

## **Exhibit 7 – February 21, 2023, Response to Comments Letter**

*APE Expansion, Updated Historic Property Identification, and Potential Effects*



**United States Department of Transportation**  
**FEDERAL AVIATION ADMINISTRATION**  
Office of Policy, International Affairs & Environment  
Office of Environment and Energy

## **NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM**

February 21, 2023

Re: Response to Comments on the Development of an Air Tour Management Plan for Hawai'i Volcanoes National Park Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR Part 800 (HICRIS Project 2021PR00353)

Kiersten Faulkner  
Historic Hawai'i Foundation  
The Dole Cannery  
680 Iwilei Rd., Dole Office Bldg. Tower, Suite 690  
Honolulu, HI 96817

Dear Kiersten Faulkner:

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS), seeks to continue consultation with your office under Section 106 of the National Historic Preservation Act (NHPA) regarding the development of an Air Tour Management Plan (ATMP) for Hawai'i Volcanoes National Park (the Park). The Federal Aviation Administration (FAA) hosted a consulting party meeting on November 21, 2022, for the development of an Air Tour Management Plan (ATMP) for the Park, pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800. The purposes of the meeting were to discuss the identification of historic properties that may be affected by the implementation of the ATMP, identify the area of potential effects (APE), and explain how the agency would assess effects on historic properties within the proposed APE (**Attachment 1**). At the meeting, and via email on November 22, 2022, the FAA requested consulting parties provide written comments for the agency's consideration regarding the ATMP's APE, the identification of cultural resources, and the potential effects of the undertaking on cultural resources. This letter serves as the FAA's response to comments it received from consulting parties and provides recent revisions to the APE and requests assistance identifying cultural resources within the revised APE.

The FAA received and reviewed comments from eight consulting parties, including the Historic Hawai'i Foundation and the Park's Kūpuna consultation group. The FAA considered the comments from the consulting parties in revising the APE and also sought input from the Hawai'i State Historic Preservation

Division (SHPD). On January 24, 2023, the SHPD offered no objections to the revised APE, but noted that their office looked forward to receiving and reviewing the agencies' responses to the consulting parties' comments. **Attachment 2** summarizes consulting parties' comments and provides the FAA's response.

### Description of the Undertaking

Consistent with the National Parks Air Tour Management Act of 2000 (Act), the proposed ATMP for the Park would regulate commercial air tours over the Park or within a half-mile outside the boundary of the Park, referred to as the ATMP planning area. Further background information regarding the history of commercial air tours over the Park, the authority under which they are currently conducted, and the area to be regulated under the ATMP is available in the February 2022 Scoping Newsletter, prepared by the FAA and the NPS (together, the agencies) is available at the following link:

- Hawai'i Volcanoes National Park: <https://parkplanning.nps.gov/HawaiiVolcanoesATMP>

The proposed ATMP would authorize or prohibit commercial air tour operations over the Park in accordance with the conditions included in the preferred alternative. The agencies are working to select the preferred alternative for the ATMP. The preferred alternative selected will be the undertaking for the Park. The current draft action alternatives are shown in the table below, and a summary of the elements in each alternative being considered can be found in **Attachment A**. Maps of the revised alternatives under consideration were previously provided to your office in the invitations to the November 21, 2022, consulting party meeting.

#### **Potential Undertakings for Hawai'i Volcanoes National Park**

Alternative 2 – No Air Tours in the Planning Area
Revised Public Scoping Alternative 4 – Reduction of Air Tours

### Revised Area of Potential Effects

The APE as defined at 36 CFR 800.16(d) is the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of any historic properties, if any such properties exist. The proposed FAA and NPS establishment of the ATMP does not require land acquisition, construction, or ground disturbance, and the FAA anticipates no physical effects to historic properties. The FAA is therefore focusing its assessment on the potential introduction of visual or audible elements resulting from the undertaking that could diminish the integrity of any identified historic properties.

In establishing the proposed APE, the FAA sought to include areas where any historic property present could be affected by the introduction of noise from or sight of commercial air tours as a result of the implementation of the ATMP. The FAA will consider the number and altitude of commercial air tours over historic properties in these areas to further assess the potential for visual effects and any incremental change in noise levels that may result in alteration of the characteristics of historic properties qualifying them for listing in the National Register of Historic Places (NRHP).

Under Alternative 2 (no air tours) it is expected that operators would continue to fly to points of interest on the island outside of the ATMP planning area or continue routes over the Park similar to existing conditions but above 5,000 feet (ft.) above ground level (AGL). Under Alternative 2 (no air tours) and Revised Public Scoping Alternative 4 (reduction of air tours), it is reasonably foreseeable that operators

would fly just outside of the ATMP planning area surrounding the volcanoes in order to view Kīlauea crater or any active lava. While operators currently fly along most of the eastern edge of the ATMP planning area and along the flight paths proposed under Revised Public Scoping Alternative 4, automatic dependent surveillance-broadcast (ADS-B) systems data<sup>1</sup> of flight paths shows an absence of existing flights in a small area to the southwest of the 'Ōla'a Forest tract. It is reasonably foreseeable that if operators are unable to fly within the ATMP planning area, the implementation of the ATMP may result in more flights in this area as they may be able to hover and view the crater.

Therefore, the FAA proposes an APE comprised of the ATMP planning area (the Park and areas outside the Park but within ½ mile of its boundary) and a small area to the southwest of the 'Ōla'a Forest tract between it and the main Park as depicted in **Attachment B**. This APE encompasses the reasonably foreseeable areas where operators may fly given the implementation of the ATMP and therefore the areas within which the undertaking may directly or indirectly cause alterations in the character or use of historical properties within the APE if any such properties exist. The APE extends vertically from ground level to above-5,000 ft. AGL with no upper ceiling to encompass areas where historic properties may be affected by operators flying above the ATMP planning area. In the event that operators choose to fly above the ATMP planning area, they would likely keep to an altitude close to but just above 5,000 ft. AGL, as flights at higher altitudes would provide limited value to a sightseeing operation.

#### **Review Request**

The FAA requests assistance in identifying cultural resources within the revised APE by March 10, 2023. Specifically, please provide any additional information you may have on historic properties that may exist within the revised APE that have not yet been identified for which setting or feeling are significant characteristics. Please send information responsive to this request to [Judith.Walker@faa.gov](mailto:Judith.Walker@faa.gov), copying the ATMP team at [ATMPTeam@dot.gov](mailto:ATMPTeam@dot.gov)

Should you have any questions regarding this letter or its attachments, please contact me at 202-267-4185 or [Judith.Walker@faa.gov](mailto:Judith.Walker@faa.gov) and copy the ATMP team at [ATMPTeam@dot.gov](mailto:ATMPTeam@dot.gov).

Sincerely,



Judith Walker  
Federal Preservation Officer  
Senior Environmental Policy Analyst  
Environmental Policy Division (AEE-400)  
Federal Aviation Administration

CCs: Dr. Alan Downer, Deputy State Historic Preservation Officer, Hawai'i SHPD  
Stephanie Hacker, Archaeologist, Hawai'i SHPD

Enclosure:

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<sup>1</sup> ADS-B systems periodically transmits aircraft location data in real-time.

Attachment 1 – November 21, 2022, Section 106 Consulting Party Meeting Presentation  
Regarding the Development of an ATMP for Hawai'i Volcanoes National Park

Attachment 2 – Response to Comments on the Development of an ATMP for Hawai'i Volcanoes  
National Park

Attachment 3 – Summary of Alternatives for an ATMP for Hawai'i Volcanoes National Park

Attachment 4 – Revised APE Map for an ATMP for Hawai'i Volcanoes National Park

Attachment 5 – Revised Historic Property Identification List for Hawai'i Volcanoes National Park

**ATTACHMENT 1**

**NOVEMBER 21, 2022, SECTION 106 CONSULTING PARTY MEETING PRESENTATION REGARDING THE  
DEVELOPMENT OF AN ATMP FOR HAWAI'I VOLCANOES NATIONAL PARK**

# Section 106 Consulting Party Meeting for Hawai'i Volcanoes National Park Air Tour Management Plan

November 21, 2022

NPS Photo

National Parks ATMP Program  
November 21, 2022



Federal Aviation  
Administration



National  
Park Service

# Agenda

- Oli
- Housekeeping
- Introductions
- Provide Project Overview
- Development of Area of Potential Effects
- Identification of Historic Properties
- Review Proposed Alternatives
- Discuss Agencies' Assessment of Effects
- Next Steps
- Request Input from Consulting Parties





# Oli

## E Hō Mai

Composed by: Edith Kanaka'ole

E Hō Mai

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*E hō mai (i) ka 'ike mai luna mai ē  
'O nā mea huna no'eau o nā mele ē*

Grant us the knowledge from above  
Concerning the hidden wisdom of songs,

*E hō mai*

Grant,

*E hō mai*

Grant,

*E hō mai ē (a)*

Grant us these things

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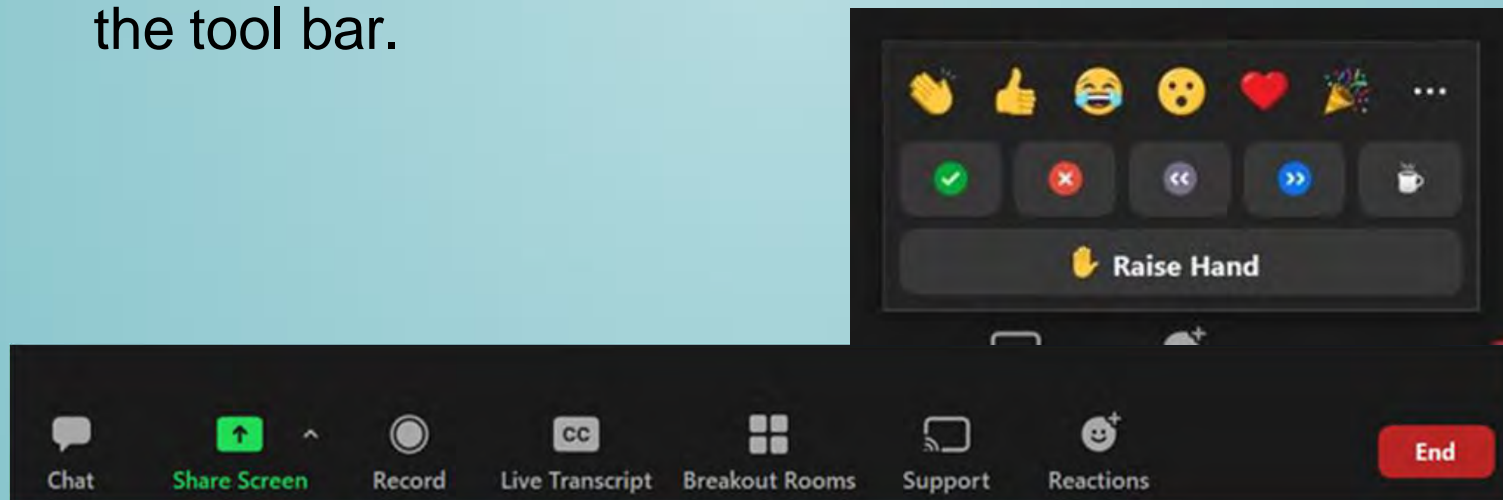
Repeat 3x

Edith K. Kanaka'ole composed this *oli* (chant) for her hula school, *Hālau O Kekuhi*. Students would perform the chant to ask for guidance from their ancestors for the undertaking that lay ahead.

Today, this *oli* is used to start an event or gathering in order to ask for guidance and direction with the endeavor at hand.

# Housekeeping

- Please **mute your mic** except when talking, this improves the sound quality for all.
- Please type your full name in chat box to identify yourself if your name does not appear in Zoom.
- If you have any questions/comments please use the "Raise Hand" icon or submit your comment in the chat box.
  - The raise your hand icon can found under "Reactions" on the tool bar.



# Introductions – Federal Agencies

## **Federal Aviation Administration**

- Judith Walker – Federal Preservation Officer
- Keith Lusk – Program Manager

## **National Park Service, Hawai'i Volcanoes National Park**

- Rhonda Loh - Superintendent
- Danielle Foster- Environmental Protection Specialist
- Summer Roper Todd - Archeologist & Cultural Resources Program Manager
- Charone O'Neil-Naeole – Hawaiian Community Liaison



# Introductions – Consulting Parties

- Native Hawaiian Organizations
- Kūpuna
- Hawai‘i State Historic Preservation Division (SHPD)
- Adjacent Land Managers
- Operators



# NPATMA Overview

- Enacted April 5, 2000
- Requires an ATMP or Voluntary Agreement
- The agencies have chosen to develop an ATMP for this park
- Required FAA to grant Interim Operating Authority (IOA) for existing commercial air tour operations
  - Based on the number of flights conducted in the 12-month period prior to enactment of NPATMA (or average of three prior years)
  - Granted 26,664 IOA to 10 operators for Hawai'i Volcanoes
  - IOA was published in the Federal Register in 2005
- Established the National Parks Overflights Advisory Group (NPOAG) to provide advice and guidance to the agencies from personnel with aviation, environmental, and tribal interests.



# Project Overview

- **Purpose:** comply with National Parks Air Tour Management Act (NPATMA) and other applicable laws, consistent with the Plan and Schedule for Completion of Air Tour Management Plans (ATMPs) at 23 Parks under Court Order
- **Need:** NPATMA requires the FAA, in cooperation with the NPS, to develop an ATMP for Parks with applications to conduct commercial air tours.
- **Objective of the ATMP:** under NPATMA - develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations on the natural and cultural resources, traditional cultural properties (TCPs), sacred sites and ceremonial areas, wilderness character, and visitor experiences



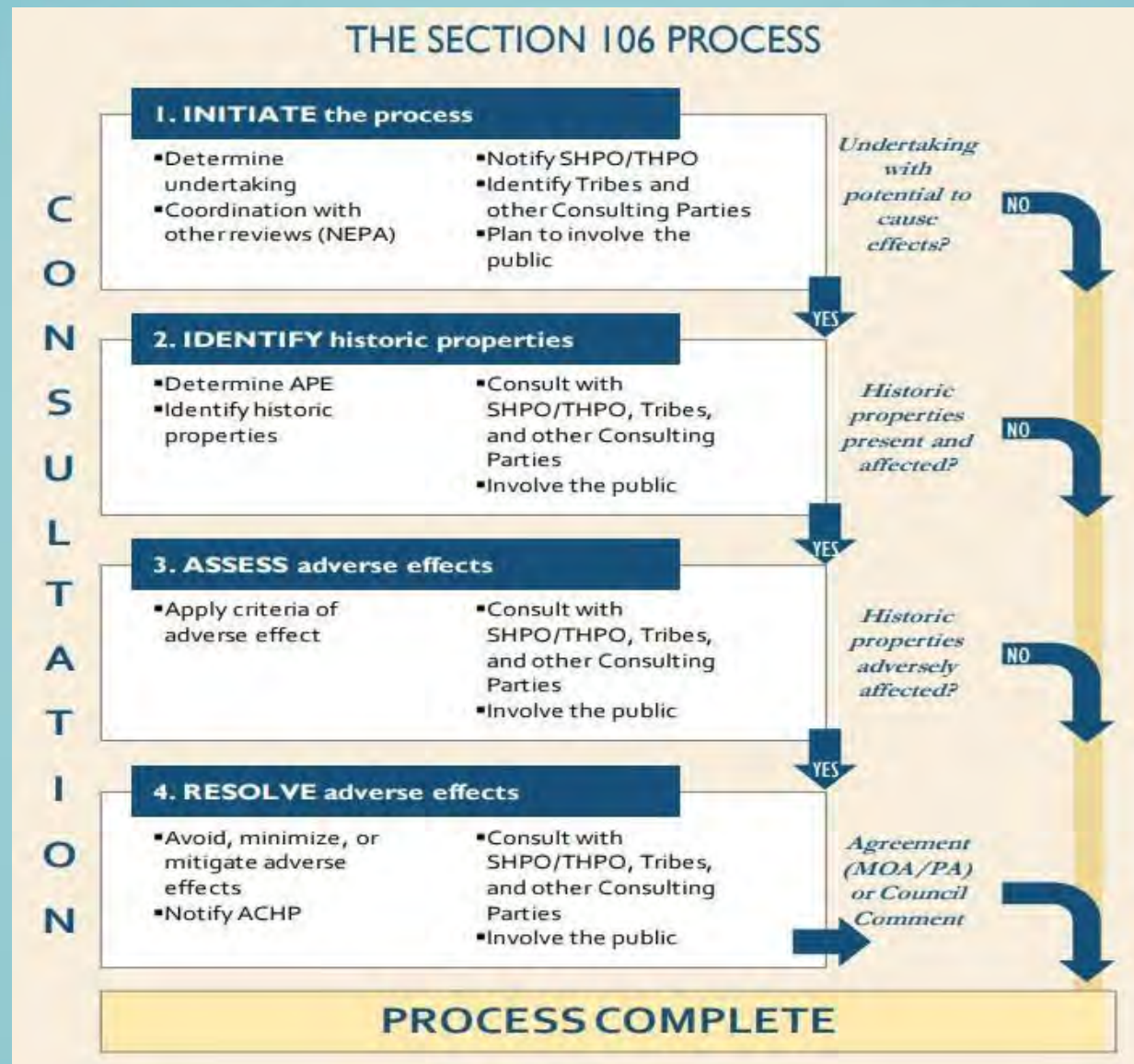


# Project Overview

- Undertaking- development of an ATMP for the Park
- ATMP would regulate commercial air tours over the Park or within a half-mile buffer during which the aircraft flies below 5,000 ft. AGL
- Three alternatives are being considered for the ATMP at the Park
- Consultation under Section 106 was re-initiated in 2021 and is ongoing
- Both the FAA and NPS must prepare National Environmental Policy Act (NEPA) documentation and sign the decision document for the ATMP
  - The FAA is acting as the lead agency overseeing compliance with NEPA and Section 106 consultation under the National Historic Preservation Act (NHPA), with the NPS serving as a cooperating agency
  - An Environmental Assessment (EA) will be prepared for the Park



# Steps of the Section 106 Process



Graphic from *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*



# Development of Area of Potential Effects

**Area of Potential Effects (APE)** is defined as *“the geographic area or areas within which an undertaking may directly or indirectly cause alteration in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.”* 36 CFR 800.16(d)

- The APE is based on the undertaking and its potential impacts to cultural resources in accordance with 36 CFR 800.
- Potential impacts include the introduction of audible or visual elements

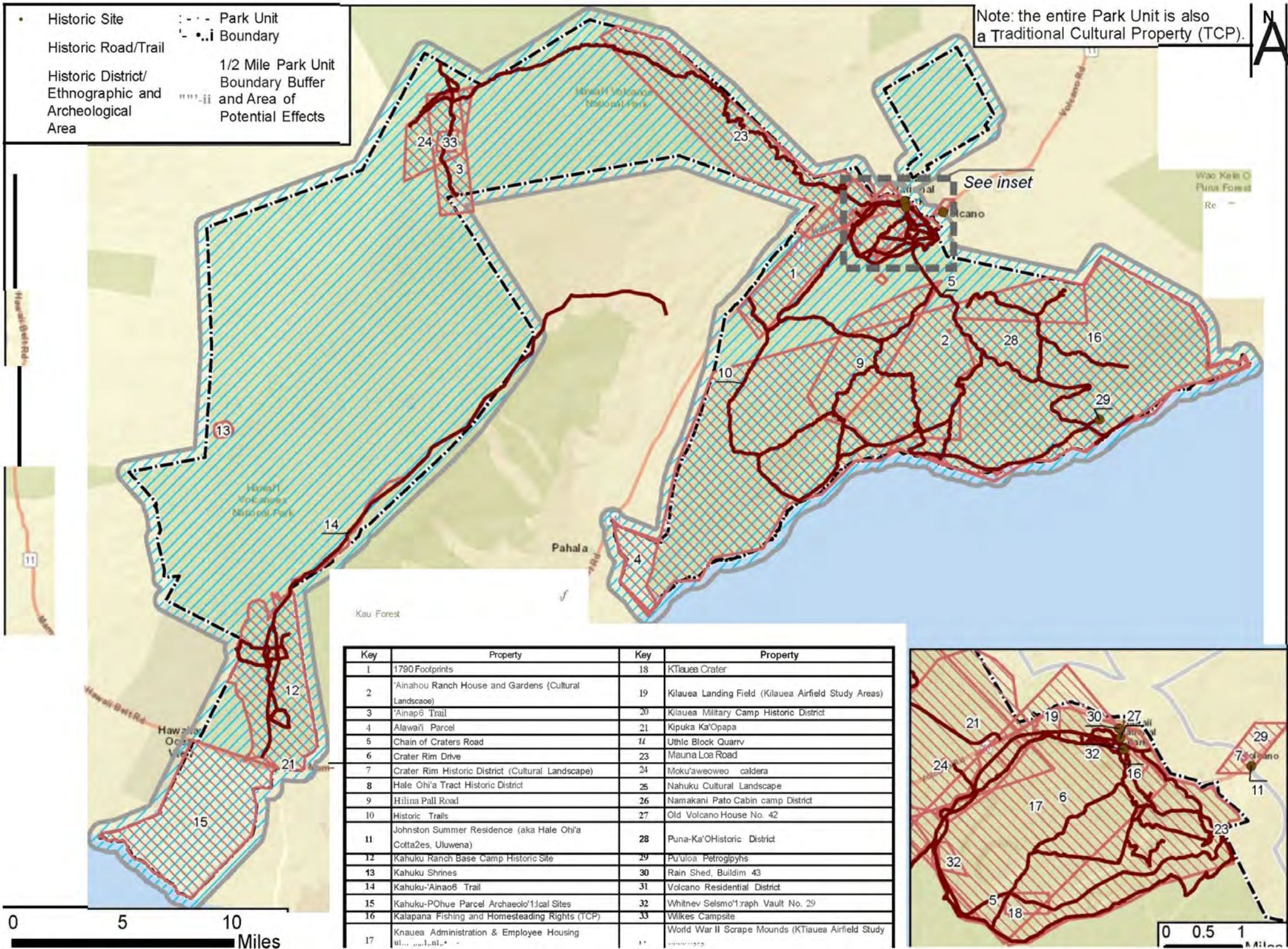




# Area of Potential Effects with Historic Properties at Hawai'i Volcanoes National Park

- Historic Site
- Historic Road/Trail
- Historic District/  
Ethnographic and  
Archeological  
Area
- - - Park Unit  
Boundary
- 1/2 Mile Park Unit  
Boundary Buffer  
and Area of  
Potential Effects

Note: the entire Park Unit is also  
a Traditional Cultural Property (TCP).





# Preliminary Identification of Historic Properties

**For identifying historic properties within the APE, the FAA and NPS consider the:**

- views of consulting parties, planning, research, and studies
- the magnitude and nature of the undertaking
- the nature and extent of potential effects on historic properties, and the use of traditional cultural properties associated with cultural practices, customs or beliefs that continue to be practiced today

**Current Identification Efforts include:**

- data pulled from NPS and the Hawai'i State Historic Preservation Division's (SHPD) Hawai'i Cultural Resource Information System identified 41 above-ground historic properties within the APE, which includes a TCP, the entire boundary of the park, and several cultural landscapes



# Preliminary Identification of Historic Properties

- Traditional Cultural Property (TCP) defined as entire park boundary
- 'Āinahou Ranch
- 1790 Footprints
- Wilkes Campsite
- Whitney Vault
- Kīlauea Crater
- Old Volcano House No. 42 (1877 Volcano House)
- Hilina Pali Road
- Mauna Loa Road
- 'Āinapō Trail
- Puna-Ka'ū Historic District
- Pu'uloa Petroglyphs
- Crater Rim Drive National Register
- Kahuku Ranch Base Camp Historic Site
- Boles Field (Kīlauea Airfield Study areas)
- Kīlauea Landing Field (Kīlauea Airfield Study areas)
- World War II Scrape Mounds (Kīlauea Airfield study areas)
- Historic Trails
- Moku'āweoweo Caldera
- Kahuku-Pōhue parcel
- Alawai'i parcel
- Great Crack
- Kilauea Military Camp Historic District
- Lithic Block Quarry
- Crater Rim Historic District
- Kīlauea Administration and Employee Housing Historic District
- Historical Corral and Chute
- Kahuku Shrines
- Kalapana Fishing and Homesteading Rights
- Nāhuku Cultural Landscape
- Namakani Paio Cabin Camp District
- Rain shed, building 43
- Kipuka Kaopapa- Ka'ū Agricultural Field Systems
- Kahuku Ranch Cultural Landscape
- Kahuku-'Āinapō Trail
- Volcano Residential District
- Chain of Crater Road
- Hale Ōhi'a Tract Historic District
- Johnston Summer Residence (aka Hale Ōhi'a cottages, Uluwena)
- Punalu'u Heiau
- Punalu'u Springs



# Questions or Comments?



# Existing Air Tour Operations – Hawai‘i Volcanoes National Park

Operator	Aircraft Type	2017 Reported Tours	2018 Reported Tours	2019 Reported Tours	3-year Reported Average No. of Air Tours (2017-2019)	Interim Operating Authority (IOA)
Above itAll Inc. (Sporty'sAcademy Hawai'i, Hawai'i Island Hoppers,Hawai'i Airventures, Benchmark Flight Center)	no data	0	0	0	0	3,878
Big Island Air Inc.	fixed wing	102	7	0	36	1,643
Hawai'i Helicopters Inc. (Helicopter Consultants of Maui, Inc.)	helicopter	139	50	67	85	141
Helicopter Consultants of Maui Inc. (Hawai'i Helicopter, Blue Hawaiian Helicopters)	helicopter	12,300	6,059	7,325	8561	12,413
K&S Helicopters (Paradise Helicopters)	helicopter	877	552	248	559	1,684
Manuiwa Airways Inc. (Volcano Helicopters,Volcano Heli-Tours)	no data	0	0	0	0	800
Mokulele Flight Service Inc. (Mokulele Airlines)	fixed wing	0	15	0	5	60
Safari Aviation Inc. (Safari Helicopter Tours)	helicopter	1,977	1,050	995	1341	3,920
Schuman Aviation Company,Ltd. (Makani Kai Helicopters)	no data	0	0	0	0	25
Sunshine Helicopters Inc.	helicopter	1,125	600	641	789	2,100
		<b>16,520</b>	<b>8,333</b>	<b>9,276</b>	<b>11,376</b>	<b>26,664</b>

# Existing Air Tour Operations

- 10 operators with Interim Operating Authority (IOA) – 7 are reporting tours
- 11,376 flights per year on average.
- IOA for up to 26,664 flights, most are helicopter operations with a few fixed wing operations
- No time-of-day restrictions
- No provisions for NPS to establish temporary no-fly periods.
- Tours occur year-round on most days of the year.
- January is the peak operation month with a 3-year average of 1,474 flights or about 47.5 flights per day during the peak month



# Proposals for the Undertaking

- ~~Alternative 1 (No Action)~~
  - No Action – Continuation of current conditions up to IOA limits
  - Not selectable as NPATMA requires implementation of ATMP or Voluntary Agreement
- **Alternative 2 (No Air Tours within Planning Area)**
  - No air tours within 5,000ft AGL over or within ½ mile of the Park
  - Air tours could still occur outside of this area and around the Park
- **Alternative 4 (Revised from Public Scoping)**
  - Reduction in annual number of commercial air tours over the Park
  - Three routes with altitudes ranging from 1,500 – 2,000ft AGL
  - Flights permitted between 10AM-2PM/QT flights from 9AM – 5 PM
  - No air tours on Sundays
  - Only QT flights on Wednesdays
  - Circling allowed only on one route

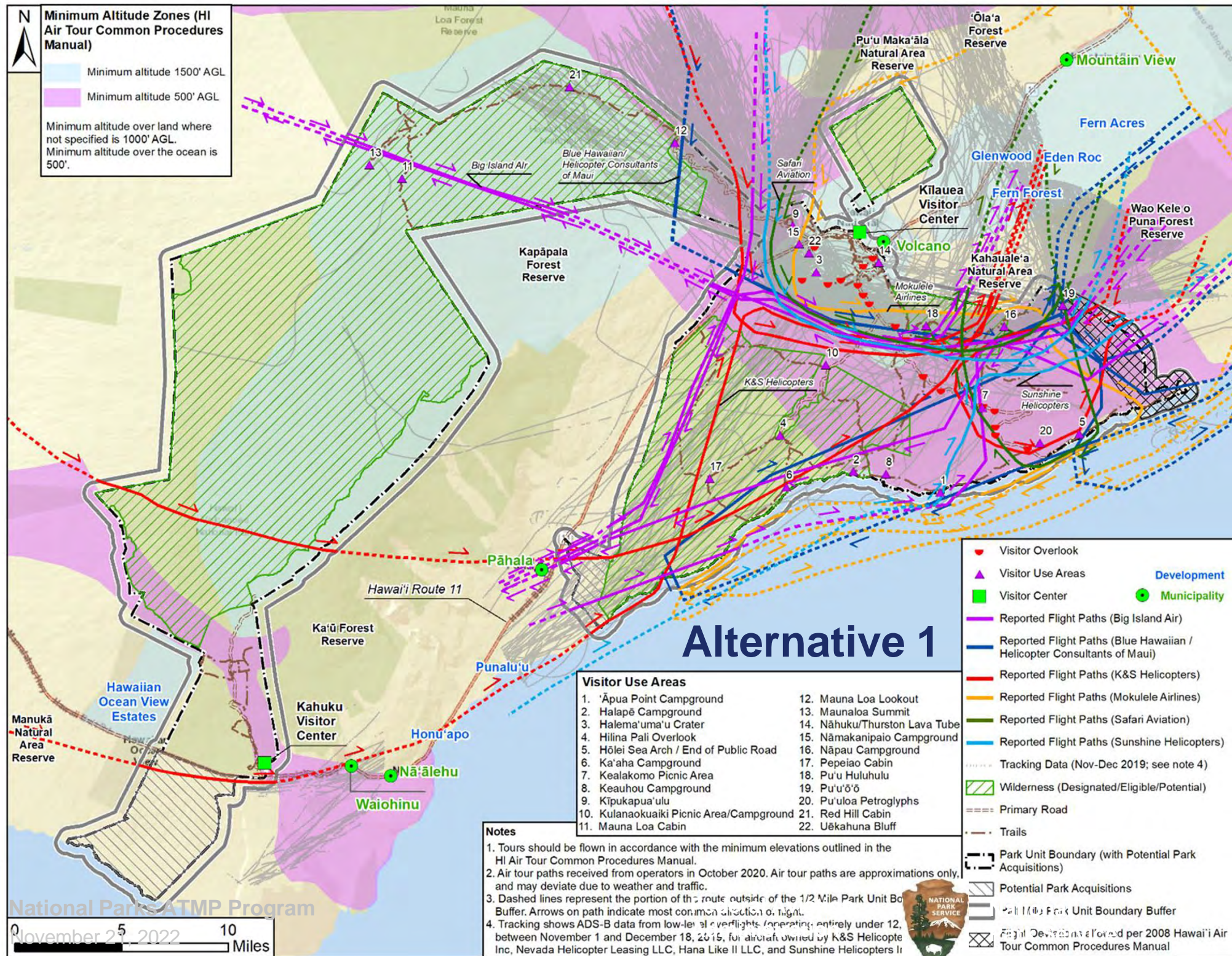






# Minimum Altitude Zones (HI Air Tour Common Procedures Manual)

- Minimum altitude 1500' AGL
- Minimum altitude 500' AGL
- Minimum altitude over land where not specified is 1000' AGL.
- Minimum altitude over the ocean is 500'.



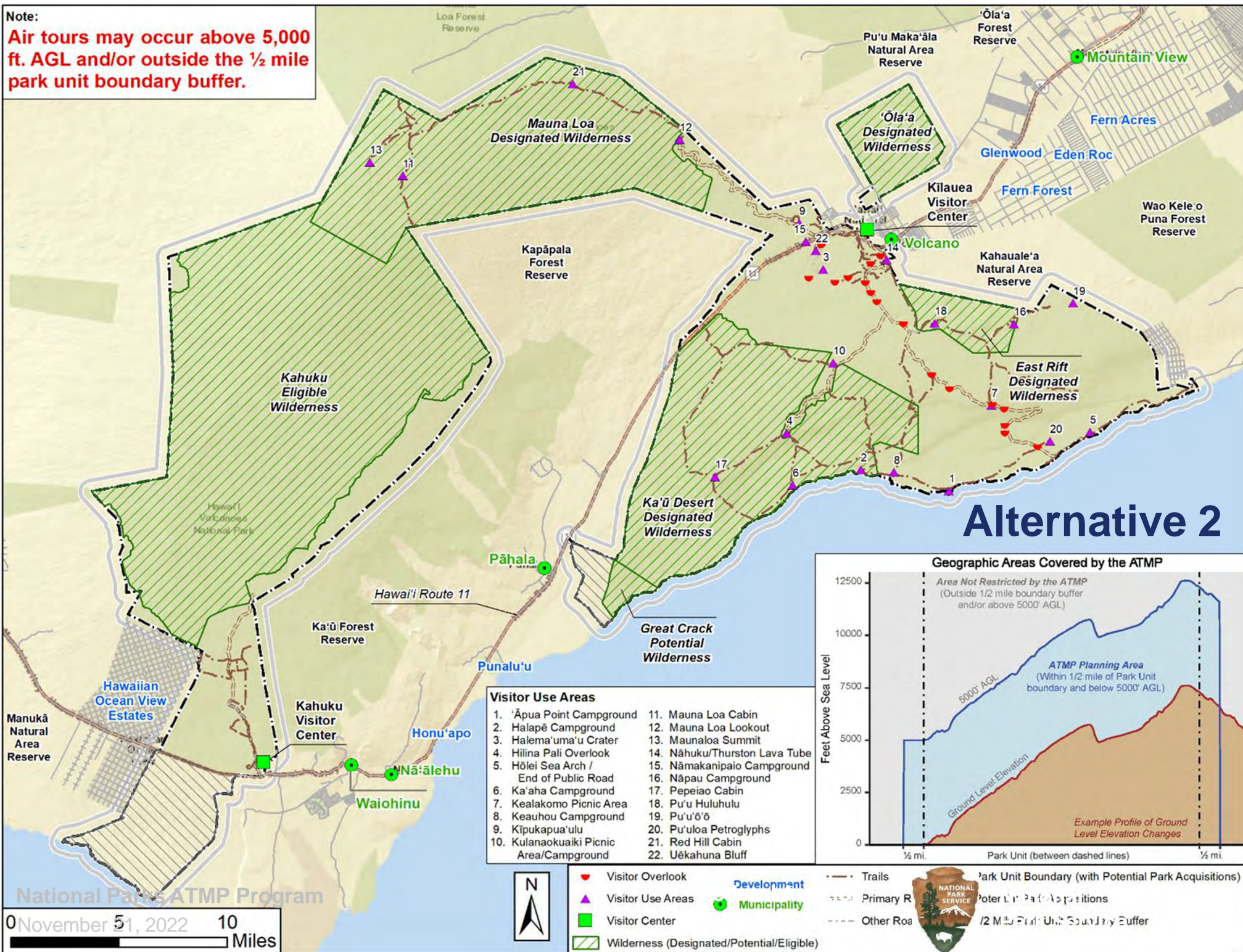
National Parks ATMP Program

November 21, 2022 5 10 Miles



**Note:**

**Air tours may occur above 5,000 ft. AGL and/or outside the ½ mile park unit boundary buffer.**





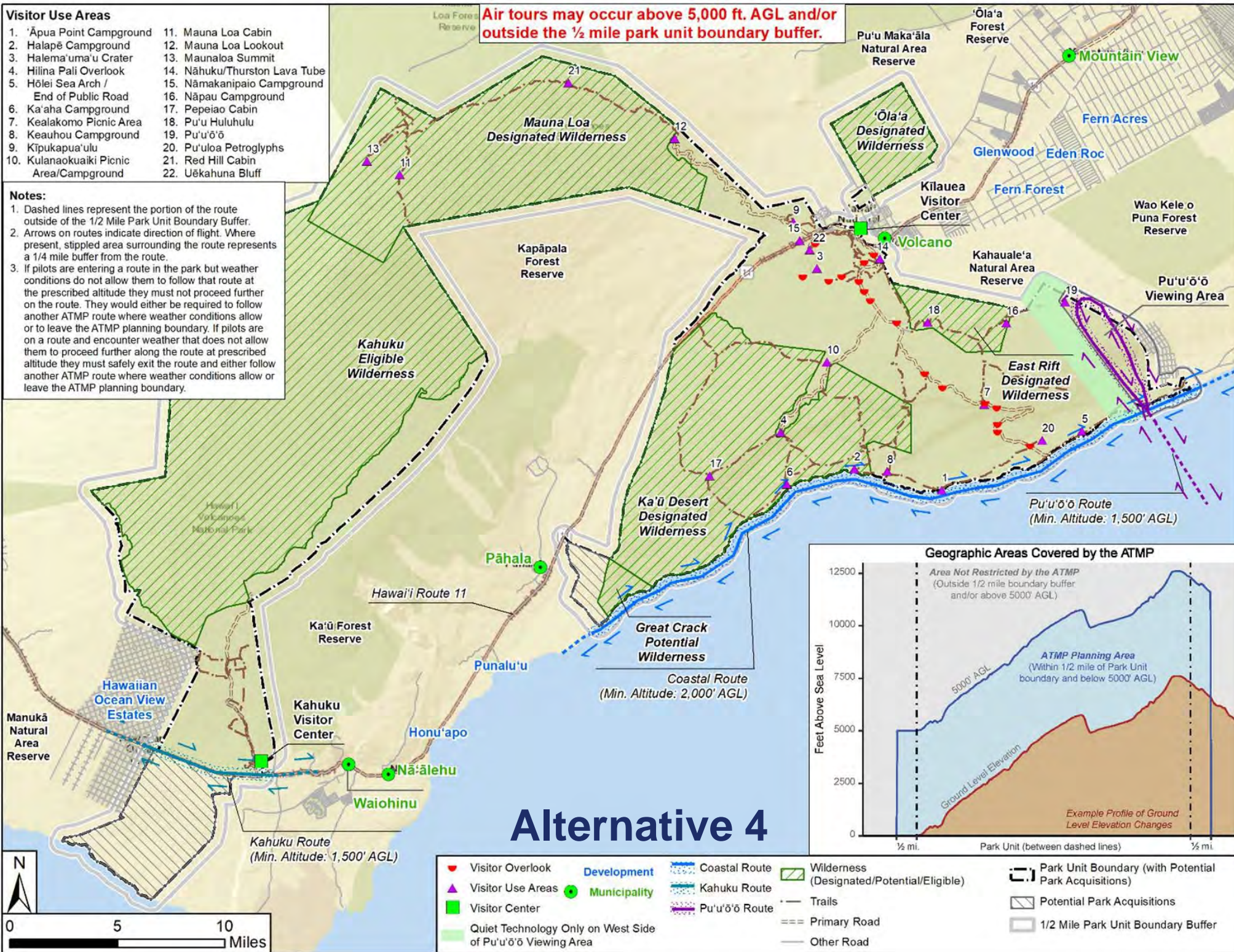
## Visitor Use Areas

1. 'Āpua Point Campground
2. Halapē Campground
3. Halema'uma'u Crater
4. Hilina Pali Overlook
5. Hōlei Sea Arch / End of Public Road
6. Ka'aha Campground
7. Kealakomo Picnic Area
8. Keauhou Campground
9. Kīpukapua'u
10. Kulanaokuaiki Picnic Area/Campground
11. Mauna Loa Cabin
12. Mauna Loa Lookout
13. Maunaloa Summit
14. Nāhuku/Thurston Lava Tube
15. Nāmakanipaio Campground
16. Nāpau Campground
17. Pepee Cabin
18. Pu'u Huluhulu
19. Pu'u'ō'ō
20. Pu'u'ō'ō Petroglyphs
21. Red Hill Cabin
22. Uēkahuna Bluff

## Notes:

1. Dashed lines represent the portion of the route outside of the 1/2 Mile Park Unit Boundary Buffer.
2. Arrows on routes indicate direction of flight. Where present, stippled area surrounding the route represents a 1/4 mile buffer from the route.
3. If pilots are entering a route in the park but weather conditions do not allow them to follow that route at the prescribed altitude they must not proceed further on the route. They would either be required to follow another ATMP route where weather conditions allow or to leave the ATMP planning boundary. If pilots are on a route and encounter weather that does not allow them to proceed further along the route at prescribed altitude they must safely exit the route and either follow another ATMP route where weather conditions allow or leave the ATMP planning boundary.

**Air tours may occur above 5,000 ft. AGL and/or outside the ½ mile park unit boundary buffer.**



# Alternative 4



# Assessment of Effects

- **The proposed ATMP draft alternatives would not require land acquisition, construction, or ground disturbance**
  - No physical effects to historic properties anticipated
- **Focus of the assessment – new introduction of visual or audible elements beyond current effects that could diminish the integrity of any identified significant historic property**
  - The FAA and NPS will consider consulting parties' input on potential adverse effects
  - Analyze visual and audible elements of air tours



# Questions or Comments?



# Next Steps – Section 106 Consultations

## The FAA and the NPS will:

- Revise alternatives as needed based on the comments received during consultation
- Continue to consult on the APE and identification of historic properties (including TCPs or sacred sites) within the APE
- Complete impact modeling and analysis
- Complete and distribute EA and Draft ATMP for comment
- Be open to holding additional consultation meetings to discuss development of an ATMP and ways to avoid or minimize any adverse effects that could result from air tours in the APE
- Send a consolidated consultation letter summarizing the FAA's steps in the Section 106 process and the effects to historic properties for consulting party input this winter
- Complete and distribute EA and Draft ATMP for comment and hold a public meeting

**The findings reached during the Section 106 consultation process will inform decision on the final ATMP.**



# THANK YOU

- **Should you wish to provide further input on cultural property identification and/or the area of potential effects, please contact:**
  - Judith Walker at (202) 267–4185 or at [judith.walker@faa.gov](mailto:judith.walker@faa.gov), copying [ATMPTeam@dot.gov](mailto:ATMPTeam@dot.gov)



## ATTACHMENT 2

### RESPONSE TO COMMENTS ON THE DEVELOPMENT OF AN ATMP FOR HAWAI'I VOLCANOES NATIONAL PARK

The following table provides an overview of consulting parties' comments on the development of an Air Tour Management Plan (ATMP) for Hawai'i Volcanoes National Park (the Park) and the Federal Aviation Administration's (FAA) responses to those comments.

Commenter	Correspondence	Summary of Comments	Response
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Instead of an ATMP, requests info on Voluntary Agreements and recommends a negotiated Agreement that addresses the full range of impacts—including those which may occur from flights within the park boundary that are higher than 5,000 feet AGL—could be more effective than an ATMP.	This request is outside the scope of the Section 106 assessment.
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Disagrees with the proposed APE - should include areas potentially affected by the commercial air tours, including areas in which tours either are currently operating or in which they may begin to fly over if the ATMP is changed from the current conditions.	In establishing the revised APE, the FAA sought to include areas where any historic property present could be affected by introduction of noise from or sight of commercial air tours as a result of the implementation of the Air Tour Management Plan (ATMP).
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Recommends the summary table of historic properties include a summary of the properties' character-defining features, with attention to those that may be affected by the air tours through visual, audible or atmospheric elements (ex: HAVO NPS TCP - the importance of its natural soundscape)	The agencies are including a summary of character defining features for the list of historic properties identified within the revised APE.



Commenter	Correspondence	Summary of Comments	Response
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Requests inclusion of historic districts and resources in the APE in the adjacent towns of Volcano Village, Wai'ōhinu and Nā'ālehu, as well as the cultural landscapes in Wao Kele o Puna	Portions of Volcano Village are included in the revised APE, including the Hale Ōhi'a Tract Historic District, Johnston Summer Residence (aka Hale Ōhi'a Cottages, Uluwena), and Volcano Residential District. Wai'ōhinu, Nā'ālehu, and Wao Kele o Puna are outside the revised APE.
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	<p>Recommends a fourth Alternative to manage air tours to avoid or minimize adverse effects on historic properties in the (recommended and expanded) APE, including areas impacts from flights that are higher than 5,000 AGL or that occur over sensitive areas that are more than half-mile from the park boundary - would need to be implemented via Agreement instead of ATMP</p> <p>Concerns that Alternatives would allow for flights over Halema'uma'u Crater higher than 5,000 feet above ground level</p>	<p>The ATMP for this park is being implemented pursuant to the National Air tour Management Act (the Act) and its implementing regulations. The regulations define a commercial air tour as: [A]ny flight, conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of any national park, or over tribal lands during which the aircraft flies:</p> <p>(i) Below 5,000 feet above ground level (except for the purpose of takeoff or landing, or as necessary for the safe operation of an aircraft as determined under the rules and regulations of the Federal Aviation Administration requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); [or]</p> <p>(ii) Less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary). Therefore, the agencies do not have authority to regulate air tours above 5,000 ft. above ground level.</p>

Commenter	Correspondence	Summary of Comments	Response
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Supports the Kūpuna Advisory Council's and the Office of Hawaiian Affairs' recommendations against commercial tours and request for a minimum vertical buffer of 9,000 feet above the volcano (or other minimum level to be determined by the Traditional Cultural Property study) and/or a complete "no fly zone" over HAVO	Comment noted.
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Concerns with effects on the designated and eligible wilderness areas that are also rich cultural landscapes, including those on Mauna Loa, 'Ōla'a, East Rift, Ka'ū Desert, Great Crack and Kahuku	The agencies are taking into consideration natural resources that contribute to the cultural resources in the APE.
Kiersten Faulkner, Historic Hawai'i Foundation	12/01/22 Letter	Supports working meetings with consulting parties (including air tour operators) about historic properties to craft another alternative	This request is outside the scope of the Section 106 process. The agencies have considered input from the public and stakeholders including the consulting parties in the development of the alternatives included in the draft Environmental Assessment and the alternatives presented at the Nov. 21, 2022, consulting party meeting.
Kūpuna consultation group providing input to the leadership of Hawai'i Volcanoes National Park	11/21/22 Letter	Opposes any commercial air tours over the Park	Comment noted.
Nona Wilson	12/21/22 Letter	Opposes any commercial air tours over the Park. Provided past documentation summarizing Kūpuna opposition to commercial air tours over the Park and expressed concerns regarding air tour impacts on the sacredness of the entire Park (including the ground, air, and ocean) and	Comment noted.

Commenter	Correspondence	Summary of Comments	Response
		the effects of noise pollution on cultural resources and ceremonies. The past documentation noted that natural resources are also cultural resources.	
Aku Hauanio, former HAVO National Park Specialist	12/01/22 Email	<p>Concerns about lands adjacent to Mauna Loa Strip, home to critically endangered species of birds (‘akiapōlā‘au, ‘akepa and ‘alawī) only found on this island. Areas of concern include Keauhou Ranch, Kīlauea Forest, Kulani, and Pu‘u Maka‘ala Natural Area Reserve as critical habitats that need protection.</p> <p>These birds are the last of their kind in the world. Any type of aerial commotion can put these birds at high-risk of extinction. Each species has a different breeding season and cannot have any type of disturbances all year. The State Department of Land and Resources are breeding the endangered ‘alalā and introducing them back into the wild. For them to be successful in their plan to repopulate, there absolutely needs to be no aerial uproar, as they are hunted by other birds and fear anything flying above them. Kapāpala Ranch is the preferred and best route to prevent the extinction of Native Birds in Hawai‘i since there are currently no endangered species of forest birds.</p>	This comment was shared with the NEPA team for consideration.

Commenter	Correspondence	Summary of Comments	Response
Kalena K. Blakemore, Office of Hawaiian Affairs, OHA (NHO) Representative, Land Agent for Wao Kele o Puna Forest Reserve	12/01/22 Email	Notes that the Office of Hawaiian Affairs (OHA), Compliance Enforcement Program, previously provided a comprehensive written response detailing the concerns and issues with the ATMP (see OHA letter to Cathy Nadals, Cultural Resource Specialist, FAA, dated January 24, 2022) and has also expressed a preference for Alternative 2 as part of the ATMP public scoping process (see OHA letter to Cathy Nadals, Cultural Resource Specialist, dated April 1, 2022).	Comment noted.
Kalena K. Blakemore, Office of Hawaiian Affairs, OHA (NHO) Representative, Land Agent for Wao Kele o Puna Forest Reserve	12/01/22 Email	Concerns about FAA's understanding and definitions of cultural resources. 'Ōiwi culture includes a multitude of gods (Kū, Kāne, Kanaloa, Lono, Hina, Pele), represented in elements such as plants, marine and terrestrial animals, birds, fire, lava, wind, rain, clouds, water, lightning, thunder, ocean currents, mountains, ridges, rock and forests. 'Ōiwi cannot separate these elements from the historic properties identified in the NHPA Section 106 consultation process and endeavor to protect all these resources as they directly relate to 'aumakua (family guardians), genealogy and ancestors.	Comment noted.
Kalena K. Blakemore, Office of Hawaiian Affairs, OHA (NHO) Representative, Land Agent for Wao Kele o Puna Forest Reserve	12/01/22 Email	Concerns about the APE and requests its expansion to include the atmosphere of the height of Pele's plume to better protect OHA's natural and cultural resources.	See above APE comment. The revised APE extends vertically from the ground level to encompass areas where operators may fly above the ATMP planning area (i.e., higher than 5,000 ft. AGL).

Commenter	Correspondence	Summary of Comments	Response
Kalena K. Blakemore, Office of Hawaiian Affairs, OHA (NHO) Representative, Land Agent for Wao Kele o Puna Forest Reserve	12/01/22 Email	Concerns about flight safety. OHA endured a helicopter crash in March 2020. The accident occurred in our 5-acre clearing where OHA practices their culture through hosting school groups for 'Ōiwi-place based learning. Several 'ōhi'a (keystone trees) were sacrificed to the accident and oil/fuel spilled on the grounds of the watershed (Pāhoa Aquifer). This was not just a major safety issue but a violation to OHA's natural and cultural resources and cultural practices. The FAA's conceived safety concerns and 'Ōiwi natural/cultural resources and practices are not mutually exclusive.	This comment is beyond the scope of the Section 106 assessment. However, this comment has been provided to agency personnel for consideration.
Kalena K. Blakemore, Office of Hawaiian Affairs, OHA (NHO) Representative, Land Agent for Wao Kele o Puna Forest Reserve	12/01/22 Email	Requests Kipukakī be considered as a sacred site. It is not listed as a historic property but is an 'Ōiwi holy place of worship in the path of air tours which can run every 15 minutes, creating great noise impacts. Asks it be acknowledged in the NHPA Section 106 consultation process.	Kīpukakī has been added to the historic property list.
Kalena K. Blakemore, Office of Hawaiian Affairs, OHA (NHO) Representative, Land Agent for Wao Kele o Puna Forest Reserve	12/01/22 Email	Requests FAA and NPS consider the impacts of air tours on the 'Ōiwi, who sacrifice their natural and cultural resources to for-profit commercial helicopter tours, with no benefit.	All contributing features of the sacred sites, ethnographic resources and traditional cultural properties entirely or partially within the revised APE will be considered in the evaluation of effects.

Commenter	Correspondence	Summary of Comments	Response
Earl Louis	12/05/22 Telephone Conversation	Against any air tours or traffic where he lives, which is about 80 miles from the coastline and part of HAVO in the District of Ka'ū on Hawai'i Island. Also noted that the coastline is pristine.	Comment noted.
John Carse	12/01/22 Email	Asks why historic properties outside of the park are not identified, since aircraft routes show overflights will go inside and outside the park boundaries. All government programs are responsible for indirect effects of any action (40 CFR, Section 1508.8). Asks why NPS is not cataloging historical sites along the established routes effected by the pollution caused by aircraft all the way back to the airports.	In establishing the revised APE, the FAA sought to include areas where any historic property present could be affected by introduction of noise from or sight of commercial air tours as a result of the implementation of the ATMP. Historic properties outside the park but within the APE are included in the historic property identification. See comment above explaining agency authority to regulate air tours.
John Carse	12/01/22 Email	Asks how the regulation of flights over historic sites will be enforced. Asks how air tours flying over park historical sites in violation of the ATMP will be identified and held accountable.	This comment is beyond the scope of the Section 106 process. However, as stated in the Park's February 2022 Newsletter, aircraft monitoring and enforcement will occur under the ATMP and NPS will continue to maintain its ADS-B flight tracking system to monitor commercial air tour activity within the Act's jurisdictional boundaries.
John Carse	12/01/22 Email	Asks if the November 21, 2022 meeting minutes will be made available online.	The agencies are providing the slide deck presentation for the November 21, 2022 consulting party meeting in the attachments to this letter. No further notes will be provided.

### ATTACHMENT 3

#### SUMMARY OF ALTERNATIVES FOR AN ATMP FOR HAWAI'I VOLCANOES NATIONAL PARK

Alternative Attributes	Alternative 2 (No Air Tours in the Planning Area)	Revised Public Scoping Alternative 4 (Reduction of Air Tours)
General Description and Objectives	Prohibits air tours within the ATMP planning area to maximize Park resource protection. Air tours could continue to fly outside the ATMP planning area (i.e., above 5,000 ft. AGL or more than ½-mile outside of the Park's boundary).	Three routes provide air tour access over the Park with soundscape mitigations, while keeping the heart of the Park free of air tours. Avoids flights over the summit of Kīlauea and minimizes impacts on coastal backcountry users.
Routes	None in ATMP planning area.	Three routes (Kahuku route, coastal route, Pu'u'ō'ō route).
Minimum Altitudes	No minimum altitude would be set. However, flights over the Park that are above 5,000 ft. AGL could occur as they are outside the ATMP planning area. The minimum altitude for air tour operations conducted more than ½ mile outside the Park boundary would be 1,500 ft. AGL unless the operator has OpSpecs B048 (air tour operations below 1,500 ft. AGL in the State of Hawaii), in which case the operator must comply with the requirements and procedures of the Hawaii Air Tour Common Procedures Manual (HI Manual) for conducting commercial air tour operations below 1,500 ft. AGL. <sup>(OBJ)</sup>	Minimum 1,500 ft. AGL; minimum 2,000 ft. AGL over wilderness areas and sensitive sites. Flights more than ½-mile outside the Park boundary are similarly outside the ATMP planning area and are subject to the altitude requirements and procedures of the HI Manual.
Time of Day	N/A	10 AM – 2 PM for non-QT flights. 9 AM – 5 PM for QT flights.
Day of Week	N/A	No-fly day on Sunday. Wednesday is QT flights only.
Loitering/ Circling	N/A	Permits limited loitering/circling (e.g. 3-5 minutes) from the Pu'u'ō'ō route.
Quiet Technology (QT) Incentives	N/A	QT flights may fly 9AM - 5PM QT flights may fly on Wednesday Additional fly locations in the Pu'u'ō'ō viewing area for QT flights.

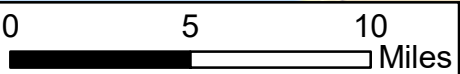
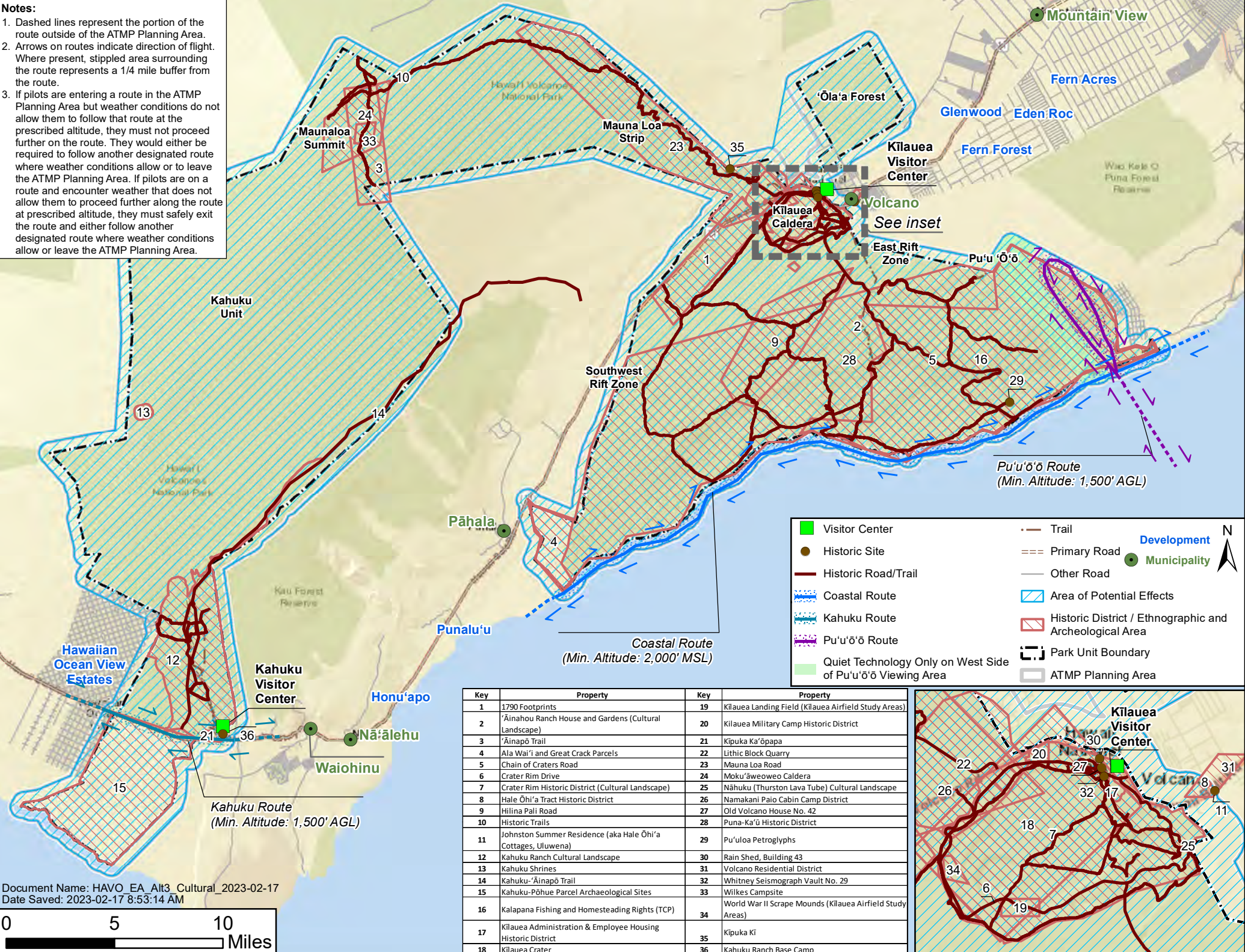
<b>Alternative Attributes</b>	<b>Alternative 2 (No Air Tours in the Planning Area)</b>	<b>Revised Public Scoping Alternative 4 (Reduction of Air Tours)</b>
Interpretative Training and Education	N/A	Mandatory if offered by the Park.
<b>Alternative Attributes</b>	<b>Alternative 2 (No Air Tours)</b>	<b>Revised Public Scoping Alternative 4 (Reduction of Air Tours)</b>
Annual Meeting	N/A	Included.
Restrictions for Particular Events	N/A	Mandatory 5-mile standoff distance (within the planning area only, does not extend outside planning area). Two months' notice provided to operators.
Operators, Initial Allocation of Air Tours, and Aircraft Types	N/A	The initial allocation would reflect the proportional number of air tours reported over the Park and the existing aircraft types of each of the seven operators that have reported operating in the period from 2017-2019. Then it would move to competitive bidding.



**ATTACHMENT 4**

**REVISED APE MAP FOR AN ATMP FOR HAWAI'I VOLCANOES NATIONAL PARK**

- Notes:**
- 1. Dashed lines represent the portion of the route outside of the ATMP Planning Area.
  - 2. Arrows on routes indicate direction of flight. Where present, stippled area surrounding the route represents a 1/4 mile buffer from the route.
  - 3. If pilots are entering a route in the ATMP Planning Area but weather conditions do not allow them to follow that route at the prescribed altitude, they must not proceed further on the route. They would either be required to follow another designated route where weather conditions allow or to leave the ATMP Planning Area. If pilots are on a route and encounter weather that does not allow them to proceed further along the route at prescribed altitude, they must safely exit the route and either follow another designated route where weather conditions allow or leave the ATMP Planning Area.



## ATTACHMENT 5

### REVISED HISTORIC PROPERTY IDENTIFICATION LIST FOR HAWAI'I VOLCANOES NATIONAL PARK

Property Name	Property Type	Eligibility Status	Significant Characteristics
1790 Footprints	District, Site	Listed	The 1790 Footprints are scattered sets of footprints of men, women, and children and hoofprints of hogs in hardened, cement-like ash that may have been laid down during the 1790 phreatic explosions of the Kīlauea volcano. The footprints are significant for their potential association with the warriors of Keoua Kuahu'ula, a high Hawaiian chief, who passed through the Ka'ū Desert during the 1790 eruption of Kīlauea. They are also significant for their potential to yield information for this historic period. Significant characteristics for the site include its location, cement-like ash, and the size, spacing, and configuration of the footprints.
'Āinahou Ranch House and Gardens (Cultural Landscape)	Cultural Landscape	Listed	The 'Āinahou Ranch House and Gardens is significant for its association with Herbert C. Shipman, a Big Island rancher, horticulturist, philanthropist, and conservationist. It is also significant as an example of a Craftsman/Bungalow style of architecture in Hawai'i. The period of significance extends from 1941, when Shipman constructed the house as a safe haven from possible Japanese invasion during World War II, to 1971. Although the plant species on the property are more limited than during the period of significance, the landscape still retains several plant varieties, and the landscape design and association with agriculture contributes to the property's significance. Other significant characteristics include the property's Craftsman bungalow style, intact materials, and Japanese-influenced design.
'Āinapō Trail	Structure	Listed	The 'Āinapō Trail was a 34-mile-long trail that served as the customary route to the summit of Mauna Loa from the prehistoric period until 1916. The trail was engineered to ensure availability of shelter, drinking water, and firewood between the nearest permanent settlement and the summit crater; it was often used during summit eruptions to honor Pele, the goddess of volcanoes, with chants and offerings. The U.S. Army constructed a new trail to the summit for volcanologists headquartered at Kīlauea in 1916, which led to diminished usage of the 'Āinapō Trail. The trail is significant for its prehistoric and historic use as the main route to the summit, for its engineering, and for its potential to yield information. The trail's alignment, association with the summit of Mauna Loa, and secluded, natural setting are all significant characteristics.



Property Name	Property Type	Eligibility Status	Significant Characteristics
Ala Wai'i Parcel	TBD	Unevaluated <sup>2</sup>	The Ala Wai'i Parcel has not been formally evaluated, but it contains known significant archeological resources (Pu'u Ula'ula) within the parcel as well as traditional fishing areas. Potential significant characteristics of the sites include extant material culture remains and an association with the ocean and surrounding landscape.
Boles Field (Kīlauea Airfield Study Areas)	Site	Eligible	Boles Field was named after the Park's first superintendent, Thomas R. Boles, and was constructed on the bluff between Uwēkahuna and the Kīlauea Military Camp in 1925. Boles Field was constructed after the previous landing field, built in 1923, was destroyed by the eruption of Halema'uma'u. Soon after construction, Boles Field was found to be dangerously short, but it was used over the next 15 years. It was also used as a location for military trucks and heavy equipment during World War II. It is significant for its association with aviation and World War II history on the island; significant characteristics include the site's location and configuration as a landing field.
Chain of Craters Road	Structure	Unevaluated	Chain of Craters Road was constructed starting in 1927. The first iteration of the road was opened in 1928 with the original alignment connecting 8 craters to Makaopuhi Crater. The road was lengthened into the Kalapana Extension in 1960, opening in 1964. The Mauna Ulu eruptions of 1969-1974 covered portions of the original alignment, which was rebuilt in 1979. The road was again damaged by eruptions in 1983. During the Kīlauea eruptions of 2014, the road was again extended into the Kalapana extension as an emergency access road. It is one of the primary roadways in the Park connecting the summit to the coastal area. Potential significant characteristics of the property include the road's alignment and its association with several craters, the summit, and the coast.
Crater Rim Drive	District, Structure	Listed	Crater Rim Drive is a 10.6-mile scenic main road within the Park that loops around the caldera rim and onto the caldera floor. The road passes through a variety of natural settings within the Park, including forests, high scrub desert, and lava fields. It is significant for its association with the early development of the Park, for its association with the Civilian Conservation Corps (CCC) program and NPS rustic style, and as an engineering feat that was designed around the Park's natural landscape. The road's alignment and design, natural setting, and association with the caldera and the CCC are all significant characteristics of the district.

<sup>2</sup> For the purposes of Section 106, the FAA is treating identified but unevaluated properties as eligible for the National Register of Historic Places.

Property Name	Property Type	Eligibility Status	Significant Characteristics
Crater Rim Drive Historic District	District, Cultural Landscape	Listed	The Crater Rim Historic District encompasses approximately 5,000 acres in and around the Kīlauea Caldera and contains Crater Rim Drive and its associated surrounding developments. It is significant for its association with the CCC program and early Park development between the periods of 1916 and 1942. It is also architecturally significant for its distinctive NPS Rustic-style architecture and naturalistic landscape architecture. Significant characteristics of the district include Crater Rim Drive's alignment and the district's natural setting, landscape design, rustic architecture, and association with the CCC.
Great Crack Parcel	TBD	Unevaluated	The Great Crack has not been formally evaluated, but it contains known potentially significant archeological resources and traditional fishing areas. Potential significant characteristics of the sites include any extant material culture remains and an association with the ocean and surrounding landscape.
Hale Ōhi'a Tract Historic District	District	Listed	The Hale Ōhi'a Tract Historic District is a small subdivision in Volcano Village containing historic buildings and structures that is marked by two large lava rock pillars. It is significant for its association with the development of the area of summer retreats in the early-twentieth century. Significant characteristics of the district include its varied, intact concentration of architecture, stone pillars, narrow roadway, and association with Volcano Village as a summer retreat.
Hawai'i Volcanoes National Park	TCP	Eligible	The entirety of Hawai'i Volcanoes National Park is significant as a Traditional Cultural Property (TCP) for its association with Native Hawaiian culture, traditions, and sacred uses. This includes the physical manifestations of the volcano, the forested areas as well as the soundscape and the airspace. Many Native Hawaiian cultural practitioners also come to Kīlauea for ceremonies, ho'okupu, and paying tribute to the deity Pelehonuamea. The exceptional stillness and serenity of the TCP are significant characteristics that allow Native Hawaiians to continue conducting traditional ceremonies that require a quiet setting.
Hilina Pali Road	District	Listed	Hilina Pali Road is a secondary road in the Park road system that was built by the CCC between 1933 and 1942 and extends westerly from Chain of Craters Road for approximately 8.35 miles in a descent towards an overlook with a historic shelter overlooking the coastline. The road has several developed areas that are connected to the roadway containing a total of over 69 acres. It is significant for its association with the CCC and early Park development, as well as for its distinctive design and construction, including its use of NPS Rustic-style architecture. Significant characteristics of the district include the road's alignment and design,

Property Name	Property Type	Eligibility Status	Significant Characteristics
			its viewshed of the surrounding landscape, rustic design, descent towards the Hilina Pali overlook, and location near the coastline.
Historical Corral and Chute	Structure	Eligible	The Historical Corral and Chute is significant for its association with the agricultural history of the Kahuku Ranch. Significant characteristics include the structure's materials and association with the Kahuku Ranch.
Historic Trails	Structures	Eligible	The majority of the trails in the Park are historic, ranging in age from ancient trails, trails associated with cattle ranching, historical Park trails, CCC era trails, and trails related to Thomas Jaggar and the Buffalo Soldiers (Mauna Loa Trail). Significant characteristics of various historic trails throughout the Park include their locations, alignments, viewsheds, and surrounding landscapes.
Johnston Summer Residence (aka Hale Ōhi'a Cottages, Uluwena)	Building	Listed	The Johnston Summer Residence, constructed in 1931, consists of a main house, maid's quarters, and two-story carriage house with a landscaped Japanese garden. It is significant for its association with the development of Volcano Village as a summer retreat and as an example of the Queen Anne style. The residence's Queen Anne features (including its asymmetrical layout, complex roof form, fishscale shingles, turret and bay windows), association with summer tourism in the area, and surrounding landscape designed to hide the property from the street are all significant characteristics of the property.
Kahuku Ranch Base Camp Historic Site	Site	Eligible	The Kahuku Ranch Base Camp Historic Site spans over 5 acres and is part of the larger Kahuku Ranch. It is significant for the U.S. military's use of the ranch between 1939 to 1947 for strategic operations during World War II. The site's significant characteristics include its rolling, pastoral landscape and setting near Mauna Loa.
Kahuku Ranch Cultural Landscape	District, Cultural Landscape	Eligible	The Kahuku Ranch Cultural Landscape is locally significant for its association with the patterns of development in the cattle industry on the Island of Hawai'i and is particularly representative of the transition point in ranching history from land-responsive methods of cattle operations to more intensive infrastructure development and range management to support ranching operations in the first half of the twentieth century. The period of significance begins in 1912 when Kahuku underwent the first development as a part of the Parker Ranch and ends in 1947 when this initial phase of development was completed, and the ranch was sold to James W. Glover. This period reflects the establishment of the foundation of modern cattle ranching on the island. The Parker-era Kahuku represents the integration of early ranching practices, of large pastures and open ranges, and the first efforts

Property Name	Property Type	Eligibility Status	Significant Characteristics
			to operate the ranch through infrastructural development and range management. Significant characteristics include the rolling, pastoral landscape and association with cattle ranching.
Kahuku Shrines	Site	Eligible	The entire archeological complex of the Kahuku Shrine is significant in its named association with the 16th/17th century ruling chief 'Umi-a-Līloa. Although the ties of this chief to specific features within the complex are tenuous, there are sufficient other regional associations with camps, trails, and temples in the high elevation area that support this evaluation. The Kahuku shrine also embodies the distinctive characteristics of Emory's Necker-style marae and those of shrines on Mauna Kea and Haleakalā. Further, the complex exhibits distinctive construction methods of stacked and set slabs on edge and end that are not typically found in such concentrations in low elevation areas and thus may represent an alpine/sub-alpine construction style. Additionally, the 'Umi Caverns complex offers an opportunity to examine the convergence of high elevation land use, transportation, and ceremonial activities.
Kahuku-'Āinapō Trail	Structure	Eligible	The Kahuku-'Āinapō Trail is a segment of an "old trail system" that was used in historic times for driving cattle between various cattle ranching operations associated with Parker Ranch (ca. 1912-1947). Stop over locations includes various ranches in route including Kapāpala Ranch, Keahou Ranch, Humuula Sheep Station, and Pu'u'ō'ō Ranch. The trail is significant as it contributes to broad patterns of history and has the potential to yield information. Significant characteristics of the trail include its alignment and its association with and location near various ranches.
Kahuku-Pōhue Parcel Archaeological Sites	Site	Eligible	The Kahuku-Pōhue Parcel contains a total of 60 sites made up of hundreds of archeological features and ethnographic resources that have the potential to yield information on Hawaiian history and prehistory. The parcel contains four resources that have architectural/engineering significance, including the traditional Hawaiian village at Kahakahakea, which was designed around the local topography. Sites also include a quarry, habitation features, shrines, and trail segments associated with the traditional practice of commuting between residences. Significant characteristics of the site include extant material culture remains, their configuration and materials, Kahakahakea's landscape design, the surrounding topography, and trail alignments and their association with residences.
Kalapana Fishing and Homesteading Rights (TCP)	TCP	Eligible	The Kalapana Fishing and Homesteading Rights area is a TCP significant for its association with Native Hawaiian culture and traditions. It is located within the Puna-Ka'ū Historic District and is contributing to the district. Pursuant to the act of June 20, 1938 (52 Stat.

Property Name	Property Type	Eligibility Status	Significant Characteristics
			781; 16 U.S.C. 391b and 396a) Native Hawaiian residents of the villages adjacent to the Kalapana extension area added to the Park by the above act and visitors under their guidance are granted the exclusive privileges of fishing or gathering seafood from parklands (above the high waterline) along the coastline of such extension area. These persons may engage in commercial fishing under proper State permit. Significant characteristics of the TCP include its use and association with the ocean and coastline.
Kīlauea Administration and Employee Housing Historic District (Cultural Landscape)	District, Cultural Landscape	Eligible	The Kīlauea Administration and Employee Housing Historic District encompasses a collection of small-scale, rustic houses and buildings along the northeast edge of the Kīlauea Caldera. Most of the buildings and landscape features were built by CCC crews and designed following a series of master plans developed from 1931 to 1941 by the NPS Landscape and Engineering Division. The period of significance for the district is between 1927 and 1942, and it is significant for its association with the CCC and early Park planning and for its NPS Rustic-style architecture and landscape design. Significant characteristics of the district include the configuration and rustic design of the buildings, its location near the caldera, landscape design, and association with the CCC.
Kīlauea Crater	Site	Listed	Kīlauea Crater is located within the summit depression of Kīlauea Volcano, one of the earth's most active volcanoes. It is significant for its association with Native Hawaiian culture and tradition centered around the goddess Pele. It is also significant as a focal point of tourism and scientific study within the Park. The crater is used for traditional practices. Significant characteristics of the site include its quiet setting that allows Native Hawaiians to continue conducting traditional ceremonies.
Kīlauea Landing Field (Kīlauea Airfield Study Areas)	Site	Eligible	Kīlauea Landing Field was a military landing field that was built in 1923 at the request of the US Army Hawaiian Department. It was the first airfield constructed on the Island of Hawai'i and used to photograph the Caldera for the first time from the air. The field was destroyed by the eruption of Halema'uma'u in the following year and was replaced by Boles Field. Kīlauea Landing Field is significant for its association with Hawaiian aviation history, military history, aerial photography, and the 1924 eruption of Kīlauea. The site's significant characteristics include its association with and location near Kīlauea.
Kīlauea Military Camp Historic	District, Cultural Landscape	Eligible	The Kīlauea Military Camp Historic District was established in 1916 and encompasses approximately 50 acres of land. It served as the location for training the local National Guard members and also served as a rest and relaxation facility for the military. During World War II,



Property Name	Property Type	Eligibility Status	Significant Characteristics
District (Cultural Landscape)			the camp was used as a Japanese internment and prisoner-of-war camp. It is significant for its association with the military history of the area as well as for its planning and design. Significant characteristics of the district include its architecture and landscape design.
Kīpuka Ka'ōpapa	Site	Eligible	Kīpuka Ka'ōpapa is a significant archeological resource and is a vestige of the Ka'ū Agricultural Field Systems, an expansive area of intensive agriculture that was built as early as the 1400s. The site is made up of a complex network of rock walls, mounds and structures and is eligible for having information potential into past traditional agricultural practices. The site's stone materials, extant structures and features and their configurations, and the agricultural landscape are all significant characteristics.
Kīpuka Kī	Site	Unevaluated	Kīpuka Kī has not been formally evaluated, but it is considered an 'Ōiwi holy place of worship. Potential significant characteristics include the natural soundscape including birds singing and the sound of leaves in the wind.
Lithic Block Quarry	Site	Eligible	The Lithic Block Quarry is a traditional ancient stone tool production site that is significant for its potential to yield information regarding production practices. It has been mapped with 277 individual workshops where fine-grained basalt rocks were shaped into stone tools by Native Hawaiians after the late-1600s. Significant characteristics include the extant remains of lithic production and the site's geology and location.
Mauna Loa Road	District	Listed	Mauna Loa Road, constructed between 1934 and 1962, is a secondary road through the Park that has several developments along its route. It is significant for its association with the CCC and for its NPS Rustic-style design. Significant characteristics include the road's alignment and location near the Kīlauea Crater and Mauna Loa and the district's rustic architecture and landscape design.
Moku'āweoweo Caldera	Site	Eligible	Moku'āweoweo Caldera is located at the summit of Mauna Loa and is considered a sacred place and ethnographic resource to many Native Hawaiians. Significant characteristics of the site include its quiet setting that allows Native Hawaiians to continue conducting traditional ceremonies.
Nāhuku (Thurston Lava Tube) Cultural Landscape	District, Cultural Landscape	Eligible	The Nāhuku Cultural Landscape (Thurston Lava Tube) is significant for its role in the development of tourism at Hawai'i Volcanoes National Park and the Hawaiian Islands. The identification of the lava tube in 1912 and its popularity as a visitor destination drew attention to the site as the Park was being established. The Thurston Lava Tube complex is also significant in the history of volcanology, allowing scientists and visitors to experience the

Property Name	Property Type	Eligibility Status	Significant Characteristics
			effects of volcanic activity at close range. Furthermore, features of the Thurston Lava Tube complex are significant for the association with the history of NPS design and construction and the NPS Rustic style. Certain features, such as stone walls and steps, constructed with native materials, are associated with the work of the CCC. Other improvement campaigns are related to Mission 66 goals. The Thurston Lava Tube complex is also contributing to the National Register-nominated Crater Rim Drive Historic District. Significant characteristics of the district include its rustic architecture, natural design, association with the CCC and Mission 66, and association with tourism.
Nāmakaniāpaio Cabin Camp District	District	Eligible	The Nāmakaniāpaio Cabin Camp District is a campground built in the 1960s that contains rustic cabins, camp sites, comfort stations, and picnic areas. It is significant due to its construction and design as part of the Mission 66 program and as a rare example of Hawaiian Mission 66-style architecture. Significant characteristics of the district include its rustic design and its association with camping and the Mission 66 program.
1877 Volcano House (Old Volcano House No. 42)	Building	Listed	The 1877 Volcano House (Old Volcano House No. 42) is a one-story building built in 1877 that formerly served as a hotel for visitors of Kīlauea Volcano. It is significant for its association with tourism and visitation within the Park and as an early representation of Western architecture in the area.
Piʻi Mauna Dump Site	Site	Unevaluated	The Piʻi Mauna Dump Site has not been formally evaluated, but it is a historic-age dump site encompassing approximately 450 square meters that contains a large rubble pile of old concrete, red clay fire bricks, boulders, metal fragments, and ceramics. Potential significant characteristics include the extant material culture remains.
Puna-Kaʻū Historic District	District	Listed	The Puna Kaʻū Historic District encompasses over 300 sites including village complexes, temple sites, cave shelters, petroglyph fields, and coastal trails. These sites are significant for their potential to yield information regarding Native Hawaiian socio-political religious systems, land use, and arts. The district encompasses land that is used for traditional practices. Significant characteristics include extant material culture and structure remains, trail alignments, and other evidence of prehistoric and historic land use.
Punaluʻu Heiau	Site	Unevaluated	The Punaluʻu Heiau is a Native Hawaiian temple constructed of heavy lava slabs. It is potentially significant for its association with Native Hawaiian rituals and culture. Potential significant characteristics include the heiau's materials and quiet setting.

Property Name	Property Type	Eligibility Status	Significant Characteristics
Punalu'u Springs	Site	Unevaluated	The Punalu'u Springs, also referred to as "Queen's Bath," is the location of a natural spring associated with Native Hawaiian culture. It was covered by lava flows in the 1980s and 1990s. Potential significant characteristics include the site's quiet, natural setting.
Pu'uloa Petroglyphs	Cultural Landscape	Eligible (and contributing feature to the Puna-Ka'u Historic District)	Pu'uloa is a very sacred and religious place for many of the people of Hawai'i and has been used ritually for over 500 years. It is the largest petroglyph field in the state. There are more than 23,000 petroglyph images, mostly <i>poho</i> (cupules, or depressions) in which a portion of the umbilical cord of a newborn was placed to ensure a long life. Motifs of circles, other geometric designs, as well as cryptic designs of human representations known as anthropomorphisms, canoe sails, and even feathered cape motifs can all be found in this dense concentration. Significant characteristics of the cultural landscape include the petroglyph designs and configurations.
Rain Shed, Building 43	Building	Eligible	The Rain Shed, Building 43 is eligible for its design and engineering. The water collection system is an example of how water supplies were developed in areas lacking wells and how the collection technology changed over time. The water collection system was an essential element in the development of the Park. Significant characteristics of the building include its extant historic materials from the period of significance, such as its corrugated metal siding and roof, and its engineering.
Volcano Residential District	District	Eligible	The Volcano Residential District encompasses several residences in Volcano Village, located just east of the Park, that were constructed prior to World War II. The district is significant for its architecture and design. Significant characteristics of the district include its location and near Hawai'i Volcanoes National Park, its architecture, and its secluded and forested setting.
Whitney Seismograph Vault No. 29	Building	Listed	The Whitney Seismograph Vault No. 29 is an underground room constructed in 1912 that housed the study of volcanic and seismic activity at Kilauea and Mauna Loa by American scientists between 1912 and 1961. The above-ground portion of the vault consists of a free-standing, reinforced concrete pier. The building is significant for its association with the history of the study of volcanic and seismic activity in the area. Significant characteristics of the vault include its location and association with Kilauea.
Wilkes Campsite	Site	Listed	Wilkes Campsite is the location and remains of an 1840-1841 expedition by American scientists on the summit of Mauna Loa. It is significant for its association with military history and the history of scientific study on the island as well as for its association with Lieutenant Charles Wilkes, the leader of the expedition. It is also significant in the areas of transportation and engineering. The campsite's secluded location at Mauna Loa, volcanic setting, and extant remains of the campsite are all significant characteristics.

Property Name	Property Type	Eligibility Status	Significant Characteristics
World War II Scrape Mounds (Kīlauea Airfield Study Areas)	Site	Eligible	The World War II Scrape Mounds were the result of efforts by the CCC and the U.S. military to destroy the two airfields and any other potential landing site for Japanese military aircraft after the Pearl Harbor attack. The features were generally caused by a 1.5-meter bulldozer bucket that was used to create mounds and depressions across the landscape. The mounds are significant due to their association with the CCC personnel efforts to deny use to the airfields, World War II in Hawai'i, and their information potential. Significant characteristics include the extant remains of the scrape mounds and depressions.