds, and dark night skies is also critical to effective wilderness management.

**Kīpahulu moku (including 'Ohe'o Gulch and Palikea Stream)** – Handed down over the centuries through oral tradition and practice, the 'Aha Moku system is the traditional Hawaiian system of natural resource division and management for ocean and land resources. The undiverted Palikea Stream and 'Ohe'o Gulch are part of an intact East Maui watershed that begins at the piko, or navel, of the island. The park is fortunate to protect nearly all of the Kīpahulu moku, including intact *ahupua'a* (smaller land divisions) within it. The Kīpahulu Biological Reserve is discussed and analyzed as part of the Native Hawaiian Biological Diversity FRV.

Wilderness – A total of 24,719 acres of Haleakalā National Park is federally designated wilderness. The wilderness area includes the majority of the Haleakalā Crater and the Kīpahulu Biological Reserve, which protects one of the most intact rainforest ecosystems in the Hawaiian Islands. The wilderness area also has cultural and spiritual significance to Native Hawaiians, who have used these lands since ancient times, and continue to visit sites and features within the wilderness for traditional practices. Visitors have opportunities to participate in wilderness experiences—from expansive views across undeveloped lands to primitive recreation and solitude.

**Ongoing Connections to Living Hawaiian Culture** – Haleakalā National Park has cultural and spiritual value for Native Hawaiians who have used particular places, sites, and resources in the park for a broad range of activities from ancient times to the present. Among these traditional cultural activities are ritual ceremonies, spiritual training, and practices related to birth and burial. For Native Hawaiians, traditional uses and connections between people and all things spiritual and physical are incorporated in the ancient, sacred tradition of the *Kumulipo* that has been passed down orally for generations in the form of a *mele ko'ihonua* or chant of more than 2,000 lines. The Kumulipo recounts the origin of the universe and the beginnings of the Hawaiian world; it inventories and explains the existence of all resources so that proper care and respect is applied through kuleana (responsibility). Sustaining the connections and interrelationships between Native Hawaiians and culturally significant park resources and places is an important objective of park managers.

**Outstanding Geological Resources, Including the Haleakalā Volcano and Crater** – Rising to 10,023 feet in elevation, the Haleakalā volcano—also known as the East Maui volcano—is the primary geological feature of the park, and preserves a record of Maui's volcanic history. At the volcano's summit is the enormous depression known as Haleakalā Crater—described by Congress in the 1916 enabling legislation as the "largest and most spectacular crater in the world." In truth, the label "crater" is somewhat of a misnomer, as this impressive depression was not shaped solely by volcanic activity, but also by water and erosion. Northeasterly tradewinds collided with the great volcano, producing rainfall, and over time streams cut channels down the slopes of the mountain. Eventually, two streams that eroded their way up the mountain joined, ultimately creating the long and deep depression that survives today. Later, volcanic vents in this area formed richly colored cinder cones and young lava flows—major scenic features of the park. Lava at Haleakalā National Park includes lower viscosity "ropy flows" (also called *pāhoehoe*) and the higher viscosity "rough and jagged flows" (also called *'a'ā*). There are at least 24 known lava tube caves in the park.

Archeological and Historic Resources Associated with Native Hawaiian Culture – Haleakalā National Park preserves a high density and variety of precontact and historic archeological resources. These resources exist in many locations and include Native Hawaiian temples (*heiaus*), trails, altars, fishing shrines, house platforms and other features. Historic resources such as historic agricultural sites and astrological shelters are also preserved by the park. Some of these resources are still used today as part of the vibrant Hawaiian culture.

Native Hawaiian Biological Diversity – Haleakalā, rising from sea to summit, and exposed to both the windward moist tradewinds and leeward drying air, features a striking variety of ecosystems that support a tremendous range of native biological diversity. The park protects endemic and iconic species including the nēnē (Hawaiian goose), 'ahinahina (Haleakalā silversword), 'akohekohe (the critically endangered crested honeycreeper), and many other threatened and endangered species. The park's remarkable ecological diversity is recognized by its designation as a United Nations International Biosphere Reserve. Haleakalā serves as a scientific laboratory for studies in climate history and change, classification of species, and taxonomy.

The upper Kīpahulu Valley, on the park's windward side, exemplifies this rich biodiversity. With its wet rainforests and bogs, the upper Kīpahulu Valley is a key refuge for native Hawaiian plant and animal species that are disappearing elsewhere. The park manages this area as the Kīpahulu Biological Reserve. Within the reserve, no trails or roads are planned in order to prevent nonnative species, which are capable of rapidly spreading and outcompeting native rainforest plants, from penetrating the valley. Entry to the reserve is allowed only to resource managers and scientists who are conducting research and management essential to understanding and protecting this rare relict ecosystem. The upper Kīpahulu Valley continues to face threats from encroaching invasive species.

Park management vigorously counteracts these threats—reinforcing fences, removing invasive plants, and controlling nonnative predators—to protect this rare gem of Hawaiian rainforest for future generations.

Kuleana – The Native Hawaiian concept of kuleana is generally recognized as the responsibility passed down from the kūpuna (ancestors) to present and future generations for stewardship and respect for all things spiritual and physical. Under the traditional 'Aha Moku system of regional boundary management based on observational knowledge and sense of place, certain people had kuleana for site specific management and families had certain roles within their moku (land division). The Pōhaku Pālaha (the place where the moku boundaries converge) marks the beginning of the interconnected system linking the heavens to the depths of the ocean. How kuleana is managed affects other moku outside park boundaries as well as ocean resources. The National Park Service has accepted kuleana for the management of Haleakalā National Park and represents the *kia'i*, or guardian of this sacred place for Hawaiian people.

**Museum Archive and Collections** – The Haleakalā National Park museum collection documents the cultural and natural history of the park. The collection is divided into three main categories: natural history, cultural resources, and archives. The natural history collection is represented by biological specimens and geological samples. The herbarium includes native and nonnative plants that have been collected from the park and East Maui. The entomological collection consists of mounted native and nonnative insects collected within the island of Maui. The cultural resources collection is represented by archeological, historical, and ethnographic objects and works of art. The archives consist mostly of documents and photographs about the history, development, and management activities of the park.

### **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 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 Haleakalā National Park:

1. Haleakalā National Park supports diverse ecosystems from sea level to 10,000 feet in elevation that are the last and only home for many plants and animals found nowhere else on Earth.

- 2. Haleakalā National Park's endemic plants and animals are continually threatened by alien species and human actions. Loss of these species endangers not only the health of remnant Hawaiian ecosystems, but intricate connections with living Hawaiian culture.
- 3. Haleakalā National Park's visitors, neighbors, and staff share the kuleana (responsibility) of protecting the park's ecosystems and qualities of wilderness, clear night sky, natural quiet, and clean air.
- 4. The Native Hawaiian principle of mālama 'āina (caring for the land) parallels NPS management goals at Haleakalā National Park, allowing park staff, neighbors, and visitors to learn from and apply both traditional knowledge and scientific research.
- 5. The Haleakalā shield volcano is the result of two million years of ongoing contest between volcanism and erosion, in which the handiwork of Pele is constantly challenged by the forces of wind and rain.
- 6. From the first Polynesian settlers to visitors today, people have been drawn to Haleakalā— for cultural and religious reasons, historic and scientific interests, recreation, and inspiration.
- 7. Haleakalā is sacred to Native Hawaiians and supports a vibrant, living Hawaiian culture, including stories, sites, and traditions that link the past to the present and future.