

# Hawai'i Volcanoes National Park

General Management Plan/Wilderness Study/Environmental Impact Statement  
Newsletter #3 Preliminary Alternatives, Summer 2011



Halemaumau, March 6, 2011. Webcam Image (USGS)

## Letter from the Superintendent

Aloha Friends,

This newsletter presents four preliminary draft alternatives for managing the park as part of our on-going work on a new General Management Plan. Each alternative offers a different approach to protecting and restoring park resources, using facilities, and providing a range of access and visitor experiences to meet the needs of local residents, off-island visitors, and students of all ages. The park planning team developed these alternatives based on the park's purpose and significance, issues that need to be addressed, legal mandates, and comments that you provided during the public scoping process.

The different alternatives discuss a menu of topics that include access and visitor services at the Kahuku Unit; locations of visitor facilities and administrative functions; enhancing conservation of park resources; new or connecting trails; sustainable and climate-friendly park operations; acknowledgment of Native Hawaiian park significance; education, research, and stewardship; transportation options and reduced congestion; commercial services and partnerships; as well as other elements.

We are also now completing a Wilderness Study as part of this planning process. This newsletter includes information about the Wilderness Study process and areas being considered for wilderness designation.

Please tell us what you think about the preliminary alternatives presented in this newsletter. Do you like one particular alternative more than the others? Are there various elements of each of the alternatives you prefer? We'd like to hear from you. Your comments will help us understand the impacts of these ideas and help us to develop a long range plan that reflects your mana'o.

We have included a mail-in form for your comments. You may also comment on-line at <http://www.nps.gov/havo/parkmgmt/plan.htm> or join us at a public meeting this summer to discuss and comment on the alternatives.

Hawai'i Volcanoes is a park with many decisions to make in the coming years. We sincerely value your input regarding future management at the park, and thank you in advance for your participation. Please feel free to contact us if you have any questions.

Mahalo nui loa,

Cindy Orlando  
Superintendent  
Hawai'i Volcanoes National Park



## Come Talk Story with Us!

### YOU'RE INVITED TO A TALK STORY SESSION

Come to one of the Talk Story Sessions and meet the planning team and hear more about the preliminary alternatives recently developed for the future management of Hawai'i Volcanoes National Park. We plan to start the evening with a few welcoming remarks and a brief orientation to the alternatives. We look forward to seeing and hearing from you!

#### HAWAII VOLCANOES NATIONAL PARK

##### Monday, August 22

6:00 pm – 8:00 pm  
Kilauea Visitor Center  
One Crater Rim Drive

#### PAHOA

##### Tuesday, August 23

6:00 – 8:00 pm  
Pahoa Community Center  
15-2910 Puna Road

#### NAALEHU

##### Wednesday, August 24

6:00 – 8:00 pm  
Naalehu Community Center  
95-5635 Mamalahoa Highway

## What's Inside . . .

Park Purpose and Significance	2
Guiding Principles	2
We Would Like to Hear from You	3
How to Comment	3

Development of Preliminary Alternatives	3
Preliminary Alternatives	3
Management Zoning	3
Actions Common to all Alternatives	4
Alternatives A-D	4-7
Summary of Preliminary Alternatives	8-14

Commercial Services Strategy	14
Wilderness Eligibility & the Wilderness Study	15
Boundaries	15
What Happens Next?	16
Schedule for GMP and Wilderness Study	16
Contact Information	16

## Park Purpose

Hawai'i Volcanoes National Park protects, studies, and provides access to Kilauea and Mauna Loa, two of the world's most active volcanoes; preserves

endemic Hawaiian ecosystems; and perpetuates the traditional Hawaiian culture connected to these landscapes.

## Park Significance

Hawai'i Volcanoes National Park preserves, protects and interprets the largest and most continuously active volcanoes in the U.S., and provides the best physical evidence of island building processes that created the 2,000 mile long Hawaiian archipelago.

Hawai'i Volcanoes National Park's active volcanoes serve as a living laboratory for scientific investigations that began over a century ago and continue to advance global understanding of volcanic processes.

Hawai'i Volcanoes National Park protects unique and diverse ecosystems that are the result of the active volcanic landscape, wide climate variation, and extreme isolation of the Hawaiian Islands.

Hawai'i Volcanoes National Park encompasses the largest and most ecologically diverse wilderness in the Pacific Islands.

Hawai'i Volcanoes National Park interprets the traditions and embraces the spiritual significance of the Native Hawaiian culture.

Hawai'i Volcanoes National Park encompasses a vast array of cultural resources that documents over 600 years of human lifestyles and activities on an active volcanic landscape.

Hawai'i Volcanoes National Park, an internationally recognized destination, provides all visitors diverse opportunities to approach two of the most active volcanoes in the world and to understand and appreciate the distinctive geology and natural and cultural adaptations to the land.

# Guiding Principles

Park managers must follow many laws, policies, and directives when managing national parks. In addition, the following foundational principles of Hawai'i Volcanoes National Park express a philosophy and commitment that will also help guide management. The park would follow these guiding principles under any alternative.

### Stewardship

The park is committed to the ongoing involvement of individuals and organizations in understanding, caring for, preserving and restoring the park's native species and habitats, cultural sites, geologic features, trails and facilities. Opportunities that

immerse people in this dynamic landscape nourish a common vision and commitment to preserving this globally important site, sustaining species and places whose long-term survival depends on the help of others.



### Partnerships and Collaboration

In working to preserve and restore the park's resources unimpaired for future generations, the park will continue to build on the legacy of the many partnerships that have extended our ability to protect resources and serve the public since the park was established. Park managers will establish and maintain cooperative relationships with managers of adjacent public and private lands; state and local governments; Native Hawaiians and community organizations. The park will collaborate to ensure

that watersheds, ecosystems, endangered species, cultural resources, viewsheds, and trail and transportations systems that extend beyond park boundaries are considered holistically. Through mutual collaboration, shared values and learning, partnerships create outcomes beyond any one organization's individual capacity. Partnerships will continue to be an important way to accomplish the park's mission.



### Research

Hawai'i Volcanoes National Park is a world class living laboratory, and the park is committed to hosting and fostering research and studies that continue to advance knowledge and understanding. Numerous universities, agencies and organizations are involved in on-going studies related to geology, ecosystem development, island biogeography and evolution, habitat restoration, climate change, human connections to the landscape, historical settlement patterns, human resource procurement,

and paleoenvironmental studies. The world's first volcano observatory, operated by the U.S. Geological Survey, is located within the park and serves as a global center for volcanic study and hazard monitoring. The park is committed to nurturing a home for the science community whose work continues to build on the existing body of scientific knowledge for resource protection, public safety and environmental understanding.



### Sustainability and Environmental Leadership

The park will continue to explore and use practices that help sustain the Earth's resources. Sustainability is fundamental to the facilities, projects, programs, and operations of the park. The park will demonstrate environmental leadership and seek opportunities to promote sustainability and stewardship to

park visitors, neighboring communities, and stakeholders. The park is committed to reducing its carbon footprint and interpreting the impacts of global climate change on natural and cultural resources.



### Global Responsibility

The park acknowledges a global responsibility to further international relationships that are inherent in the World Heritage Site and International Biosphere Reserve designations. The World Heritage Site and International Biosphere Reserve designations attest to the compelling values that the park's unique geologic resources and island biota hold for people worldwide as well as its global importance as a

benchmark for monitoring environmental change. These designations provide an important visible reminder for all visitors about why this park is special. Participation in training and information exchange within this international network brings a richness and depth to park management.



# Development of Preliminary Alternatives

The following preliminary or draft alternatives were developed by the General Management Plan (GMP) planning team to explore different options for the future of Hawai'i Volcanoes National Park and are based on comments received during public scoping. These alternatives represent different approaches to address issues identified by park staff, visitors, and other interested parties. Together, these alternatives represent a range of possible actions that could occur in the park.

NPS planning requires that all alternatives must be consistent with the park's purpose and significance (GMP Newsletter #1, 2009\*) and reflect ideas and concerns from public comments (GMP Newsletter #2, 2010\*). The alternatives must be reasonable and be consistent with other special mandates and laws such as the Endangered Species Act and the National Historic Preservation Act.

While you read the management options, please keep in mind that these are initial ideas. At this stage, there may be some gaps and inconsistencies and some ideas might not be fully developed. With your input, the planning team will continue to refine these concepts and further develop these alternatives. Unless otherwise stated, all existing uses and visitor and administrative facilities would continue in the park under all the concepts.

Also, remember that these options are conceptual in nature. The GMP establishes a vision of the future that will guide other planning and year-to-year management of Hawai'i Volcanoes. Full implementation of the GMP will take many years.

*\*GMP Public Scoping Newsletters #1 and #2 may be viewed on-line at [www.nps.gov/havo/parkmgmt/plan.htm](http://www.nps.gov/havo/parkmgmt/plan.htm).*

## Preliminary Alternatives

Alternatives are different ways or options to manage Hawai'i Volcanoes National Park. Each of the four preliminary alternatives presented expresses a concept statement that generally describes the overall philosophy or direction. Following the concept statement is a description that highlights the management directions and actions that would be taken.

Please note that the NPS has not yet designated a preferred alternative. The agency's preferred alternative will be designated in the Draft GMP/Wilderness Study/EIS when it is published in 2013. The preferred alternative could be one of the preliminary alternatives or it could be made up of parts of these initial alternatives. Public comments and ideas on the preliminary alternatives will assist the planning team in selecting a preferred alternative.

Please do not dismiss an alternative if there are certain elements that you do not like, such as a new

visitor contact station at Kahuku or a particular boundary modification. Let us know what you like or dislike about each alternative and the reasons behind your preferences. If you would change something about an alternative or add something else please identify that in your comments.

As required by the GMP planning process, the planning team identified and evaluated boundary adjustments to consider that would be appropriate to enhance the congressionally mandated purposes of the park. The boundary modifications would be undertaken to protect significant resources, values, and visitor experiences and to address operational and management issues associated with the current configuration of the park.



Winds blow across Kahuku Unit.

## Management Zoning

One of the tools used in park planning is management zoning. Management zones identify how different areas of the park could be managed to achieve a variety of resource conditions and visitor experiences. Management objectives differ from zone to zone and vary according to the resources and conditions that exist within the park and the type of visitor experiences that are desired in each area.

Under different alternatives, the National Park Service would apply management zones to different parts of the park's landscape and take

different actions in specific zones with respect to the types and levels of uses and facilities. The planning team has developed descriptions for four management zones that could be appropriate at Hawai'i Volcanoes National Park. The planning team arranged these zones in different configurations to create three draft management concepts or alternatives detailed on the following pages.

### Visitor Services Zone

The Visitor Services Zone is managed primarily for a high level of visitor use, access, and interpretation with a wide range of media and facilities to support diverse visitor needs.



### Wild/Primitive Zone

The Wild/Primitive Zone is managed primarily for natural and cultural resource protection and its wild character and wilderness values. Visitor experiences are consistent with wilderness character and provide opportunities for connecting visitors with the resource.



### Transitional/Semi-Primitive Zone

The Transitional/Semi-Primitive Zone is managed as a transition between areas of high development and remote areas of the park. It focuses on natural and cultural resource protection with more rustic visitor facilities, experiences, and activities that encourage visitors to connect with the resources.



### Park Support Zone

The Park Support Zone is managed primarily to support park operations and maintenance, including operational needs of park partners. Access for visitors is primarily for limited visitor services (such as backcountry permitting), orientation, and organized meetings or events.



## We Would Like to Hear from You!

As you read through this newsletter, think about what alternatives, or parts of the alternatives, you like best and let us know. Your written comments on this newsletter are welcomed and encouraged. Comments can be submitted electronically or sent by mail using the postage-free comment form enclosed in this newsletter. Receiving your comments by September 30, 2011 will allow us to incorporate your ideas and suggestions as we continue to develop the Draft GMP/Wilderness Study/EIS.

In addition to written comments, you can provide your comments on the preliminary alternatives at several Talk Story Sessions to be held the week of August 22 at the park's Kilauea Visitor Center, Naalehu, or Pahoa. At these sessions, you can talk with the planning team about your ideas, comments, and questions.

## How to Comment

- Fill out a comment form online at the NPS Planning, Environment, and Public Comment System at <http://parkplanning.nps.gov/havo>. Click on the GMP newsletter and look for the option to submit your comments.
- Send us the postage-free comment form enclosed in this newsletter.
- Send a letter to the Superintendent at the park's mailing address located on the back of this newsletter.

Not on the GMP mailing list? Fill out the back of the enclosed comment form and mail it to us or send us an email.

**PLEASE SUBMIT YOUR COMMENTS BY SEPTEMBER 30, 2011.**

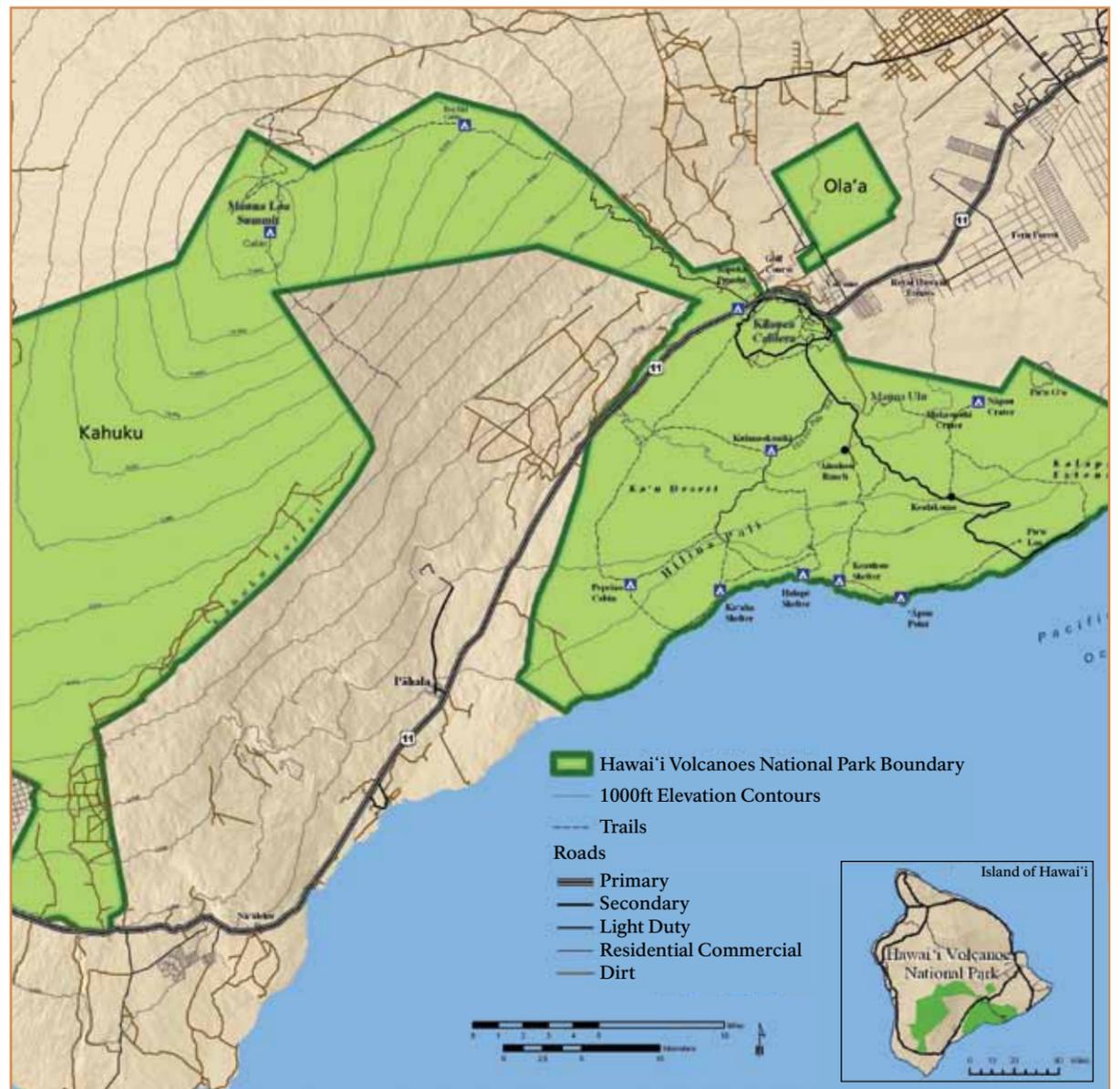
## Actions Common to All Alternatives

The following list includes actions that would most likely be common to all the new alternatives (B through D) in the park.

- Continue to protect and provide access to the iconic places, volcanic processes, and experiences that the park is known for – volcanic features and active eruption sites, endemic species, traditional Hawaiian culture, and historic properties.
- Strive to provide high quality visitor experiences, and visitors would continue to be offered a menu of options depending on length of stay, interests, and capabilities.
- Visitors would continue to experience the park's world treasures, iconic landscapes, and other significant highlights.
- Continue existing recreation opportunities such as camping, picnicking, hiking, biking, equestrian use, and viewing lava, scenery, and wildlife.
- Continue to provide a variety of interpretive and educational programs, events, and guest speakers to engage park visitors and diverse audiences.
- Continue to maintain trails and provide visitor facility improvements as needed.
- Park management actions would continue to acknowledge the sacredness of the park to many Native Hawaiians, notably Kilauea Volcano, the home of Pelehuamea, and Mauna Loa Volcano, important to the Native Hawaiian sense of identity, unity and continuance.
- Park management and programs would emphasize malama aina (care of the land) and the idea that caring for park resources is the kuleana (the right and the responsibility) of us all.
- Develop a site plan to use the entire complex of buildings on Kilauea summit as a kauhale (campus) for an integrated visitor experience, including Kilauea Visitor Center, Volcano House, Ohia Wing, Volcano Art Center, pa hula (hula platform), and other buildings.
- Continue to manage the 2.8 miles of Crater Rim Drive between the entrance station and Jaggar Museum, consistent with the *Crater Rim Drive Rehabilitation Environmental Assessment* (May 2010).
- Kilauea Military Camp (KMC) would continue to operate in the park under permit as a military recreation facility. The park would continue to coordinate with KMC on natural and cultural resource protection, including the list of Classified Structures eligible for the National Register, and to interpret the park's military history and KMC's history, including the World War II Japanese confinement and prisoner of war (POW) history.
- In the event the U.S. Army decides to end its operation of KMC, the land will revert to the exclusive use of the NPS. The NPS would prepare a master plan to explore options for the site such as adaptive reuse of historic structures for the park's main visitor center, a multi-agency research and education campus, or a concession operation for visitor services. Non-historic structures could be removed and areas of native forest and habitat restored.
- Continue to improve interpretation and preservation of Kealakomowaena and its resources by implementing recommendations from the Kealakomo Preservation Plan (January 2011) in a phased approach, including primary messages and themes for interpretive trails and signage, sites to be interpreted, site preparation required to mitigate impacts to sensitive resources, and guidance for managing natural and cultural resources in the area.
- Strive to expand recreation opportunities at Kahuku and provide public access seven days a week.

## Alternative A - No Action

Alternative A would continue current management and provide a baseline for evaluating changes and impacts in other alternatives. Existing programming, facilities, staffing, and funding would generally continue at their current levels.



### HIGHLIGHTS

#### Kilauea Summit and Vicinity

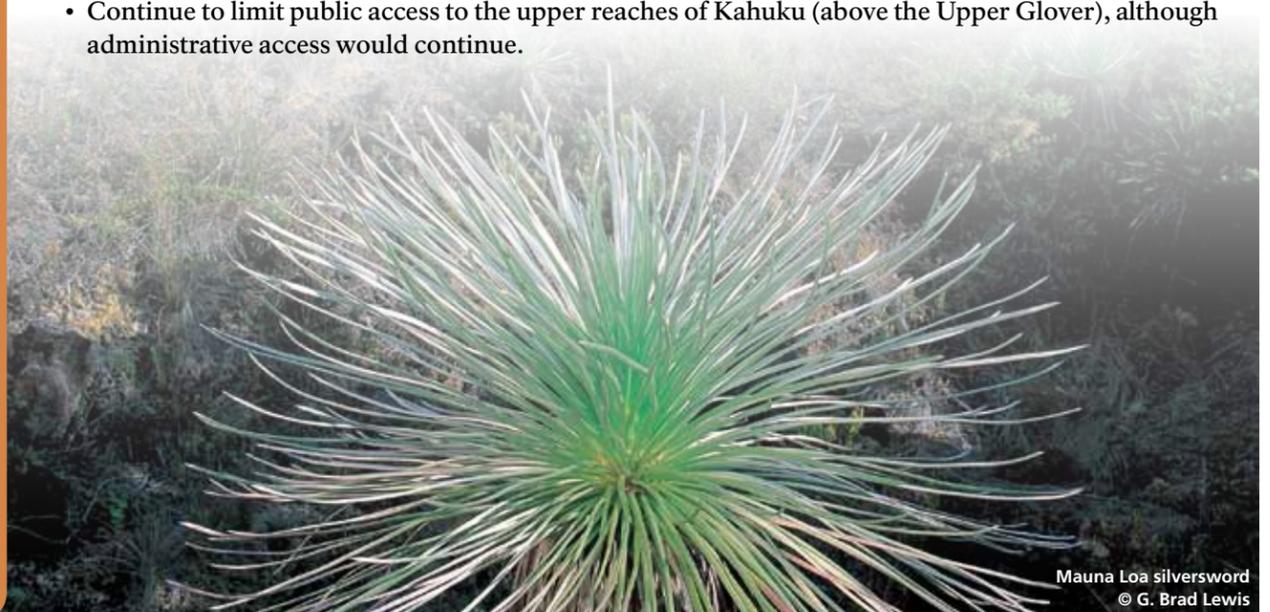
- Retain current functions of existing buildings on Kilauea summit and upgrade buildings as needed to address maintenance and operational concerns and provide some minor improvements for additional interpretive opportunities, such as additional interpretation at Kilauea Military Camp or at the 1877 Volcano House occupied by Volcano Art Center.
- Continue current visitor interpretation at the museum and scientific activities at the observatory. Rehabilitate, upgrade, and reconfigure Jaggar Museum and interpretive exhibits. The U.S. Geological Survey's Hawaiian Volcano Observatory would continue to operate in its current facility adjoining Jaggar Museum at Uwekahuna, continuing the original vision and legacy of combining ongoing scientific studies and interpretation of those studies to the public in a single location.
- Maintain Crater Rim Drive as a two-way road with its historic character and reopen closed section when possible for both public and administrative use.

#### Chain of Craters Road to Ocean Entry

- Maintain the current experience and opportunities along Chain of Craters Road.
- Continue to work with partners to provide a sustainable and moveable visitor contact station at the current eruption site for interpretation and safety on a trial basis. If the pilot project is successful, retain the structure for visitor contact at the end of Chain of Craters Road.
- Ainahou would continue to remain open to guided public use during the months when public access is not in conflict with nene recovery activities.

#### Kahuku Unit

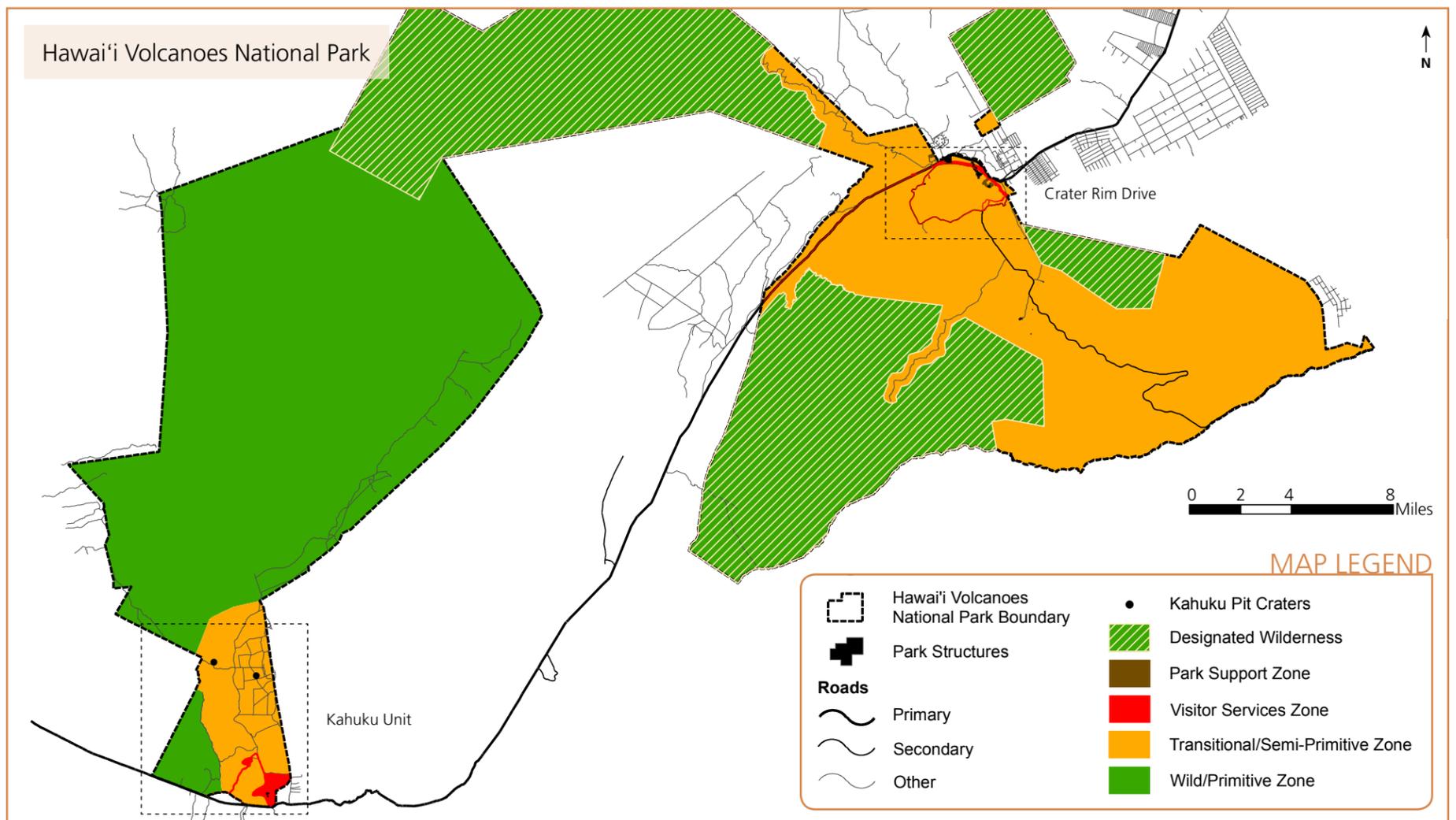
- Maintain the current entrance to Kahuku with improvements for safety.
- Continue to provide a minimum level of visitor services and interpretation at Kahuku to accommodate limited day-use.
- Continue to limit public access to the upper reaches of Kahuku (above the Upper Glover), although administrative access would continue.



Mauna Loa silversword  
© G. Brad Lewis

## Alternative B

Alternative B strengthens and broadens opportunities to connect people with the volcanic world treasure, Hawai'i Volcanoes National Park.



### HIGHLIGHTS

#### Kilauea Summit and Vicinity

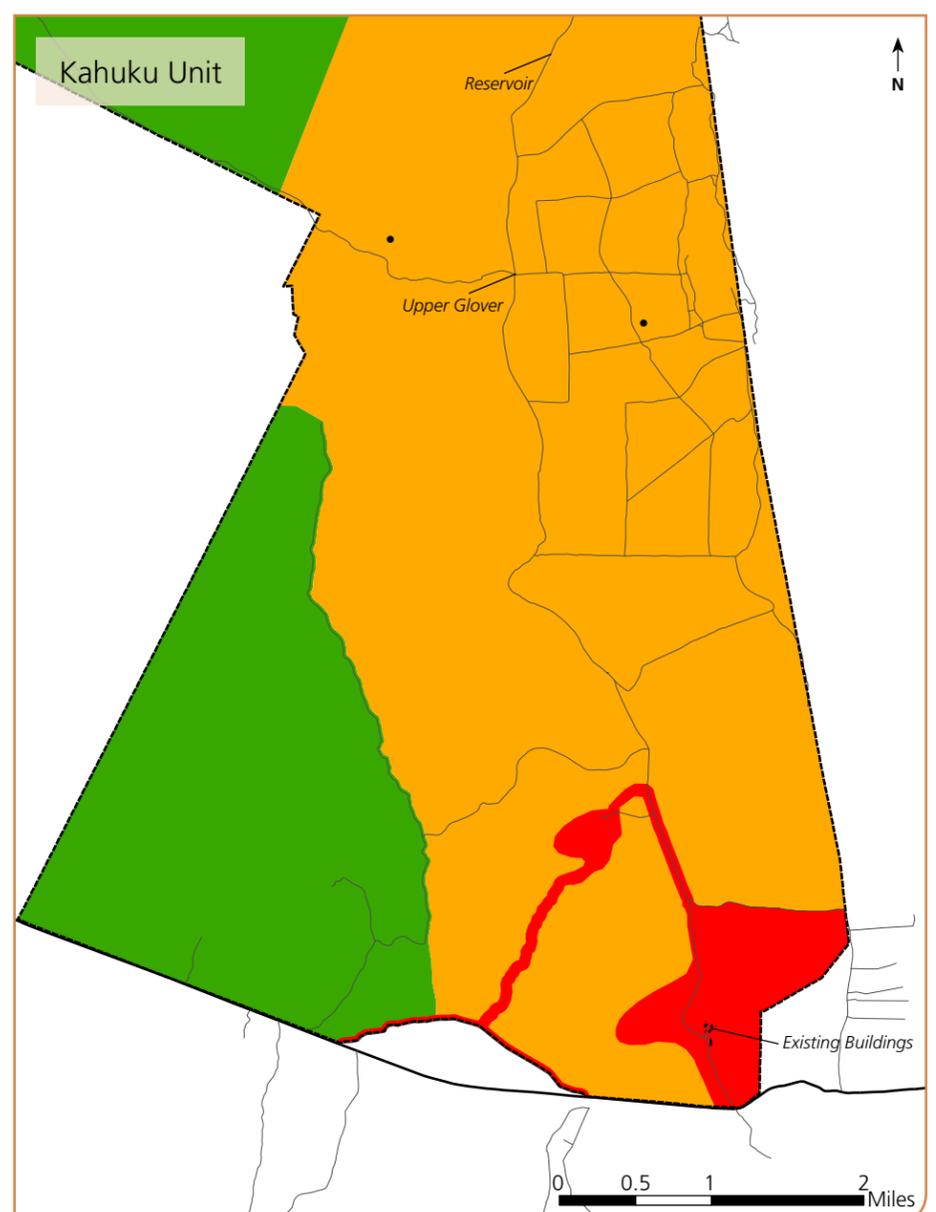
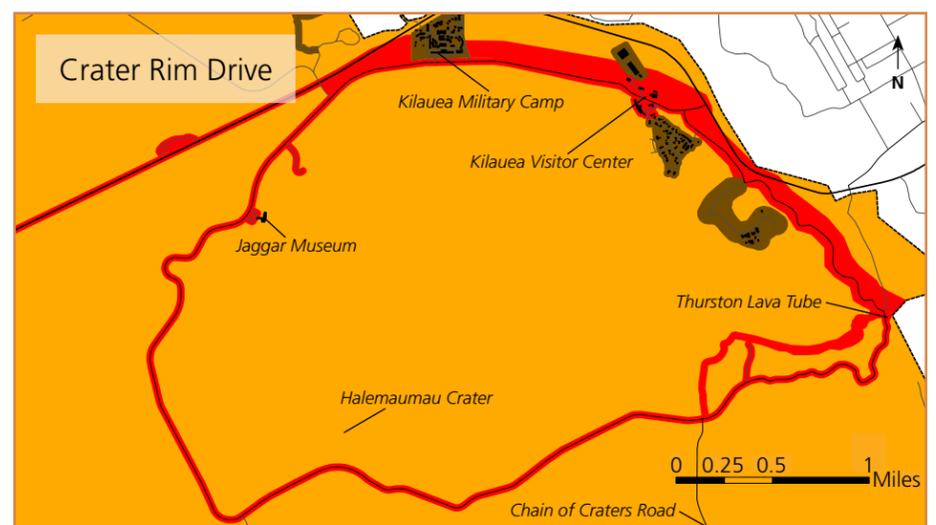
- Adaptively use and possibly expand Kilauea Visitor Center to adequately address current visitation and improve visitor services, orientation, and interpretive support. Consider an open-air pavilion for self-guided visitor orientation and interpretation. Move headquarters administrative functions to other buildings within the park.
- Create a second park entrance using the Mauna Loa Road connection into the park to highlight Jaggar Museum as a first stop and orientation opportunity for visitors and complementing the reconfiguration of the Kilauea Visitor Center complex of buildings.
- Expand Jaggar Museum to include an outdoor amphitheater to make better use of the location on the rim and views of the caldera.
- Keep Crater Rim Drive open to the public for as much of its length as possible for two-way traffic; when reopened, allow a mix of private vehicles and provide smaller shuttles as an alternative option for visitors.
- Large commercial buses would be limited to one-way traffic from Jaggar Museum west/southwest to Chain of Craters Road junction.
- Reduce congestion at Thurston Lava Tube: remove private vehicle parking, expand parking at Kilauea Iki Overlook with an improved trail connection, and provide one-way bus traffic and a shuttle stop.

#### Chain of Craters Road to Ocean Entry

- Identify sites to improve visitor immersion in the volcanic story with designated interpretive trails that link key features; improve interpretation along existing trails and consider new trails.
- Establish a long-term moveable visitor contact station at the end of the road.
- Strive to restore the portion of Chain of Craters Road currently in use if covered by lava in the future.
- Maintain Ainahou Ranch House as a historic structure and open to public for guided use while minimizing disturbance to endangered nene. If nene activities change, consider use as an educational site for guided interpretation or education.

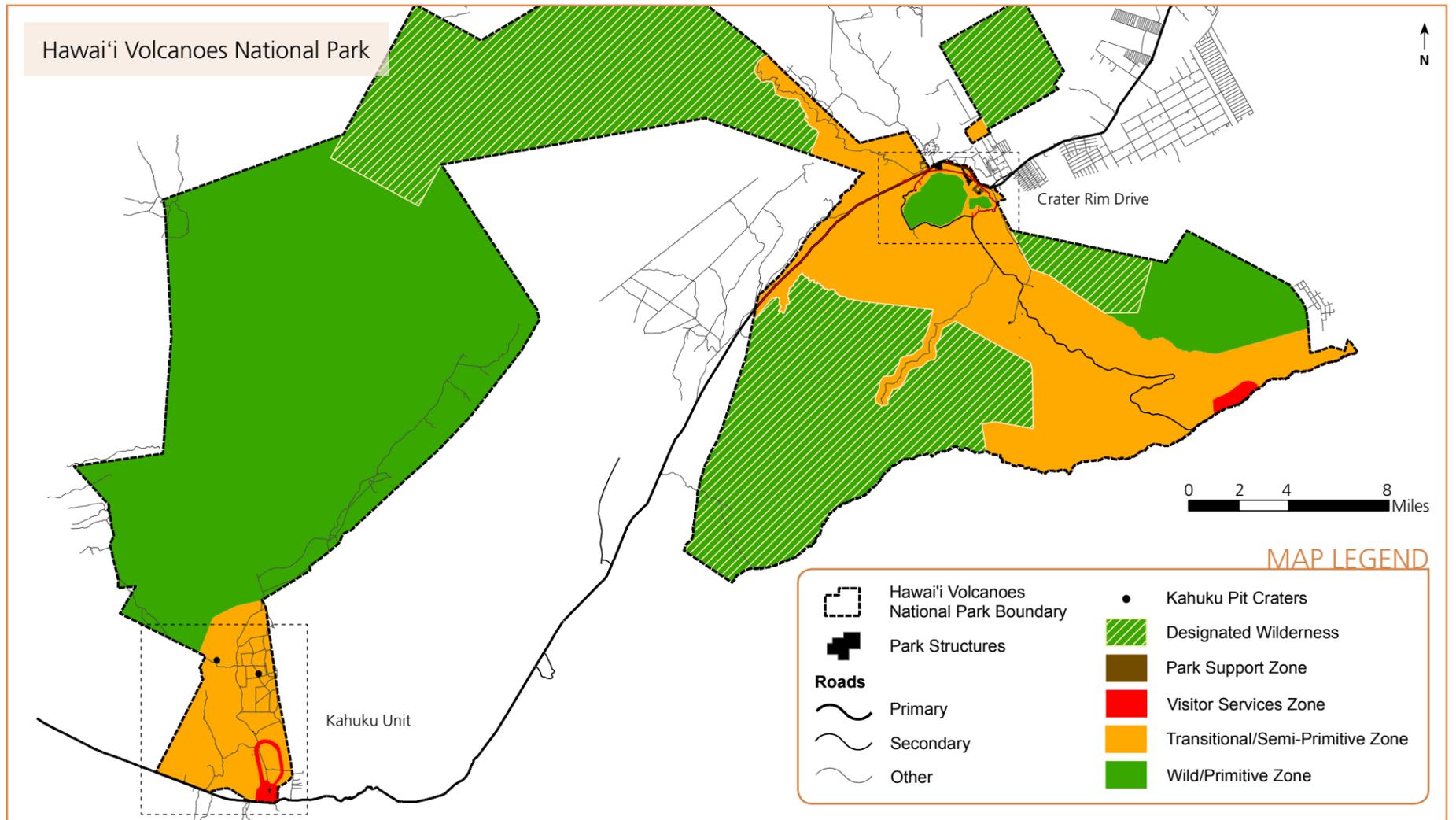
#### Kahuku Unit

- Explore the feasibility of moving entrance westward using the old Mamalahoa Highway (old Highway 11) turnoff and alignment.
- Adaptively reuse existing buildings at Kahuku for a mix of visitor services, administration, and park operations. Develop open air pavilions for interpretation and to convey a sense of arrival.
- Establish a traditional frontcountry accessible campground that accommodates a wide range of users as well as a range of overnight camping including more dispersed car camping and primitive camping opportunities.
- Improve existing main road in lower Kahuku for 2-wheel and 4-wheel drive access. Maintain road primarily as one lane (either gravel or paved) with pullouts.
- Allow general pedestrian access to upper Kahuku (near the reservoir) as well as ranger-led or commercially guided vehicular, equestrian or bicycle access. Access would be managed through a permit system for resource protection and visitor safety. Continue administrative access.



# Alternative C

Alternative C integrates concepts, perspectives, and values from traditional Native Hawaiian land management (such as the ahupuaa land management system) and ecological knowledge into current park management thinking and decisions.



## HIGHLIGHTS

### Kilauea Summit and Vicinity

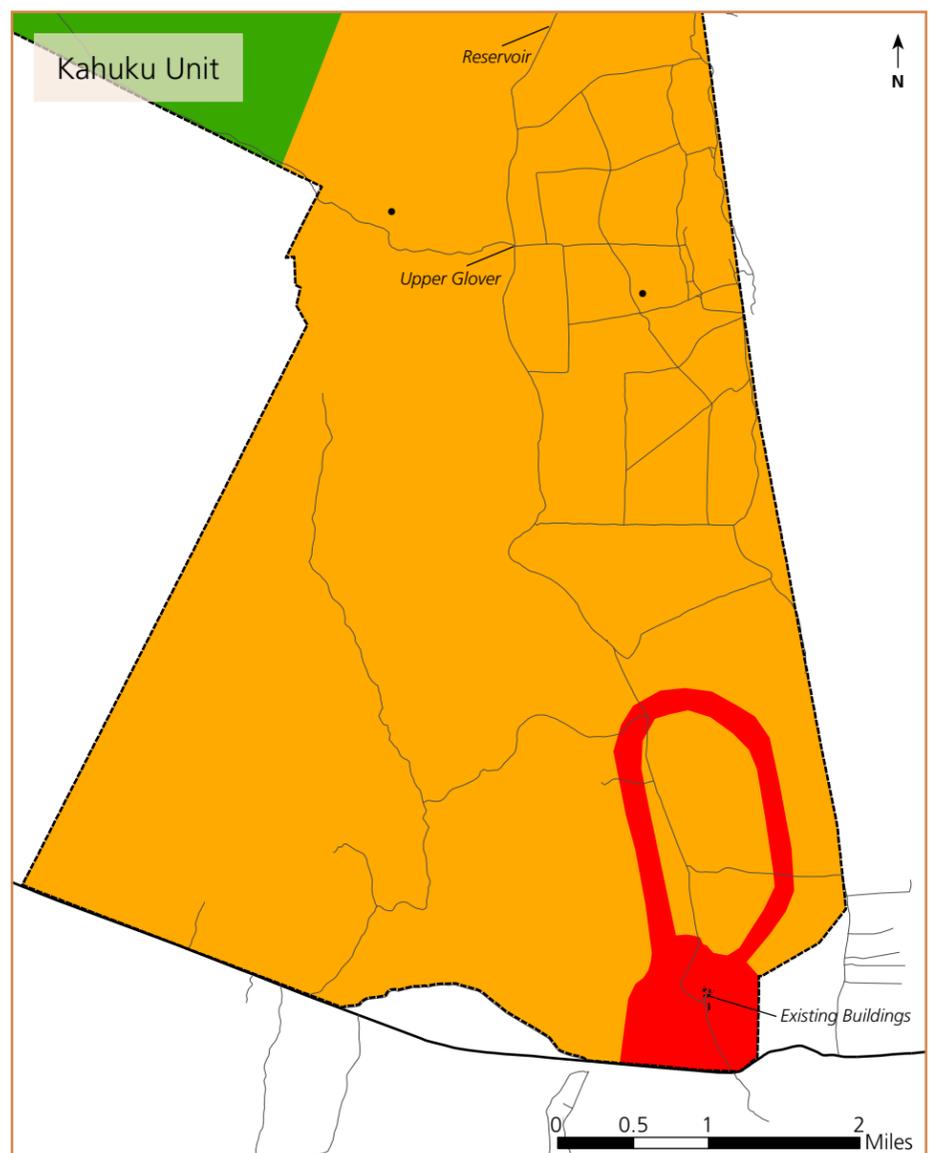
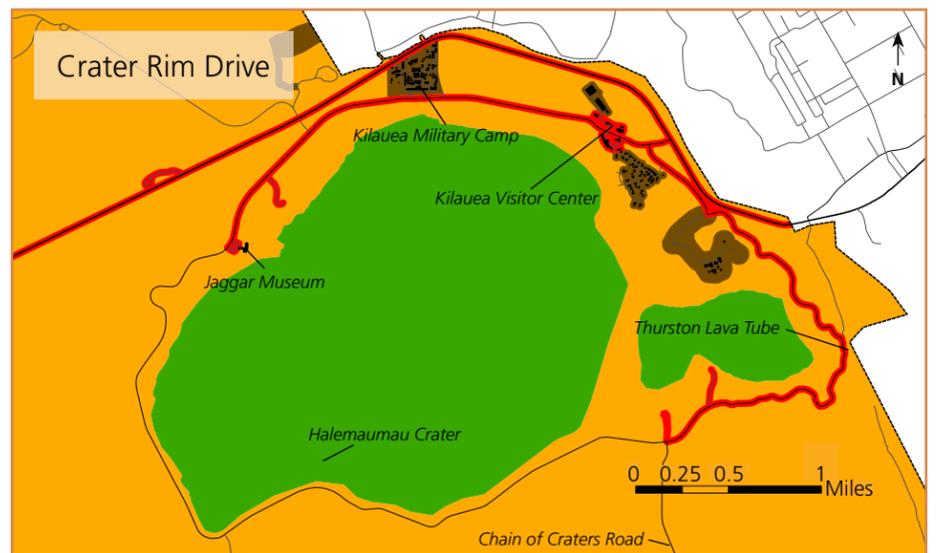
- Adaptively use and possibly expand Kilauea Visitor Center to better address existing visitation and improve visitor services, orientation, and interpretive support. Move headquarters administrative functions to other buildings within the park, and possibly increase administrative space in Hilo.
- Create a second park entrance using the Mauna Loa Road connection. Second park entrance would be used for staff and administrative use and to help disperse commercial bus tours and vendors to minimize congestion and improve access.
- Rehabilitate/update Jaggar Museum facility and exhibits but do not increase the existing footprint.
- Convert Crater Rim Drive to bicycle and pedestrian access only for the general public from Jaggar Museum west/southwest to Chain of Craters Road. Continue to allow administrative and emergency use of the road for two-way vehicle traffic.
- Improve congestion at Thurston Lava Tube by moving bus staging pick-up and drop-off to another location. Explore limits and reservations for buses in general.

### Chain of Craters Road to Ocean Entry

- Improve visitor experience along Chain of Craters Road by improving and working with existing and historic trail connections to create additional visitor opportunities. Limit new development.
- Chain of Craters Road could become a trail if damaged by lava in the future, and the park would evaluate opening the road to vehicles, if feasible.
- Focus on restoration for nene and minimize human presence at Ainahou Ranch. Maintain access road to Ainahou as an unpaved road.

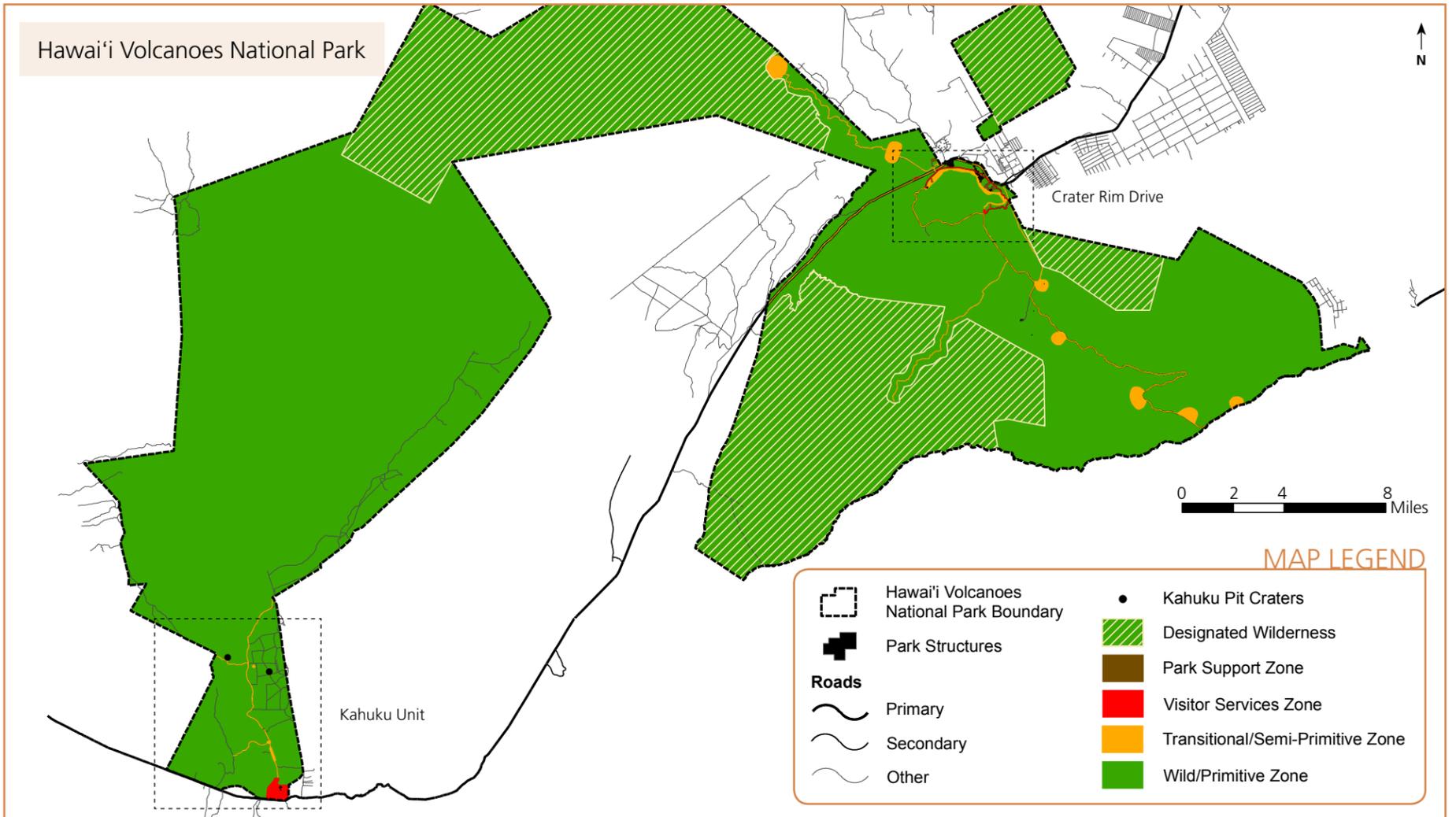
### Kahuku Unit

- Maintain existing entrance to Kahuku with safety improvements.
- Adaptively reuse existing facilities at Kahuku for visitor orientation, interpretation, and support services. Locate administration in adjacent communities, and park operations and maintenance either outside the park or within Kahuku but separated from the visitor functions.
- Create a loop trail to actively interpret the stories about people who have inhabited the land and changes to the land over time.
- Focus on dispersed overnight camping on multiple smaller scale, designated campgrounds with a low level of infrastructure and minimal services (water, fire pits with fire grates, restrooms). Ensure some accessible ADA sites are available.
- Provide for 2-wheel drive access along main road to Upper Glover.
- Allow general pedestrian access to upper Kahuku (near the reservoir) as well as ranger-led or commercially guided vehicular, equestrian or bicycle access. Access would be managed through a permit system for resource protection and visitor safety. Administrative vehicular access would continue.



## Alternative D

Alternative D emphasizes the park's role as a refuge and haven for native biota, people, and cultures in a world constantly adapting to volcanic activity and island building processes.



## HIGHLIGHTS

### Kilauea Summit and Vicinity

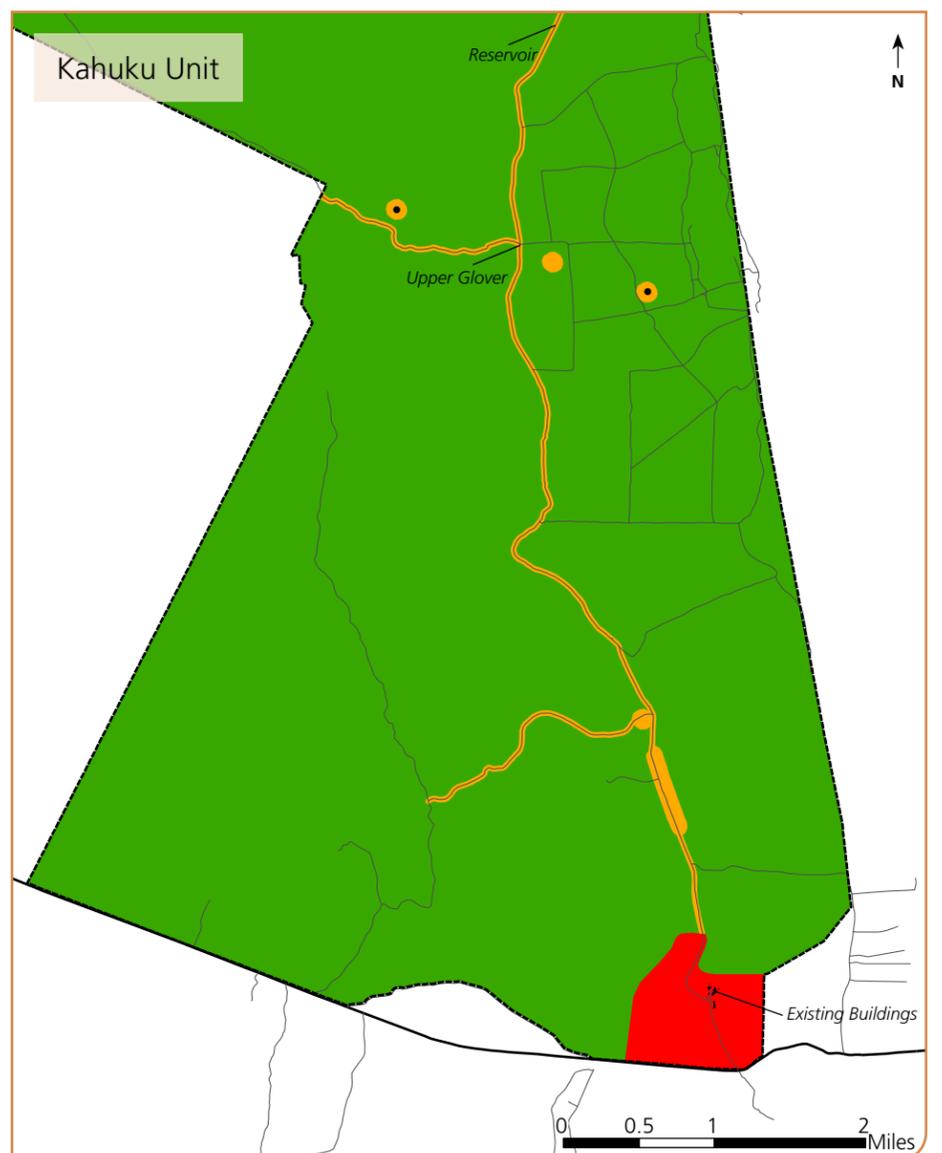
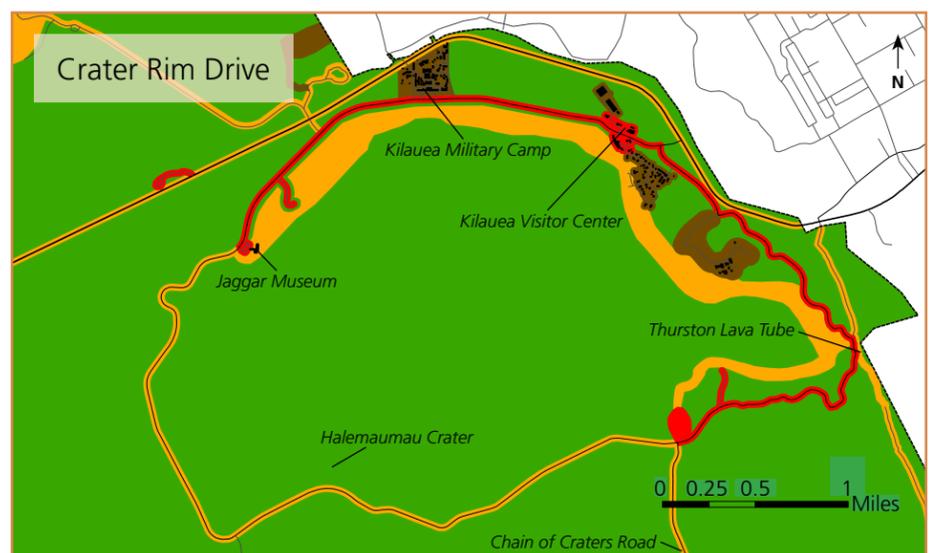
- Adaptively use and possibly expand Kilauea Visitor Center to address increased visitation and improve visitor services, orientation, and interpretive support. Move headquarters administrative functions to other buildings within the park, and possibly increase administrative space in Hilo.
- Create a second park entrance using the Mauna Loa Road connection for staff and administrative use, and possibly for commercial bus tours to minimize congestion and improve access.
- Rehabilitate/update Jaggar Museum facility and exhibits but do not increase footprint.
- Implement a mandatory park shuttle on Crater Rim Drive for the public from Jaggar Museum west/southwest to Chain of Craters Road with two-way shuttle traffic. Commercial tour buses would be limited to one-way traffic on Crater Rim Drive from Jaggar Museum west/southwest to Chain of Craters Road. Continue to allow administrative and emergency use of the road for two-way vehicle traffic.
- Improve congestion at Thurston Lava Tube by restricting private vehicle parking, improving trail connections, and implementing a mandatory shuttle system.

### Chain of Craters Road to Ocean Entry

- Strive to reopen the portion of Chain of Craters Road currently in use if damaged by lava to provide vehicle access to the coast.
- Focus on restoration for nene at Ainahou and allow human use only as directly related to the protection of the site.

### Kahuku Unit

- Maintain the existing entrance at Kahuku with safety improvements and partner with the State to expand interpretive and scenic opportunities along Highway 11, such as waysides and overlooks.
- Adaptively reuse the existing buildings at Kahuku for a mix of visitor services and park operations. Provide for additional interpretive exhibits.
- Focus overnight camping on multiple smaller scale, dispersed campgrounds with a low level of infrastructure and minimal services (water, fire pits with fire grates, restrooms). Ensure separate group camping for larger groups and for environmental study areas.
- Improve main road at Kahuku for 2-wheel drive access to just below the reservoir.
- Public access to upper Kahuku would be by hiking trail for pedestrian use only. Administrative vehicular access would continue.
- Serve as a model for climate change with forest restoration.



# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>ALTERNATIVE CONCEPT</b>				
	<i>This alternative calls for the continuation of current management and serves as a baseline to evaluate changes and impacts in other alternatives.</i>	<i>This alternative strengthens and broadens opportunities to connect people with the volcanic world treasure, Hawai'i Volcanoes National Park.</i>  <i>New visitor opportunities would foster long-lasting connections to the park, extend the values of the park to a broader audience and encourage people to translate their recreation and conservation experiences at the park into action at home.</i>	<i>This alternative integrates concepts, perspectives, and values from traditional Native Hawaiian land management (such as the ahupuaa land management system) and ecological knowledge into current park management thinking and decisions.</i>  <i>Visitors gain an appreciation for the ways in which kamaaina (local people of the land) view, understand and connect with park landscapes and resources today.</i>	<i>This alternative emphasizes the park's role as a refuge and haven for native biota, people, and cultures in a world constantly adapting to volcanic activity and island building processes.</i>  <i>A greater emphasis on science and learning would provide new learning opportunities stretching from mauka (mountain) to makai (sea) for visitors as well as ongoing support for research.</i>
<b>PARK SITES</b>				
<b>Park Entrance</b>	Maintain existing park entrance off Highway 11 for both public and administrative use.	Create a second park entrance using the Mauna Loa Road connection. Second park entrance highlights Jaggar Museum as a first stop/orientation place for visitors and complements the reconfiguration of the Kilauea Visitor Center complex of buildings.	Create a second park entrance using the Mauna Loa Road connection. Second park entrance would be used for staff and administrative use and to help disperse commercial bus tours and vendors to minimize congestion and improve access.	Same as Alternative C.
<b>Kilauea Visitor Center, Volcano House, and Ohia Wing</b>	Continue to maintain the current use and function of buildings with no expansion to buildings.	Use the entire complex of buildings as a kauhale (campus) for an integrated visitor experience, including Kilauea Visitor Center, Ohia Wing, Volcano Art Center, Pahula, and other buildings. Evaluate individual building functions as part of a larger vision for the entire campus for improving visitor services with a potentially expanded footprint. Develop a conceptual design document and site-specific interpretive plan.	Same as Alternative B.	Same as Alternative B.
<b>Kilauea Visitor Center and Surrounding Area</b>	Retain current function of Kilauea Visitor Center as main park visitor contact station and park headquarters/administrative offices.  Continue to upgrade Kilauea Visitor Center as needed for building maintenance and interpretive exhibits.  Maintain some additional office space in Hilo for continuity of operations and flexible work space.	Adaptively use and rehabilitate Kilauea Visitor Center to accommodate existing visitation, address increased visitation, and improve visitor services, orientation, and interpretive support. Make more efficient use of the interior space while any additions would be to the lanai or with additional open-air pavilion space.  Move headquarters/administrative functions to other buildings within the park.  Improvements to Kilauea Visitor Center could include: <ul style="list-style-type: none"> <li>• Improve staging for guided services with a small kiosk to address congestion and use conflicts inside the building and on the lanai.</li> <li>• Possible additional open-air, self-guided pavilion or enlarge and possibly enclose the lanai to handle overcrowding during daily peak periods.</li> <li>• Possible expanded parking for increased visitation and length of stay.</li> </ul>	Adaptively use and possibly expand Kilauea Visitor Center to accommodate existing visitation, address increased visitation, and improve visitor services, orientation, and interpretive support.  Move headquarters administrative functions to other buildings within the park, and possibly increase administrative office space in Hilo.  Improvements to Kilauea Visitor Center could include: <ul style="list-style-type: none"> <li>• Redesign to implement the original architectural concept with a two-story building.</li> <li>• Enlarge and possibly enclose the lanai to handle overcrowding in the visitor center during daily peak periods.</li> <li>• Possible expansion of parking for increased visitation and length of stay.</li> </ul>	Same as Alternative B.
<b>Volcano House and Surrounding Area</b>	Continue current visitor use functions (such as lodging, retail, and food services) at the Volcano House as a concession operation.  Continue educational programs and cultural demonstrations by the Volcano Art Center as well as additional tours or programs by park partners.	Continue to operate Volcano House as a concession operation for lodging, retail, and food services. Continue educational programs and cultural demonstrations by the Volcano Art Center as well as additional tours by park partners.  If concessions operations do not continue, adaptively reuse Volcano House as a visitor center to offer additional interpretive and education opportunities.  If Volcano House is destroyed or significantly damaged, rebuild lodging as close to present location as is safe to continue to provide an overnight volcano experience to visitors and maintain tradition of lodging at the summit of Kilauea, dating back to 1848.	Continue to operate Volcano House as a concession operation for lodging, retail, and food services. Continue educational programs and cultural demonstrations by the Volcano Art Center as well as additional tours by park partners.  If concessions operations do not continue, adaptively reuse Volcano House as a visitor center to offer interpretive and education facility and/or as a park museum in conjunction with Ohia Wing.  If Volcano House is destroyed or significantly damaged, do not rebuild on rim of crater.  Rely on locating lodging outside the park if the Volcano House is no longer a concession or is destroyed or significantly damaged.	Continue to operate Volcano House as a concession operation for lodging, retail, and food services. Continue educational programs and cultural demonstrations by the Volcano Art Center as well as additional tours by park partners.  Retrofit/update Volcano House with a goal of becoming energy independent, and serve as a leader in sustainable design/adaptive reuse.  If concessioner operations do not continue, adaptively reuse building as an education center (similar to an environmental learning center with educational conferences and visiting researchers).  If Volcano House is destroyed or significantly damaged, do not rebuild on rim of crater.  Rely on locating lodging outside the park if the Volcano House is no longer a concession or is destroyed or significantly damaged.
<b>Ohia Wing</b>	Adaptively reuse the historic former Ohia Wing of the Volcano House, and original park headquarters building constructed in 1932 as cultural museum.  Interpret the original Thomas Vent plan for the park documented in the original 1938 master plan.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
<b>1877 Volcano House (Volcano Art Center)</b>	Continue current function of 1877 Volcano House as a nonprofit educational arts center, currently occupied by the Volcano Art Center.  Continue to interpret the structure as one of the early buildings to provide lodging to visitors on the summit of Kilauea. Maintain the building in its present location, relocated from its original location on the edge of the caldera.	In the short-term increase historic interpretation of 1877 Volcano House (current home of the Volcano Art Center) and the historic campus.  If Volcano Art Center were to relocate, the NPS would continue to maintain and adaptively reuse the building for continued visitor services including commercial services.	In the short-term increase historic interpretation of 1877 Volcano House (current home of the Volcano Art Center) and the historic campus.  If Volcano Art Center were to relocate, evaluate restoring the building to its original function and develop a living history demonstration with period furnishings and interpretive programs and media.	In the short-term increase historic interpretation of 1877 Volcano House (current home of the Volcano Art Center) and the historic campus.  If Volcano Art Center were to relocate, examine adaptively reusing the building for additional self-guided interpretive visitor services and as a staging area for educational groups.

# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>Crater Rim Drive (includes Halemaumau Parking Area)</b>	<p>Continue to maintain the character of roads, ensuring a park-like feel to the driving experience while providing for visitor safety.</p> <p>Maintain road as a two-way road with its historic character and reopen closed section when possible for both public and administrative use.</p> <p>Management of the 2.8 miles of Crater Rim Road between the entrance gate and Jaggar Museum would be consistent with the <i>Crater Rim Drive Rehabilitation Environmental Assessment</i> (May 2010) including: maintaining the road for visitor and administrative use, solving structural deficiencies for traffic loads, improving overall use, providing for ADA parking in parking areas, mitigating/minimizing impacts to natural and cultural resources and threatened and endangered (T&amp;E) species, and preserving management options for future road uses.</p>	<p>Assuming no eruptive activity, keep road open to the public for as much of its length as possible for two-way traffic, allowing a mix of private vehicles and smaller, non-mandatory shuttles. Preserve the historic character of the road.</p> <p>Continue to allow administrative use of the road for two-way vehicle traffic.</p> <p>Large commercial buses would be limited to one-way traffic west/southwest from Jaggar Museum to Chain of Craters Road junction.</p> <p>Reduce size of parking at Halemaumau overlook for cultural sensitivity and redesign parking to improve resource protection. Consider times of day/days of week management on the road or a separate bicycle trail to improve safe bicycle access around Crater Rim Drive.</p>	<p>Assuming no eruptive activity, convert Crater Rim Drive to pedestrian and bicycle-only access, restore the landscape, and interpret the cultural significance of the area. Crater Rim Drive would remain closed to private vehicle traffic west/southwest from Jaggar Museum to Chain of Craters Road.</p> <p>Continue to allow administrative use of the road for two-way vehicle traffic.</p> <p>Preserve the original road configuration and historic character of the road.</p> <p>Repair the Halemaumau overlook, remove the parking lot, and restore the area. Some remnants of the parking lot could be maintained to provide an interpretive opportunity.</p> <p>Construct a pedestrian trail around Crater Rim Drive with potential new trail connections. Bicycle use would occur on the road.</p>	<p>Assuming no eruptive activity, implement a shuttle system on Crater Rim Drive. Shuttle would run with two-way service the length of Crater Rim Drive and be mandatory west/southwest from Jaggar Museum to Devastation Overlook. Crater Rim Drive would remain closed to private vehicle traffic west/southwest from Jaggar Museum to Chain of Craters Road.</p> <p>Large commercial buses would be allowed to run on Crater Rim Drive but would be limited to one-way traffic from Jaggar Museum to Chain of Craters Road junction.</p> <p>Continue to allow administrative use of the road for two-way vehicle traffic.</p> <p>Restore Halemaumau overlook, removing the large parking area and converting it to a shuttle stop.</p> <p>Encourage bicycle use of the road.</p>
<b>Kilauea Military Camp</b>	<p>Kilauea Military Camp (KMC) would continue to operate under permit as a military recreation facility in park-owned historic structures. Continue to coordinate with KMC on resource protection, notably resources on the List of Classified Structures and eligible for the National Register, and to interpret the park's military history and KMC's history, including the World War II Japanese confinement and prisoner of war (POW) history.</p> <p>Retain current function as a military, morale, welfare and recreation center--a self-supporting operation under a Non-Appropriated Funding Instrument (NAFI), for active duty military and military retirees and their guests and who may also sponsor other groups.</p> <p>Kilauea Military Camp would continue to be the fueling station for hydrogen shuttle pilot program and could be a shuttle stop there.</p> <p>Kilauea Military Camp would continue to be a staging area for special events, such as the park's Cultural Festival and emergencies.</p>	<p>Same as Alternative A, plus enhance coordination on natural and cultural resource protection, visitor services, and safety.</p> <p>Explore opportunities to work with the military to interpret the park's military history and KMC's history, including the WWII Japanese confinement and POW history.</p> <p>If the permitted military recreation operations at KMC are discontinued, the park would prepare a plan and explore future options for the site, such as:</p> <ul style="list-style-type: none"> <li>Adaptively reuse as the park's main visitor center including interpretation and orientation, and locate visitor parking, shuttle staging, and other visitor functions and services to create a sense of arrival in the park.</li> <li>Adaptively reuse as a multi-agency and partner research and education campus, including administrative office space.</li> <li>Convert to concession operation to provide commercial visitor services such as lodging, food, retail, and other appropriate amenities.</li> <li>Remove non-historic structures and restore some of the area for native forest and habitat.</li> </ul>	<p>Same as Alternative B.</p>	<p>Same as Alternative B.</p>
<b>Jaggar Museum and Hawaiian Volcano Observatory (Uwekahuna)</b>	<p>Continue current self-guided interpretation at the museum and continue scientific activities at the observatory.</p> <p>Hawaiian Volcano Observatory would continue to operate at Jaggar.</p> <p>Rehabilitate and upgrade Jaggar Museum and interpretive exhibits.</p>	<p>Same as Alternative A, plus restore the old stone tower of original observatory.</p> <p>Add a rustic outdoor amphitheater to provide visitor seating during guided demonstrations and talks. Make better use of the limited space on the rim with its views of the caldera.</p> <p>If the Jaggar Museum and Hawaiian Volcano Observatory facilities are destroyed or significantly damaged, focus on facility relocation. Facilities would not be rebuilt on its current site due to cultural significance. Alternative locations would be explored, preferably inside the park in proximity of the caldera, to maintain continuity for the historic visitor experience and scientific operations as much as possible.</p> <p>Maintain visitor orientation/interpretation opportunities in the vicinity of Jaggar (Uwekahuna) that would be open air or self-guided in nature using less enclosed infrastructure.</p>	<p>Same as Alternative A.</p> <p>If the Jaggar Museum facilities are destroyed or significantly damaged, remove all facilities from Uwekahuna and restore the site as a sacred place to Native Hawaiians.</p> <p>Strive to rebuild the functions provided by Jaggar Museum and Hawaiian Volcano Observatory on an alternative site further from the rim in a less culturally sensitive location, preferably inside the park.</p> <p>Interpret story of Jaggar and history of the site (Uwekahuna) in an alternative location.</p>	<p>Same as Alternative C.</p>
<b>Thurston Lava Tube (Nahuku) Including Area from Devastation Trail to Kilauea Iki Overlook</b> <i>(continued on next page)</i>	<p>Implement the Crater Rim Drive Environmental Assessment (EA) recommendations for a more integrated experience with reconfigured parking, additional bike parking and improved signage, accessible restrooms, and trails linking Nahuku, Kilauea Iki, Puu Puai.</p> <p>Implement visitor use planning to accommodate experimental shuttles.</p>	<p>Use a suite of tools to address congestion and improve visitor experience at Thurston Lava Tube:</p> <ul style="list-style-type: none"> <li>Remove private vehicle parking from Thurston Lava Tube and expand parking at Kilauea Iki with an improved trail connection.</li> <li>Improve trail connections for pedestrians and bicycles from other parking areas and locations in the park.</li> <li>Limit large commercial bus traffic to one-way only on Crater Rim Drive, when feasible.</li> <li>Improve visitor information and outreach for trip planning and emphasize less busy times of day to visit.</li> <li>Improve and increase interpretive opportunities and themes, such as a focused rainforest experience and interpretive trail.</li> </ul>	<p>Implement more active management of Thurston Lava Tube to address congestion and improve visitor experience:</p> <ul style="list-style-type: none"> <li>Maintain and improve private vehicle parking at Thurston Lava Tube.</li> <li>Improve trail connections for pedestrians and bicycles from other parking areas.</li> <li>Move large commercial bus staging pickup and drop off to another location with an enhanced trail connection.</li> <li>Implement carrying capacity and/or reservations for commercial buses to reduce congestion.</li> <li>Improve visitor information and outreach for trip planning and emphasize less busy times of day to visit. Enhance interpretation at Nahuku to discuss early Native Hawaiian use of the caves (water, refuge etc.) and Hawaiian principles for managing the cave as sacred (kapu) as necessary.</li> </ul>	<p>Improve the experience at Thurston Lava Tube within the existing developed footprint of parking infrastructure to address congestion and improve visitor experience:</p> <ul style="list-style-type: none"> <li>Restrict private vehicle parking for ADA access only.</li> <li>Maintain Thurston Lava Tube as a stop for commercial buses and shuttles. With a shuttle, make better use of other existing parking areas for private vehicles.</li> <li>Improve trail connections for pedestrians and bicycles from Kilauea Iki and Devastation Overlook parking areas, but maintain the existing footprint of those parking areas for private vehicles.</li> <li>Improve visitor information and outreach for trip planning and emphasize less busy times of day to visit.</li> <li>Do not expand public access to other lava tubes.</li> </ul>

# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>Thurston Lava Tube (Nahuku)</b> <b>Including Area from Devastation Trail to Kilauea Iki Overlook</b> <i>(continued from previous page)</i>		<ul style="list-style-type: none"> <li>Explore an additional lava tube or lava tunnel experience, likely more remote and smaller scale, elsewhere in the park.</li> <li>Consider widening trail surface on Escape Road to accommodate bicycle/pedestrian community connection and a possible loop connection outside of wilderness.</li> </ul>	<ul style="list-style-type: none"> <li>Do not expand public access to other lava tubes.</li> </ul>	
<b>Chain of Craters Road (Includes Mauna Ulu, Kealakomo)</b>	<p>Continue to maintain the character of roads to NPS standards, ensuring a park-like feel to the driving experience, while providing for visitor safety. Chain of Craters Road would continue to immerse people in the volcanic landscape and history of the area from the coast to the rainforest.</p> <p>Identify and clear over-vegetated pullouts to make views/vistas more intimate and encourage stops on road.</p> <p>Continue to improve interpretation and preservation of Kealakomowaena and its resources by implementing recommendations from the Kealakomo Preservation Plan (January 2011) in a phased approach, including primary messages and themes for interpretive trails and signage, sites to be interpreted, site preparation required to mitigate impacts to sensitive resources, and guidance for managing natural and cultural resources in the area.</p> <p>Keep road open until covered by lava; do not attempt to reopen lava-covered sections at the end of Chain of Craters Road.</p>	<p>Same as Alternative A, plus, identify sites to improve visitor immersion in volcanic story with clearly defined interpretive trails that link key features.</p> <p>Develop an expanded trail network with loop trails by creating connections with existing trails and new use of historic trails.</p> <p>Consider Mauna Ulu parking area as site of mobile visitor contact station to orient and interpret for visitor safety needs and provide an alternative experience when the summit is closed.</p> <p>Strive to restore the portion of Chain of Craters Road currently in use if covered by lava in the future.</p>	<p>Same as Alternative A, plus, work with existing trails, historic trails, pullouts, and limit any new development along Chain of Craters Road.</p> <p>Improve signage of features on road to limit informal pullouts.</p> <p>Chain of Craters Road could become a trail if it is covered by lava and park would evaluate opening the road to vehicles, if feasible. Ensure trail access mauka to makai at a minimum to provide a coastal experience.</p>	<p>Same as Alternative A, plus work with existing trails, historic trails, pullouts, and limit any new development along Chain of Craters Road.</p> <p>Strive to restore the portion of Chain of Craters Road currently in use at least to coast if covered by lava in the future.</p>
<b>End of Chain of Craters Road Coastal Area</b>	<p>Continue to work with partners to provide a sustainable and moveable visitor contact station at the current eruption site for interpretation and safety on a trial basis. If pilot project is successful, retain the structure for visitor contact at the end of Chain of Craters Road to replace some of the functions provided by the lost Wahaula Visitor Center.</p>	<p>Same as Alternative A, plus ensure a long-term replacement mobile visitor contact station at the end of Chain of Craters Road to address visitor safety needs and provide an alternative experience when the summit is closed.</p> <p>Replace lost picnicking opportunities with a new picnic area along the coastal portion of Chain of Craters Road.</p> <p>Install small hale at key locations for interpretation.</p>	<p>Same as Alternative A, plus develop a visitor contact station in the form of a traditional hale at the end of Chain of Craters Road (wood framed and thatched; framing could be salvaged). Structure would not be mobile, but interior elements could be made to be quickly removable in the path of lava.</p> <p>Increase educational group use with a covered pavilion for outdoor educational use.</p>	<p>Same as Alternative A, plus provide open air structures, pavilions or kiosks at key locations for interpretation, visitor contact and outdoor educational use.</p>
<b>Hilina Pali</b>	<p>Maintain existing road width and historic alignment. Address one-lane sections through signage and other management actions.</p>	<p>Same as Alternative A, plus consider expanding interpretive opportunities with waysides and pullouts along the road corridor and at end of the road outside of wilderness boundaries.</p> <p>Improve trailhead management at end of the road by removing exotic plants and restoring native species.</p> <p>Maintain road open/access should it be impacted by volcanic/seismic activity.</p> <p>Consider identifying days/parts of days when Hilina Pali Road is closed for day use vehicles and is hike/bike only. Overnight campers and backpackers would not be restricted.</p> <p>Consider bicycle loop access to connect Escape Road with Hilina Pali Road outside wilderness.</p>	<p>Similar to Alternative B, except Hilina Pali Road could become a trail for pedestrians and bicycles if it was impacted by volcanic/seismic activity.</p> <p>Increase educational group use with a covered pavilion for outdoor educational use.</p>	<p>Same as Alternative A, plus emphasize wilderness interpretation along the road, at the kiosk currently at the end of the road, and at trailheads to interpret park wilderness, and provide resource protection messages, and as a wild experience for transition to park wilderness.</p> <p>Improve trailhead management at end of the road by removing exotic plants and restoring native species.</p> <p>Maintain road open/access for resource management reasons should it be impacted by volcanic/seismic activity.</p> <p>Consider identifying days/parts of days when Hilina Pali Road is closed for day use vehicles and is hike/bike only. Overnight campers and backpackers would not be restricted.</p>
<b>Ainahou Ranch House and Grounds</b>	<p>Ainahou would continue to provide a core nene management area for nene recovery.</p> <p>Ranch house would remain open to guided occasional public use during the months when public access is not in conflict with nene recovery activities.</p> <p>Maintain house in good condition as a historic structure so as not to preclude future uses, such as an environmental camp. Maintain water system for house fire suppression.</p> <p>Access road to Ainahou should be maintained as an unpaved road.</p>	<p>Same as Alternative A.</p> <p>If nene recovery activities or priorities change, the park would consider expansion of uses as an educational site for guided interpretation or education.</p>	<p>Focus on restoration for nene and minimize human presence. Allow human use only as directly related to the protection of site, consistent with NPS management guidelines. Prioritize native vegetation recovery, beyond protection of historic structure and immediate cultural landscape.</p> <p>Maintain house in good condition as a historic structure.</p> <p>Access road to Ainahou should be maintained as an unpaved road.</p>	<p>Same as Alternative C.</p>
<b>Mauna Loa Road</b> <i>(continued on next page)</i>	<p>Maintain existing road width and historic alignment.</p> <p>Address one-lane sections through improved signage and other management actions.</p>	<p>Same as Alternative A, plus increase interpretive and bird watching opportunities with minimal infrastructure/impacts. Focus on waysides, one or two loop trails in good locations (such as to link Kau Wilderness and Mauna Loa Wilderness) for hiking and bird watching, and improve trail connections to link Nama Kanipaio Campground with key sites.</p> <p>Consider pull-out at a designated area for bird watching (about 6,000' elevation).</p>	<p>Same as Alternative B, except no additional pavilions would be constructed. Identify locations suitable for temporary group use; focus on using existing structures.</p>	<p>Same as Alternative B, except provide covered pavilions for outdoor education use or other group use at Kipuka Puauulu and near the top of Mauna Loa Road.</p>

# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>Mauna Loa Road</b> <i>(continued from previous page)</i>		Provide covered pavilions for outdoor education use or other group use at Bird Park and near Kipuka Ki.  Consider identifying days/parts of days when Mauna Loa Road is closed to private day-use vehicles and is hike/bike only. Backpackers would not be restricted.		
<b>Olaa: Designated Wilderness (larger tract)</b>	Seek legislation to include Olaa within the legislated park boundary.  Maintain custodial responsibility for Olaa and manage as wild experience without formalizing trails for day use.  No on-site guided interpretation or overnight camping.  Interpret Olaa off-site.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
<b>Olaa: Non-wilderness (smaller tract)</b>	Seek legislation to include Olaa within the legislated park boundary.  Work with adjacent landowners to provide one gravel pull-out for three cars on non-NPS land.  Occasional ranger-led and educational use. No defined trail or regular recreational use.	Seek legislation to include Olaa within the legislated park boundary.  Coordinate with the county to provide pullout parking on Wright Road for two to three cars (current capacity) or shuttle/guided access.  Develop a boardwalk-style (weed mat) trail to ensure resource protection and minimize impact but allow for on-site interpretation of the rainforest.  Design a route to avoid sensitive resources and consider a group size limit for trail.	Same as Alternative B, but guided access only.	Seek legislation to include Olaa within the legislated park boundary.  Access and group size is same as Alternative B.  Trail would be a flagged route for guided access only, and possible fee interpretation.  Increase outdoor educational group use with a small covered pavilion through partnership with adjacent landowners. Engage other partners in forest restoration and maintenance in Olaa.
<b>Kahuku</b>				
<b>Entrance</b>	Maintain existing entrance at Kahuku but address safety issues by vegetation clearing, improving signage, possibly lowering berms to improve line of sight, and partnering with the State to add a turn lane.	Work with the county to explore the feasibility of moving the entrance further to the west using the old Mamalahoa Highway (old Highway 11) turnoff and alignment. The location would be east of the rare forest, but just west of 1868 lava flow. Connect the new entrance road through the tree farm, lower airstrip, or 1886 lava flow to the existing road.  May require a left turn lane or using abandoned highway for one way out to avoid turn lanes.  Provide a new small visitor contact station and/or orientation open air pavilion at the entrance that could be staffed.  Maintain existing entrance with safety improvements for a loop driving experience.	Same as Alternative A.	Same as Alternative A, plus work with the State and other partners to expand interpretive and scenic opportunities with State along Highway 11.
<b>Use of Existing Buildings</b>	Continue to adaptively reuse the site for a mix of visitor services and administrative and operational use as needed. Some limited use of existing buildings would continue.  Park would develop a small scale orientation/interpretive strategy to define and site various media and messages to interpret Mauna Loa geologic history, native forest conservation, history of cattle ranching, and Native Hawaiian presence in this area.	Develop a Development Concept Plan for site.  Adaptively reuse the site and buildings for a variety of visitor services and mixture of administration and park operations, including administrative office and maintenance space.  Provide opportunities to accommodate staging for recreational groups.  Include self-guided infrastructure such as open air pavilions to convey a sense of arrival and tell interpretive stories of Kahuku.	Develop a Development Concept Plan for site.  Adaptively reuse the site and buildings for visitor services resulting in a better separation of functions at the site.  Move administration, park operations, and maintenance elsewhere and preferably off-site to the neighboring community to try to minimize additional development.  Provide opportunities to accommodate staging for recreational groups.	Develop a Development Concept Plan for site.  Same as Alternative B, plus provide opportunities to accommodate camping and staging for volunteers, researchers, students, and educational and service groups.  Provide additional interpretive exhibits.
<b>Road Access in Lower Kahuku</b>	Maintain the current main road system and vehicle access to Upper Glover.  Maintain some of the unimproved pasture roads for administrative use.  Some old pasture roads could continue to be converted to trails for public access.  Any roads not used for vehicular access or trail access would be restored.  Restore the former paddock areas. Enhance interpretation along the current road system.	Encourage visitor opportunities and connection to the resources in Kahuku through improved road access for a range of vehicles including large commercial buses or tour buses. The new entrance and road connection would provide a scenic loop drive to the existing buildings and out the existing entrance, though bus parking would be confined to the airstrip.  Maintain the main road from the airfield to a designated area near the reservoir for 2-wheel drive access, similar to Hilina Pali or Mauna Loa Road. This road would primarily be a one-lane road with pull-outs that could be gravel or paved surface.  Explore maintaining some additional roads to 4-wheel drive standards to features for public and administrative access.  Any roads not used for vehicular access or trail access would be restored.	Provide opportunities for visitors that stretch mauka and are consistent with the ahupuaa land management system.  Maintain the main road through lower Kahuku for 2-wheel drive access, similar to Hilina Pali or Mauna Loa Road to a designated area near the reservoir (ensuring security of reservoir). This road would primarily be a one-lane road with pull-outs that could be gravel or paved surface.  Maintain some additional roads for administrative vehicle use only. Some administrative roads could be used as public bicycle routes or equestrian trails.  Formalize a new trailhead to the cinder cone area for guided access.  Any roads not used for vehicular access or trail access would be restored.	Encourage a more rustic visitor experience in Kahuku and minimize pavement and road infrastructure.  Maintain the main road through lower Kahuku as a very primitive driving experience for 2-wheel drive access to a designated area near the reservoir. This road would be primarily a one-lane road with pull-outs that could be gravel or paved surface.  Emphasize trails and trailheads for non-motorized use as opposed to any additional road access.  Any roads not used for vehicular access or trail access would be restored.

# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>Upper Kahuku</b>	Manage Upper Kahuku for its wilderness characteristics based on determination of eligibility. There would be no public access above Upper Glover though vehicular access for administrative use and emergencies would be allowed on existing roads.	<p>Implement a permit system for public hiking and backcountry travel near the reservoir. Improve a trailhead and primitive campground in the vicinity of the reservoir for trailhead access.</p> <p>Allow NPS- or commercially-guided vehicular, bicycle and equestrian access near the reservoir. Vehicular access would be 4-wheel drive access and would be allowed on existing roads up to the CCC cabin on the east side and to the west side.</p> <p>Implement resource protection requirements for access near the reservoir such as weed-free feed for equestrian use and scrubbing or washing procedures travelers to ensure no introduction of invasive or exotic species.</p> <p>Vehicular access for administrative use and emergencies would be allowed on existing roads.</p>	Same as Alternative B.	<p>Implement a permit system for public hiking and backcountry travel near the reservoir. Improve a trailhead and primitive campground in the vicinity of the reservoir for trailhead access.</p> <p>No vehicular, biking or equestrian use would be permitted near the reservoir.</p> <p>Implement resource protection requirements for access near the reservoir such as scrubbing or washing procedures travelers to ensure no introduction of invasive or exotic species.</p> <p>Vehicular access for administrative use and emergencies would be allowed on existing roads.</p>
<b>Campgrounds</b>	Continue to manage for day-use access only at Kahuku.	<p>Provide a range of overnight camping at Kahuku including car camping and primitive camping opportunities.</p> <p>Establish a traditional front country accessible campground that accommodates a wide range of users. Develop a Development Concept Plan for design of the campground. Some sites could offer structural shelter such as a lean-to or covered pavilion for cooking. Other sites could offer walk-in camping. The campground would likely offer water but no electrical hookup. Some sites could accommodate horse trailers.</p> <p>Consider multiple locations for various types of camping and different levels of infrastructure. Focus on previously disturbed areas and in less sensitive resource areas.</p> <p>Possible additional campground locations could include the tree farm and the area adjacent to/across the road from the former ranch house infrastructure.</p>	<p>Focus on dispersed, overnight camping on multiple smaller scale, designated campgrounds at Kahuku with a low level of infrastructure and minimal services (water, fire pits with fire grates, restrooms). Ensure some accessible ADA sites are available.</p> <p>Focus camping opportunities close to trailheads and features of interest.</p> <p>Accommodate groups by providing multiple tent sites for extended family or group camping in different locations.</p> <p>Provide individual designated campsites not associated with larger campgrounds for drive-in or walk-in camping.</p>	Similar to Alternative C, plus ensure separate group camping for larger educational groups, such as school groups and volunteer groups with a covered area for staging or programs. Establish some temporary and movable field camps for environmental study areas for staff, volunteers, or other science, research, and educational groups.
<b>Trails and Trailheads</b>	Continue to convert some old road beds to trails at Kahuku.	<p>Develop a Trail Management Plan for specific trail alignments and uses.</p> <p>Develop a trail network at Kahuku that includes loop trails and trail connections to promote hiking, equestrian use, and bicycling.</p> <p>Provide a wide range of trail types to accommodate different visitor abilities.</p> <p>Seek to provide biking opportunities by using some of the old roads; designate specific routes for biking. Minimize user conflicts by separating trail uses and considering some bicycle only or equestrian only trails.</p> <p>Allow commercial guided horse use and private horse use in lower pastures and designated areas and with weed-free protocols. Potentially limit the number of equestrian-accessible trails to manage use and monitor impacts.</p>	<p>Develop a Trail Management Plan for specific trail alignments and uses.</p> <p>Develop a trail network at Kahuku that includes loop trails and trail connections to promote hiking, bicycling, and equestrian. Provide a range of trail types to accommodate different visitor abilities.</p> <p>Prioritize re-establishing traditional and historic travel routes through Kahuku for hiking opportunities.</p> <p>Emphasize connecting historic trails across lava flows.</p> <p>Bicycling, including mountain biking, would be permitted on existing maintained roads.</p> <p>Allow private and commercial equestrian use similar to Alternative B, but likely to a smaller scale/fewer trails.</p>	Similar to Alternative C, except no equestrian use of pastures for staging.
<b>Range of Recreational Activities</b>	<p>Open primarily for weekend use at Kahuku during the day and for special events.</p> <p>Recreational activities include sightseeing, picnicking, hiking, and guided hikes.</p>	<p>Provide access for recreation activities seven days a week.</p> <p>Provide for overnight camping and a mix of day use activities such as, hiking, bicycling, equestrian use, scenic driving, bird watching, nature study, photography, and activities that promote health, wellness, and foster connections with the landscape.</p> <p>Consider access for some commercially guided recreation such as biking, scenic driving, and equestrian use.</p>	<p>Same as Alternative B, but bicycling would only be allowed on existing roads.</p> <p>Consider access for some commercially guided recreation such as biking, scenic driving, and equestrian use.</p>	Same as Alternative C, except for no commercially guided recreation.
<b>Interpretive and Educational Highlights</b>	<p>Interpretation at Kahuku focuses on a range of themes and media for visitor immersion.</p> <p>Develop a wayside plan and address interpretive techniques through a Long-Range Interpretive Plan.</p>	<p>Develop a specific interpretive plan to address key stories that should be interpreted at Kahuku such as the Southwest Rift of Mauna Loa and five eruptions; the story of refugia and restoration; ranching; Akihi, how land affects people and people affect the land; Kahuku in the context of climate change, and the ahupuaa.</p> <p>Visitor interpretation would be guided, such as ranger-led programs and hikes, as well as self-guided such as waysides and interpretive trails. Ranger-led campground programs would be provided.</p>	<p>Develop a specific interpretive plan to address key stories that should be interpreted at Kahuku such as the Southwest Rift of Mauna Loa and five eruptions; the story of refugia and restoration; ranching; Akihi, how land affects people and people affect the land; Kahuku in the context of climate change, and the ahupuaa.</p> <p>Visitor interpretation would be guided, such as ranger-led programs and hikes, and self-guided such as waysides and interpretive trails. Campground programs and ranger-led programs would be provided and a greater emphasis would be placed on using Native Hawaiian guides.</p>	Similar to Alternative C, plus visitor interpretation would be self-guided, independent, and full of discovery using interpretive trails and waysides.

# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>Restoration Activities</b>	Restoration activities at Kahuku emphasize restoring native ecosystems and the recovery of biological diversity of native species. Specific activities include fencing and ungulate removal, control of other invasive non-native plant and animal species, reintroduction and augmentation of native species.	Same as Alternative A, plus immerse the visitor in the restoration process throughout Kahuku, designing trails and developing interpretive programs that optimize visitor access and opportunities to experience the unique natural resources and participate in the recovery of species and sites.  In addition to current methods for establishing native species and plant communities, consider additional tools such as bulldozing or prescribed fire to stimulate native species recovery and remove invasive species in severely degraded systems.	Same as Alternative B, plus promote a greater emphasis on engaging the Native Hawaiian community in restoration efforts.	Same as Alternative A, plus in addition to current methods for establishing native species and plant communities, consider additional tools such as bulldozing or prescribed fire to stimulate native species recovery and remove invasive species in severely degraded systems.  Set aside specific areas as living laboratories for experimental restoration and research.  Allocate resources to maximize recovery efforts and while there would be less focus on visitor participation, promote visitor exposure to living laboratory, science and learning through some restoration efforts and partnerships.
<b>Cultural Landscapes and Landscape Elements</b>	Continue to stabilize and maintain some significant ranching landscapes or contributing elements.	Some historically significant ranching landscapes or contributing elements of landscapes would be identified and maintained for interpretation and education.	Same as Alternative B, plus consider restoration of pre-contact Polynesian landscapes such as former uala (sweet potato) fields or the Kau field system.	Same as Alternative B.

## PARK PROGRAMS AND TOPIC AREAS

### Natural Resources

<b>Primary Concept</b>	Continue to provide a high degree of natural resource protection and management to perpetuate and restore native ecosystems and recover biological diversity of native species by using informed scientifically based methods. Management activities include control of nonnative plants and animals, reintroduction of historical species, and augmentation of locally rare species.	Same as Alternative A, plus immersing the visitor in the protection and restoration of native species and ecosystems by maximizing opportunities to participate in restoration activities. Emphasize stewardship and service-learning opportunities to foster long-lasting connections to the park and enhance resource protection.	Same as Alternative A, plus integrate concepts of traditional Native Hawaiian land management, such as the ahupuaa into natural resource management activities and emphasize the interconnectedness of the natural and cultural environments.  Integrate western science and native Hawaiian ecological knowledge to enhance restoration techniques and practices.  Pursue partnerships with traditional Hawaiian groups associated with the area to perpetuate native species.	Same as Alternative A, plus emphasize and expand research, to identify new and optimize existing methods and approaches for habitat conservation, watershed protection, and restoration of native habitats, ecosystems, and habitat linkages.  Expand science-learning opportunities for park visitors in focal areas.
------------------------	---	---	---	--

### Cultural Resources

<b>Primary Concept</b>	Continue to provide a high degree of cultural resource protection and management, including surveys, documentation and a range of techniques to protect cultural resources.	Same as Alternative A, plus emphasizing stewardship and service learning opportunities to foster long-lasting connections to the park and enhance resource protection.	Same as Alternative A, plus integrate concepts of traditional Native Hawaiian land management and culture into cultural resource management and emphasize the interconnectedness of the natural and cultural environments.	Same as Alternative A, plus emphasize and expand research, scientific investigation and learning opportunities to enhance cultural resource protection and maintain Native Hawaiian culture within a changing environment.
------------------------	---	--	--	--

### Research

<b>Primary Concept</b>	Continue park research efforts as well as collaboration with partners and support independent research under the NPS permitting system and consistent with NPS management policies.	Same as Alternative A, plus expand science communication by facilitating opportunities to connect the study and/or results with local communities and visitors in the park.	Same as Alternative A, plus expand research on Native Hawaiian resources, culture, and values that would be shared through education and programs.	Same as Alternative A, plus strengthen the emphasis on research related to ecology, endemics, and climate change and dissemination of that research to visitors.
------------------------	---	---	--	--

### Wilderness

<b>Primary Concept</b>	Continue to manage designated wilderness guided by NPS policies and the Wilderness Act. Continue to manage proposed eligible wilderness in upper Kahuku for its wilderness characteristics.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
------------------------	---	------------------------	------------------------	------------------------

### Visitor Experience (See specific Park Sites for more detailed guidance)

<b>Primary Concept</b> <i>(continued on next page)</i>	Continue to provide visitors with continued access to volcanic features and lava.  Continue to allow for a range of recreational activities such as camping, hiking, biking, lava viewing, picnicking, equestrian use, and sightseeing.  Continue to use Kilauea Visitor Center and Jaggar Museum as primary locations for visitor orientation and in-depth exposure to interpretive themes.  Continue with the current range of interpretive programs, media, and techniques. Develop a long-range interpretive plan.  Maintain the basic infrastructure for visitors and education groups, with upgrades to these facilities as needed.  Maintain the existing trail network within the park, with an emphasis on maintaining frontcountry trails.	Continue to provide visitors with continued access to volcanic features and lava.  Continue to allow for a range of recreational activities such as camping, hiking, biking, lava viewing, picnicking, equestrian use, and sightseeing.  Develop a trail management plan to identify specific trail alignments and uses (hiking, biking, equestrian, etc.). • Focus on a network of trails. • Emphasize using historic alignments and traditional routes when possible. • Create a series of loop trails that provide connections between existing key visitor front-country destinations. • Ensure there is a trail linking the summit to the sea as well as a trail opportunity in all different park ecosystems. • Consider a separate bicycle trail adjacent to Crater Rim Drive.  Use Kilauea Visitor Center, Jaggar Museum, and Kahuku as primary locations for visitor orientation and in-depth exposure to interpretive themes.  Expand the use of Jaggar Museum as a dramatic opportunity to introduce and immerse visitors in the dynamic volcanic story. Increase interpretive opportunities by adaptive reuse of existing facilities and some additional small facilities, primarily temporary and moveable, to meet the basic needs of park visitors, attract diverse user groups, and offer greater flexibility during periods of eruptive activity.	Continue to provide visitors with continued access to volcanic features and lava.  Continue to allow for a range of recreational activities such as camping, hiking, biking, lava viewing, picnicking, equestrian use, and sightseeing.  Develop a trail management plan to identify specific trail alignments and uses (hiking, biking, equestrian, etc.). • Focus on additional trails primarily along historic alignments and traditional routes. • Few new trails would be created.  Use Kilauea Visitor Center, Jaggar Museum, and Kahuku as primary locations for visitor orientation and in-depth exposure to interpretive themes.  Expand interpretive opportunities to introduce park significance through the lens of traditional Hawaiian culture. Consider new interpretive sites and media to interpret subjects such as ahupuaa boundaries, pre-contact agriculture, paniolo, ranching, and other stories.  Emphasize minimal new facilities and when needed, structures would be small, low-impact, consistent with traditional Hawaiian design (thatched hale) and provide flexibility.  Opportunities for outdoor education and learning would stretch from mauka to makai with a series of pavilions at key locations and emphasize oral tradition -	Continue to provide visitors with continued access to volcanic features and lava.  Continue to allow for a range of recreational activities such as camping, hiking, biking, lava viewing, picnicking, equestrian use, and sightseeing.  Develop a trail management plan to identify specific trail alignments and uses (hiking, biking, equestrian, etc.). • Focus on additional trails primarily along historic alignments and traditional routes. • Strive to create loop trail experiences through new links between existing trails.  Use Kilauea Visitor Center, Jaggar Museum, and Kahuku as primary locations for visitor orientation and in-depth exposure to interpretive themes.  Expand interpretive opportunities to include visitor exposure to places to observe park rainforests, native Hawaiian endemic species and the story of endemism and restoration. Consider making a greenhouse open to the public to interpret indigenous plants and demonstrate the park's role in protecting endemic plant species. Other new programs could include Mauna Loa eruptive history, ranching history and conservation stories at Kahuku. Emphasize minimal facilities and when needed, structures would be small, temporary, and moveable to offer flexibility.
---	--	---	--	---

# Summary of Preliminary Alternatives

	Alternative A: No Action	Alternative B	Alternative C	Alternative D
<b>Primary Concept</b> <i>(continued from previous page)</i>		Opportunities for outdoor education and learning would stretch from mauka to makai with a series of pavilions at key locations.	the concept of “look to the source” - and traditional design such as thatched hales.	Opportunities for outdoor education and learning would stretch from mauka to makai with a series of pavilions at key locations.
<b>Commercial Services</b>				
<b>Primary Concept</b>	Continue existing commercial services under concession contracts, commercial use authorizations, and special use permits.	Produce a commercial services strategy as part of the GMP. Continue to allow the range of concessions operations and commercial services that presently exist.  Issues related to congestion from commercial recreation activities would be addressed through some infrastructure changes to accommodate these uses (such as additional parking, staging areas, limiting tour buses to one-way traffic on Crater Rim Drive). Limits on numbers or size/capacity of commercial activities would be considered if infrastructure and operational tools are unsuccessful at managing congestion and visitor conflicts.  Consider giving emphasis to those services that promote understanding of the national significance of the park through new recreational and interpretive activities and programs.	Produce a commercial services strategy as part of the GMP. Continue to allow the range of concessions operations and commercial services that presently exist.  Implement numeric capacity limits on numbers and size of commercial buses entering the park. Explore a reservation system for CUAs to manage the use.  Consider giving emphasis to those services that incorporate and interpret an understanding of Native Hawaiian resources and culture.	Produce a commercial services strategy as part of the GMP. Continue to allow the range of concessions operations and commercial services that presently exist.  Issues related to congestion from commercial recreation activities would be addressed primarily through implementing a mandatory shuttle around Crater Rim Drive when possible to reopen. With a mandatory shuttle in the park, there would be less congestion with private vehicle traffic around Crater Rim Drive and less of a need to limit the number of commercial buses. Limits on numbers or size/capacity of commercial activities would be considered if infrastructure and operational tools are unsuccessful at managing congestion and visitor conflicts.  Consider giving emphasis to those services that highlight volcanic processes, research, park history, and stewardship.
<b>Transportation and Access</b>				
<b>Main Park Roads and Parking</b>	Park roads are maintained to provide for safety consistent with the park setting and a scenic driving experience. Historic road alignments are maintained to the extent possible while ensuring safety. A range of roads and road standards would continue. Continue to work cooperatively with the State and other partners, particularly on Highway 11 for visitor safety, signage and information.  Continue to maintain parking areas and turnouts with upgrades as needed. No major new parking areas would be anticipated.	Park roads are maintained similar to Alternative A. Strive to maintain and improve visitor access on the road network for both vehicles and bicycles.  Some new restrictions or management of vehicles on some roads would be implemented, such as size limits and one-way traffic for large vehicles.  No new road construction is envisioned, except for the new entrance road in Kahuku. Strive to reopen roads impacted by lava. Some road connections previously lost to lava could be restored.  Existing parking areas could be expanded or and new parking could be developed to facilitate visitor access. Some parking areas could also be reduced or removed for resource concerns.	Park roads are maintained similar to Alternative A. Reduce private vehicle traffic on some roads, such as Crater Rim Drive, and improve bicycle access on those roads.  Some new restrictions or management of vehicles on some roads would be implemented, such as size limits and one-way traffic for large vehicles.  No new road construction is envisioned. Strive to maintain Chain of Craters Road to the ocean if impacted by lava. Previous roads lost to lava would remain closed.  Minimize any expansion or development of new parking. Some parking areas could also be reduced or removed for resource concerns.	Park roads are maintained similar to Alternative A. Reduce private vehicle traffic through implementation of a shuttle system and mandatory shuttle on Crater Rim Drive from Jaggar Museum to Devastation Overlook. Improve bicycle access on roads by limiting private vehicles.  No new road construction is envisioned. Roads impacted by lava would be re-evaluated for reopening to vehicle traffic and could be converted to trails.  Minimize any expansion or development of new parking. Some parking areas could also be reduced or removed for resource concerns.
<b>Partnerships</b>				
<b>Partnerships</b>	Continue to maintain existing partnerships at the park with organizations that are key to the park’s mission.	Same as Alternative A, plus promote community and school involvement in traditional practices and environmental service projects. Encourage expanded partnerships with the State and adjacent landowners.	Same as Alternative A, plus expand partnerships with Native Hawaiians and communities for involvement in traditional practices and knowledge, interpretation, education, and projects.	Same as Alternative A, plus encourage expanded partnerships with organizations, the State and adjacent landowners for stewardship and stewardship opportunities.
<b>Climate Change and Sustainability</b>				
<b>Primary Concept</b>	Continue to reduce greenhouse gas emissions, increase climate change education and outreach, and develop climate change adaption.	Same as Alternative A, plus strive for increased energy efficiency, conservation, and sustainability in development of facilities.  Increase reliance on temporary and moveable facilities to improve flexibility for both visitors and operations during periods of eruptive activity.  Encourage commercial operators to use vehicles with alternative fuels to limit emissions within the park.  Encourage promote activities to get visitors out of cars and using non-motorized tools to see the park, such as hiking, biking, and equestrian use.	Same as Alternative B.	Same as Alternative B, plus provide expanded opportunities for climate change research, focusing on landscape scale ecosystems and issues. Facilitate research to study climate change and adaptation.  Serve as a model for climate change with forest restoration.

## Commercial Services Strategy

The National Park Service (NPS) conducts commercial services planning to identify the appropriate role of commercial operators in helping the park provide opportunities for visitor use and enjoyment. A commercial services strategy will be integrated within the GMP. It will identify park-wide goals for commercial services operating within Hawai‘i Volcanoes National Park, identify types of commercial services that are necessary and/or appropriate,

consistent with the Concessions Management Improvement Act of 1998 and NPS Management Policies 2006, and recommend strategies for ensuring high quality experiences for visitors who use commercial services. The commercial services strategy will help park staff and commercial providers work together to protect park resources and ensure that quality, safe, visitor services are provided.



Kilauea rainforest.

# Wilderness Eligibility and the Wilderness Study

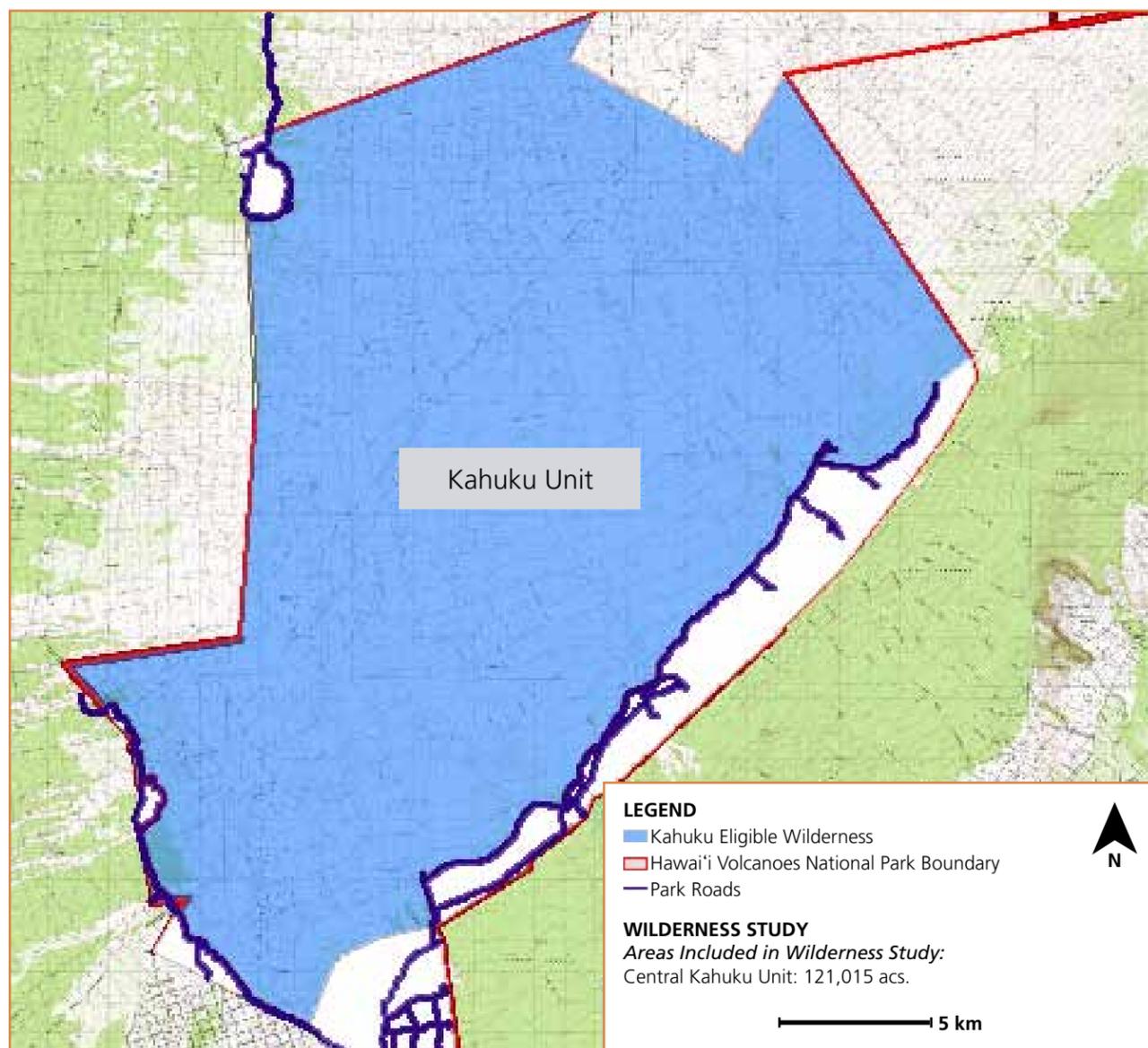
For the past several years the NPS has been working on a new General Management Plan / Environmental Impact Statement for Hawai'i Volcanoes National Park, which is the guiding document for park management. The NPS is now expanding this planning effort to include a wilderness study to determine if any NPS-managed lands within the park should be recommended for inclusion in the National Wilderness Preservation System.

## Draft Wilderness Eligibility for Kahuku

NPS lands will be considered eligible for wilderness if they are at least 5,000 acres or of sufficient size to make practicable their preservation and use in an unimpaired condition, and if they possess the qualities of wilderness character. The Draft Kahuku Unit Wilderness Eligibility Assessment addresses these requirements and criteria and is the result of an inventory conducted in 2010.

Expanding the scope of the GMP to include these additional elements will result in efficiency and cost savings. As a result of this expanded project scope, the National Park Service will solicit additional information related to wilderness during the review of preliminary GMP alternatives and at the public Talk Story Sessions being held this summer.

Of the 150,865 acres assessed, 121,015 acres of the Kahuku Unit meet the eligibility criteria and are eligible for further wilderness study and potential designation. The remaining 29,848 acres are not recommended for eligibility at this time because of the need for long-term intensive restoration activities to restore natural conditions.



## What Is A Wilderness Study?

A Wilderness Study is an assessment of wilderness characteristics and values, as defined in the Wilderness Act of 1964. The publication *Keeping it Wild: An Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System* defines wilderness character based on the statutory language of the 1964 Wilderness Act in terms of four qualities of wilderness character that are tangible and directly link agency stewardship to the legal mandates of law and policy. These four intrinsic qualities of wilderness character are:

### Untrammeled –

- Wilderness is essentially unhindered and free from the actions of modern human control or manipulation.

### Natural –

- Wilderness ecological systems are substantially free from the effects of modern civilization.

### Undeveloped –

- Wilderness retains its primeval character and influence, and is essentially without permanent improvement or modern human occupation.

### Solitude or primitive and unconfined recreation –

- Wilderness provides outstanding opportunities for solitude or primitive and unconfined recreation.

Lands and waters found to possess the characteristics and values of wilderness are formally studied to develop a recommendation to Congress for wilderness designation. The Wilderness Study that is incorporated into the GMP will take a fresh look at wilderness potential in the park, particularly in Kahuku. The planning will develop a range of alternatives for wilderness, which may result in recommendations that alter the wilderness boundaries that exist today. Actual wilderness designation in the park would require an act of Congress. This combined GMP/ Wilderness Study planning document will be supported by a single environmental impact statement (EIS).

## Boundaries

The National Parks and Recreation Act of 1978 requires the National Park Service to consider potential boundary modifications in GMPs. Park boundaries are often drawn to reflect practical considerations at one point in time and do not necessarily reflect natural features, administrative considerations, or changing land uses. Under the NPS Management Policies, boundary adjustments may be recommended to protect significant resources and values, enhance opportunities for public enjoyment related to park purposes, address operational and management issues, or otherwise protect park resources that are critical to fulfilling park purposes.

Potential boundary adjustments must also be feasible to administer, considering size, configuration, ownership, costs, and other factors. Other alternatives for management and resource protection must have been assessed and judged to be not adequate. Actual implementation of any boundary recommendation under consideration would require an act of Congress.

### Boundary Adjustments under Consideration

- Formal inclusion of Olaa Unit within the legislated park boundary
- The Great Crack parcels
- Parcel between Kahuku and Hawaii Ocean View Estates for resource protection and access to upper Kahuku
- Land at the southern tip of Kahuku, west of the present entrance off Highway 11

### Additional Designations under Consideration

- Engage partners such as Hawaii Department of Land and Natural Resources (DLNR) and National Oceanic and Atmospheric Administration (NOAA) to pursue an additional designation to enhance protection of coastal and marine resources along the park boundary such as a Marine Managed Area (MMA) or National Marine Sanctuary (NMS)



Misty forest understory of the Kahuku Unit.

## Contacts

Cindy Orlando, Superintendent  
Hawai'i Volcanoes National Park

Lora Gale, Park Planner  
Hawai'i Volcanoes National Park  
(808) 985-6303

Amanda Kaplan, GMP Project Lead  
NPS Pacific Regional Office  
(206) 220-4150

### Mail

Hawai'i Volcanoes National Park  
PO Box 52  
Hawaii National Park, HI 96718

### E-Mail

havo\_gmp@nps.gov

### GMP Project Website

For project information or to provide comments directly online:  
<http://parkplanning.nps.gov/havo>

### Park Website

For more information about Hawai'i Volcanoes National Park:  
<http://www.nps.gov/havo>

### Smartphone Access

Take a photo of the Quick Response (QR) code below with your camera enabled smart phone (download App for QR) to access linked information.



## What Happens Next?

The next step in this process will be the selection of a preferred alternative. The selection process is based on analysis of the impacts, the advantages of the alternatives, costs to implement the alternatives, and consideration of public comments. The NPS preferred alternative will be identified in the Hawai'i Volcanoes National Park Draft General Management Plan/Wilderness Study and Environmental Impact Statement (Draft GMP/Wilderness Study/EIS).

Once the Draft GMP/Wilderness Study/EIS is completed in 2013, the document and a summary newsletter will

be mailed to you for review and comment. At that time, the planning team will also hold a final round of public Talk Story Sessions to present the Draft GMP/Wilderness Study/EIS and to provide opportunities for you to discuss it with the planning team. The Draft GMP/Wilderness Study/EIS will then be revised based upon any new information, analysis, and your comments. In 2014, the Final GMP/Wilderness Study/EIS will be published and distributed. Pending approval, park staff will then begin to implement the GMP/Wilderness Study recommendations over the next 15-20 years.

Schedule for GMP and Wilderness Study		
Estimated Time Frame	Planning Activity	Public Involvement Opportunities
2009	<b>Conduct Public Scoping</b> — Identify goals and issues that need to be addressed. Host meetings with the public, park partners, agencies, Native Hawaiians, and other stakeholders.	<ul style="list-style-type: none"> <li>Review the Public Scoping Newsletter and send us your ideas and concerns.</li> </ul>
2010-2011	<p><b>Develop Preliminary GMP Alternatives and Initiate Wilderness Study Scoping</b>— Based on public scoping results, develop a draft outline of different possible futures for the park. Seek additional comments on issues related to wilderness.</p> <p>Provide opportunities for review and comment by the public, partners, government agencies, Native Hawaiians, and other stakeholders.</p> <p><b>*We are currently on this step</b></p>	<ul style="list-style-type: none"> <li>Review both the Public Comment Summary Newsletter and the Preliminary Alternatives Newsletter and send us your ideas and concerns.</li> <li>Attend public meetings and voice your ideas and concerns. Meet the planning team.</li> </ul>
2012-2013	<b>Prepare and Distribute Draft GMP/Wilderness Study/EIS</b> —Revise alternatives based on comment from the public, park partners, government agencies, Native Hawaiian, and other stakeholders. Provide additional details on each alternative, analyze impacts of the alternatives, and identify a preferred course of action for the GMP and recommendation for wilderness designation.	<ul style="list-style-type: none"> <li>Attend public meetings and voice your ideas and concerns.</li> <li>Review the Draft GMP/Wilderness Study/EIS or summary newsletter and provide written comments.</li> </ul>
2014	<b>Revise Draft GMP/Wilderness Study/EIS and Prepare a Final GMP/Wilderness Study/EIS</b> —Revise Draft GMP/Wilderness Study/EIS based on comment from the public, park partners, government agencies, Native Hawaiians, and other stakeholders.	<ul style="list-style-type: none"> <li>Review the Final GMP/Wilderness Study/EIS.</li> </ul>
2014	<b>Distribute and Implement the Approved GMP/Wilderness Study/EIS</b> —Prepare and issue a Record of Decision and implement the plan as funding allows.	<ul style="list-style-type: none"> <li>Work with the park to implement the plan.</li> </ul>

Printed on recycled paper with soy-based ink

HAWAII VOLCANOES NATIONAL PARK  
PO Box 52  
Hawaii National Park, HI 96718

OFFICIAL BUSINESS PENALTY FOR  
PRIVATE USE - \$300

First Class Mail  
Postage and Fees  
**PAID**  
U.S. Department of Interior  
Permit no. G-83

EXPERIENCE YOUR AMERICA™

**Hawai'i Volcanoes National Park**

General Management Plan/Wilderness Study/Environmental Impact Statement  
Newsletter #3 Preliminary Alternatives, Summer 2011

