FEDERAL AVIATION ADMINISTRATION AND

U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE

FINDINGS OF NO SIGNIFICANT IMPACT/RECORD OF DECISION

AIR TOUR MANAGEMENT PLAN FOR HAWAIʻI VOLCANOES NATIONAL PARK, HAWAIʻI

I. Introduction

This document serves as the Federal Aviation Administration's (FAA) and the National Park Service's (NPS) (collectively, the agencies) Findings of No Significant Impact/Record of Decision (FONSIs/ROD) and provides final agency determinations and approvals for the federal actions necessary to implement the Air Tour Management Plan (ATMP) for Hawaiʻi Volcanoes National Park (Park) in the State of Hawaiʻi, in accordance with the National Parks Air Tour Management Act (the Act), as amended, its implementing regulations (14 CFR Part 136), and all other applicable laws and policies. This FONSIs/ROD is based on the information and analysis contained in the attached final Environmental Assessment (EA), dated December 19, 2023. This final EA has been prepared in accordance with the National Environmental Policy Act (NEPA), its guidelines and requirements set forth by the Council on Environmental Quality (CEQ), the FAA's NEPA implementing regulations, and the Department of the Interior's implementing regulations.

This FONSIs/ROD includes the applicable background information, which is provided in more detail in the final EA and ATMP; identifies the proposed action; identifies the purpose and need for the proposed action; summarizes the alternatives considered in the final EA and their environmental consequences as found in the final EA; identifies the Preferred Alternative; provides the agencies' separate findings of no significant impact; explains the agencies' compliance with laws that apply to the action, in addition to NEPA and the Act; identifies any changes from the draft ATMP to the final ATMP; explains the basis and justification for the decision made by the agencies; and provides the agencies' joint decision and the FAA's final order.

II. Description of the Park

The Park is on the southern end of the Island of Hawaiʻi, the southernmost island of the Hawaiian Archipelago. The Park was established by Congress on August 1, 1916, as Hawaii National Park (subsequent legislation separated Hawaiʻi Volcanoes National Park and Haleakalā National Park). The Park protects approximately 354,461 acres of public land, which includes some of the most unique geologic, biologic, and cultural landscapes in the world.

The Park protects and interprets the largest and most continuously active shield volcanoes in the United States and provides the best physical evidence of island building processes that

continue to form the 2,000-mile-long Hawaiian archipelago. Extending from sea level to the summit of Mauna Loa at 13,677 ft., the Park encompasses the summits and rift zones of two of the world's most active shield volcanoes—Kīlauea, representing the newest land in the Hawaiian Islands chain, and Mauna Loa, the largest volcano in the world. The Park's active volcanoes serve as a living laboratory for scientific investigations that began more than a century ago and continue to advance global understanding of volcanic processes, while providing opportunities for visitors to approach and experience active volcanic eruptions including fountains, fissures, and flows.

The Park plays a unique role in preserving and interpreting the history of human development on the Hawaiian Islands and remains an important home to living cultures in Hawai'i. Over five centuries before the establishment of the Park, Native Hawaiians lived, worked, and worshipped on this sacred ground. Volcanic landscapes and all active flows and products of eruptive events are the representation of Pelehonuamea, deity of Hawaiian volcanoes. The entire Park landscape and all of its inhabitants and features, including the sky as a layered extension of the landscape, are sacred to Native Hawaiians, particularly Halema'uma'u Crater (home of Pelehonuamea), Mauna Loa's Moku'āweoweo caldera (a focal point for the greater Hawaiian relationship to the universe-stars, sun, moon), and mauka forested areas. Later, in the 18th, 19th and early 20th centuries, adventurers, explorers, scientists, philanthropists, and individuals also left their mark on the landscape. Today, ancient villages, petroglyphs, stone walls, and footpaths remain between massive lava flows. Historic housing districts, historic structures, and historic roads dot the developed corridors of the Park, together revealing the diverse cultures and history that have been, and continue to play, an integral role on this landscape.

While Kīlauea and Mauna Loa are the primary features of the Park and the principal reason for its establishment, this volcanic topography also supports one of the most fascinating biologic landscapes in the world, sustaining highly diverse populations of plant and animal communities across seven ecological life zones. Located more than 2,000 miles from the nearest continent, Hawaiian plants and animals have evolved in almost complete isolation for the past 30 million years. As a result, more than 90% of the native terrestrial flora and fauna in Hawai'i are endemic to this small archipelago. The Park provides habitat for 62 federally listed endangered or threatened species, many of which are noise sensitive avian species, and nine species that are proposed for listing. Included among these species are the nēnē (Hawaiian goose), 'i'iwi, and 'āhinahina (Mauna Loa silversword). Considering this diversity of life and its distinction on the planet, the Park is both a laboratory for the study of biogeography and evolution within the Pacific Islands and a cornerstone for recovery of native Hawaiian species found nowhere else in the world.

The Park encompasses the largest and most ecologically diverse Wilderness in the Pacific Islands. The Park contains 123,100 acres (official deeded acreage) or 130,950 acres (GIS estimate of acreage due to lava flows and recent land acquisitions) federally designated as

Wilderness and 7,850 acres designated as potential Wilderness in 1978. In 2012, the NPS determined an additional 121,015 acres to be eligible for preservation as Wilderness in the Kahuku Unit, and it is therefore managed as Wilderness. There are an additional 19,201 acres of the Park that have not yet been evaluated for Wilderness eligibility and will be managed as Wilderness until evaluation is completed. In 1980, Hawai'i Volcanoes and Haleakalā National Parks were jointly designated as "Hawaiian Islands International Biosphere Reserve" by United Nations Educational, Scientific and Cultural Organization (UNESCO). Seven years later, in 1987, the Park was inscribed on the UNESCO World Heritage List. Very few areas in the United States and the world are designated as both a UNESCO Biosphere Reserve and a UNESCO World Heritage Site.

The purposes of the Park are to protect, study, and provide access to Kīlauea and Mauna Loa, two of the world's most active volcanoes, and perpetuate endemic Hawaiian ecosystems and the traditional Hawaiian culture connected to these landscapes. One of the principal reasons for its establishment by Congress is that the volcanic topography creates large variations in precipitation that, in turn, sustain incredibly diverse populations of plant and animal communities across seven ecological life zones.

III. Background

The final EA and final ATMP include relevant background information in more detail than is summarized below. Both documents, together with their appendices, are incorporated by reference. 40 CFR 1501.6(b).

A. The National Parks Air Tour Management Act

The Act requires that all commercial air tour operators conducting or intending to conduct a commercial air tour operation over a unit of the National Park System apply to the FAA for authority to undertake such activity. 49 U.S.C. § 40128(a)(2)(A). The Act, as amended, further requires the FAA, in cooperation with the NPS, to establish an ATMP or voluntary agreement for each park that did not have such a plan or agreement in place at the time the applications were made, unless a park has been otherwise exempted from this requirement. *Id*. § 40128(b)(1)(A). The objective of an ATMP is to "develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations upon the natural and cultural resources, visitor experiences, and tribal lands." *Id*. § 40128(b)(1)(B)). An ATMP "may prohibit" commercial air tour operations over a park in whole or in part, or "may establish" conditions for the conduct of commercial air tour operations over a park. *Id*. § 40128(b)(3)(A)-(B). The need for implementation of any measures taken in an ATMP must be justified and documented in the ATMP and with a record of decision. *Id*. § 40128(b)(3)(F).

As a threshold matter, the agencies needed to define what constitutes a commercial air tour so that they could implement the requirements of the Act. As relevant here, FAA 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:
>
> (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]
>
> (ii) Less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary).

14 CFR § 136.33(d). This area is referred to as the ATMP planning area in the draft and final EAs, and as the ATMP boundary in the draft and final ATMPs. This FONSIs/ROD uses the terms ATMP boundary and ATMP planning area interchangeably.

Because Congress understood that developing ATMPs that meet the requirements of the Act could take some time, the Act provided that prior to the establishment of an ATMP, the FAA "shall grant interim operating authority" to existing air tour operators that apply for prospective operating authority. 49 U.S.C. 40128(c)(1); H.R. Rep. No. 106-167, at 96. The interim operating authority (IOA) issued was required to be the greater of the number of commercial air tour flights over the park during the 12-month period prior to the enactment of the Act or the average number of commercial air tour flights within the 36-month period prior to the enactment of the Act. 49 U.S.C. 40128(c)(2).

The Act was substantively amended in 2012. In addition to authorizing the agencies to enter into voluntary agreements with air tour operators in lieu of developing ATMPs, 49 U.S.C. 40128(b)(7)(A), the 2012 amendments added reporting requirements for operators conducting commercial air tour operations over National Park System units. *Id*. § 40128(d). The amendments also exempted parks with 50 or fewer commercial air tours from the requirement to prepare on ATMP or voluntary agreement, unless this exemption was withdrawn by the NPS. *Id*. § 40128(a)(5).

B. Past Efforts to Complete an ATMP for the Park

The previous planning process for an ATMP for the Park was initiated in 2003. In 2004, the FAA published a notice of the agencies' intent to prepare an EA for that ATMP.[1] Work on this planning process was ultimately paused due to the passage of the 2012 amendments to the Act which, as discussed above, included new operator reporting requirements and provided an exemption from the requirement to prepare an ATMP or voluntary agreement for parks with 50 or fewer commercial air tours per year. The planning process was formally terminated via a September 3, 2020 Federal Register notice.[2]

C. The Compliance Plan

In February 2019, a petition for a writ of mandamus was filed in the U.S. Court of Appeals for the District of Columbia in which the petitioners requested an order directing the FAA and the NPS to establish ATMPs or voluntary agreements under the Act for seven specified National Park System units within two years of such order. *In Re: Public Employees for Environmental Responsibility*, 957 F.3d 267, 271 (D.C. Cir. 2020). On May 1, 2020, the Court granted the petition, holding that agencies had a mandatory duty to establish ATMPs or voluntary agreements for eligible parks under the Act and that mandamus relief was warranted based on delay in performance of this duty and consideration of the relevant factors, *Id*. at 273; Per Curiam Order, May 1, 2020 (Mandamus Order). The Mandamus Order directed the agencies to submit, by August 31, 2020, a proposed plan for bringing all 23 eligible parks within the National Park System into compliance with the Act by completing an ATMP or voluntary agreement for those parks, within two years – or to offer "specific, concrete reasons" why it will take longer than two years. *Id*. The Court retained jurisdiction to approve the agencies' plan and monitor their progress and directed the agencies to submit quarterly progress updates.

Consistent with the Court's order, agencies submitted a proposed plan and schedule (Compliance Plan). In general, the Compliance Plan contemplated initiating and moving forward with a process to implement ATMPs at all eligible parks concurrently as part of a coordinated, omnibus effort. Hawai'i Volcanoes National Park was identified as requiring an ATMP or voluntary agreement and was included in the Compliance Plan which was subsequently approved by the D.C. Circuit on November 30, 2020.

---

[1] Environmental Assessments for the Air Tour Management Plan Program at Haleakalā National Park, Hawai'i Volcanoes National Park, Pu'ukoholā Heiau National Historic Site, Kaloko-Honokōhau National Historical Park, Kalaupapa National Historical Park, and Pu'uhonua O Honaunau National Historical Park, 69 Fed. Reg. 9,420 (February 27, 2004).

[2] Termination of Previously Initiated Processes for the Development of Air Tour Management Plans and Environmental Assessments/Environmental Impact Statements for Various National Park Units and Notice of Intent to Complete Air Tour Management Plans at 23 National Park Units, 85 Fed. Reg. 55060 (Sept. 3, 2020).

On June 21, 2022, the Court ordered the agencies to file a joint supplemental report and proposed firm deadlines for bringing each of the parks included in the Compliance Plan into compliance with the Act. On July 21, 2022, the agencies filed their report and provided a deadline of December 31, 2023 to complete an ATMP for the Park.

D. The Planning Process

As no ATMP had previously been implemented for any park at the time the agencies submitted their Compliance Plan to the Court, as an initial step in this process, the agencies worked collaboratively to determine the contents of and process for completing an ATMP that would be consistent with the Act. Together, they developed an ATMP template which could then be modified and tailored to meet the specific needs and address the unique circumstances of each park included in the planning process. Further, because air tours have been occurring over parks for decades, the agencies had institutional experience and data to draw upon in developing the ATMP template and in determining how to regulate commercial air tours over parks.

E. Existing Conditions of Air Tours within the ATMP Planning Area

Early in the planning process, the agencies worked to identify the existing condition of commercial air tours over the Park and outside of the Park but within ½-mile of the boundary (referred to as the ATMP planning area in the EA and as the ATMP boundary in the ATMP itself); i.e., the average number of commercial air tours conducted per year and the general operating parameters of those tours (see Table 1 and Figure 1 below). As stated above, the Act required the FAA to grant IOA to existing operators authorizing them to conduct commercial air tours within the ATMP planning area, as a temporary measure until an ATMP could be established. IOA includes only an annual cap on the number of commercial air tours that may be conducted by an operator but does not represent the actual number of air tours conducted and does not designate the route(s), time-of-day, altitude(s), or other conditions for such tours.

The agencies decided to use a three-year average of operator-reported air tours to identify the existing condition, rather than reports from a single year. In order to identify the three-year average, the agencies decided to use reported air tours from 2017, 2018, and 2019. These years were selected because they reflected relatively current air tour conditions, represented reliable operator reporting of air tours, accounted for variations across multiple years, were available during the planning effort, and excluded years that were atypical due to the 2020 COVID-19 pandemic. The requirement for commercial air tour operators to report annual commercial air tour operations to the agencies was implemented in 2013. Reporting data from 2013 and 2014 are considered incomplete as reporting protocols were not fully in place at that time and likely do not accurately reflect actual number of air tours conducted. Flight numbers from a single year were not chosen as the existing baseline because the three-year average accounts for both variation across years and takes into account the most recent

pre-pandemic years. Reporting data from 2020 was not used because the 2020 COVID-19 pandemic resulted in abnormalities in travel patterns across the U.S., which does not represent the conditions in a typical year. The agencies also decided against using 2021 and 2022 data due to continued abnormalities associated with the COVID-19 pandemic and the unavailability of reporting data for 2021 and 2022 during most of the planning effort. The agencies also decided against using IOA as the baseline because IOA was based on numbers reported by operators more than 20 years ago and does not represent the most current or reliable operational data.

Table 1 below depicts available reporting information regarding the number of commercial air tours conducted on an annual basis over the Park. In the period from 2017-2019, ten commercial air tour operators held IOA to fly up to a combined total of 26,664 commercial air tours per year over the Park. Since that time, two operators no longer hold IOA to conduct tours over the Park, and eight operators are currently authorized to conduct a combined total of 24,880 commercial air tours per year over the Park (see Table 1). Based upon the three-year average of reporting data from 2017 to 2019, the operators conduct an average of 11,376 commercial air tours per year which is approximately 46% of current IOA. The final EA used the three-year average as the existing condition of commercial air tours within the ATMP planning area.

F. Air Tour Operations

In order to identify the general operating parameters of the air tours, the FAA reached out to the current operators to identify current air tour routes and other operating conditions. The general route information provided by current commercial air tour operators for their air tour operations within the ATMP planning area is shown in Figure 1, which also depicts Automatic Dependent Surveillance-Broadcast (ADS-B) flight tracking data of likely commercial air tour operations over and adjacent to the Park. Likely commercial air tour operations are dispersed around the generalized routes provided by operators depicted on Figure 1. The ADS-B tracking data is more reflective of existing operations for various reasons including deviations that may occur due to weather. There are currently no route limitations on air tours and routes may change, depending on an operator's preference to change routes or fly higher or lower than they currently are flying.

Air tour operators authorized to fly below 1,500 ft. above ground level (AGL) (14 CFR Part 136, Appendix A, Special Operating Rules for Air Tour Operators in the State of Hawai'i) within the ATMP planning area must comply with requirements such as training and limitations set forth by the FAA in the 2008 FAA Hawai'i Air Tour Common Procedures Manual (Hawai'i Common Procedures Manual).[3] Minimum altitudes for commercial air tours within the ATMP planning area are flown in accordance with the Hawai'i Common Procedures Manual, from 500-1,500

[3] Hawai'i Air Tour Common Procedures Manual, FAA Document Number: AWP13-136A, 2008, https://www.faa.gov/media/69191

ft. AGL, weather dependent and contingent on location over the island. Refer to Figure 1 for details.

Table 1. Commercial Air Tour Operators, Aircraft Type, Reported Tours, and IOA

Operator	Aircraft Type	2013	2014	2015	2016	2017	2018	2019	2020	2017-2019 Avg.	IOA
Above it All Inc. (Sporty's Academy Hawai'i, Hawai'i Island Hoppers, Hawai'i Airventures, Benchmark Flight Center)	no data	0	0	0	0	0	0	0	0	0	3,878
Big Island Air Inc.	CE-337-T337H, CE-421-C (fixed-wing)	92	74	48	55	102	7	0	0	36	1,643**
Hawai'i Helicopters Inc. (Helicopter Consultants of Maui, Inc.)	AS-350-B2 (helicopter)	0	0	0	104	139	50	67	0	85	141**
Helicopter Consultants of Maui Inc. (Blue Hawaiian Helicopters)	AS-350-B2, EC-130-B4, EC-130-T2 (helicopter)	12,540	11,815	12,280	12,088	12,300	6,059	7,325	1,018	8,561	12,413
K&S Helicopters (Paradise Helicopters)	BHT-407-407, BHT-430-430, MD-369-D, MD-369-E (helicopter)	108	123	140	650	877	552	248	54	559	1,684
Manuiwa Airways Inc. (Volcano Helicopters, Volcano Heli-Tours)	no data	0	0	0	0	0	0	0	0	0	800
Mokulele Flight Service Inc. (Mokulele Airlines)	C208B (fixed-wing)	0	0	0	0	0	15	0	0	5	60
Safari Aviation Inc. (Safari Helicopter Tours)	AS-350-B2 (helicopter)	1,680	1,431	1,408	1,748	1,977	1,050	995	116	1,341	3,920
Schuman Aviation Company, Ltd. (Makani Kai Helicopters)	no data	0	0	0	0	0	0	0	0	0	25
Sunshine Helicopters Inc.	AS-350-BA, EC-130-B4 (helicopter)	990	984	769	844	1,125	600	641	62	789	2,100
TOTAL	--	**15,410**	**14,427**	**14,645**	**15,489**	**16,520**	**8,333**	**9,276**	**1,250**	**11,376**	**24,880**

Source: 2013-2020 Annual Reports, "Reporting Information for Commercial Air Tour Operations over Units of the National Park System." See: https://www.nps.gov/subjects/sound/airtours.htm.

** Operators who are no longer authorized to conduct commercial air tours over the Park as of 2023. IOA is not included in the total reflected across the eight operators currently operating over the Park.

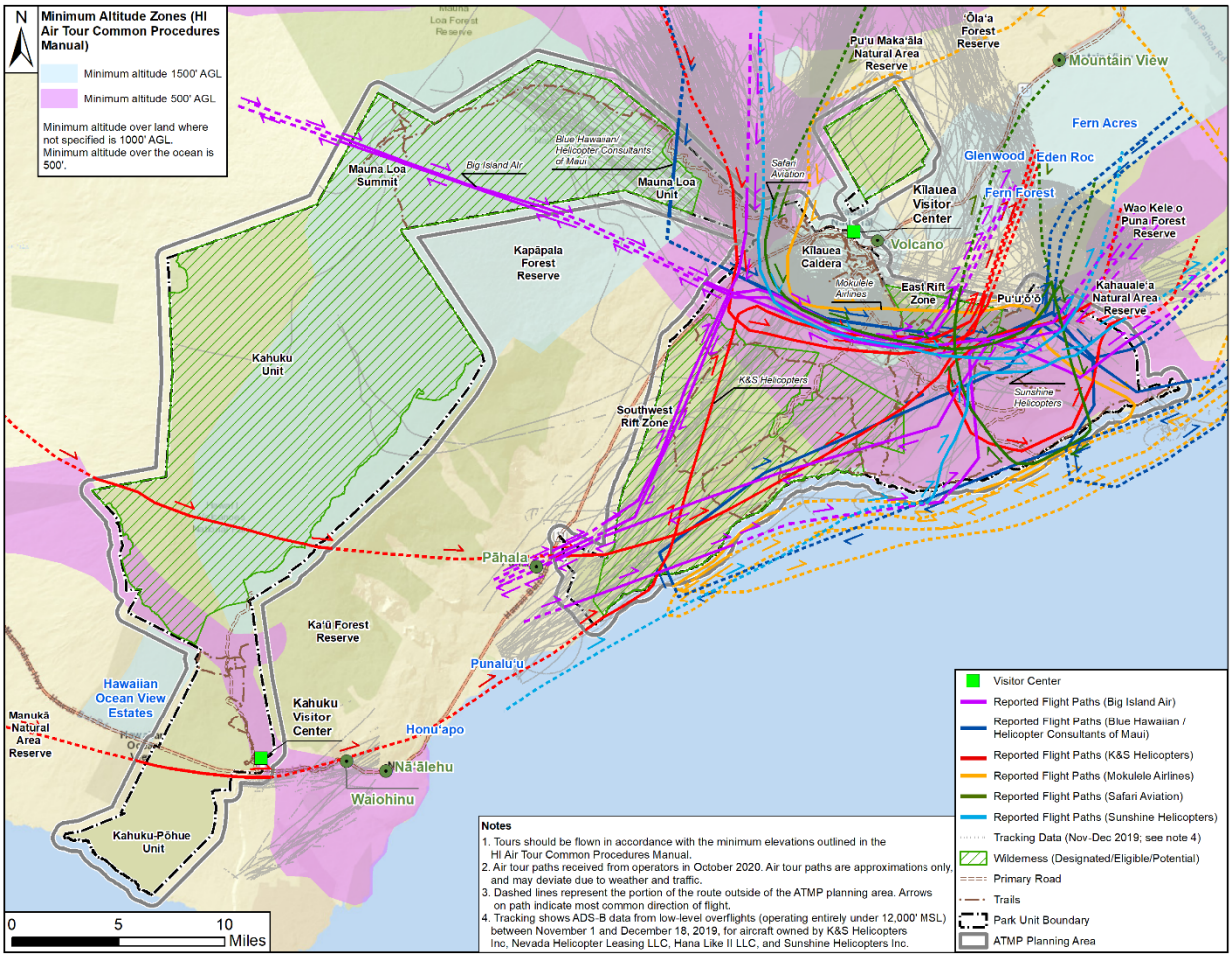

Figure 1. Current routes as reported by operators.

IV. Proposed Action

The proposed action is to implement an ATMP for the Park. The Act defines an ATMP as a plan used to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations upon natural and cultural resources, visitor experiences, and tribal lands. An ATMP describes conditions for the conduct of air tour operations over a park, including routes, altitudes, time-of-day restrictions, restrictions for particular events, maximum numbers of flights, or other provisions. The Act and implementing regulations found in 14 CFR Part 136 state that the ATMP for a park:

- May prohibit commercial air tour operations over a national park in whole or in part;
- May establish conditions for the conduct of commercial air tour operations, including, but not limited to, commercial air tour routes, maximum number of flights per unit of time, maximum and minimum altitudes, time-of-day restrictions, restrictions for particular events, and mitigation of noise, visual, or other impacts;

- Shall apply to all commercial air tour operations over a national park or within ½-mile outside the park's boundary;
- Shall include incentives (such as preferred commercial air tour routes and altitudes, relief from caps and curfews) for the adoption of quiet aircraft technology by commercial air tour operators conducting commercial air tour operations at the park;
- Shall provide for the initial allocation of opportunities to conduct commercial air tour operations if the plan includes a limitation on the number of commercial air tour operations for any time period;
- Shall justify and document the need for measures taken pursuant to the items above and include such justifications in the record of decision.

V. Purpose and Need

Purpose: The purpose of the ATMP is to comply with the Act and other applicable laws, consistent with the *Plan and Schedule for Completion of Air Tour Management Plans at Twenty-Three Parks* approved by the U.S. Court of Appeals for the District of Columbia Circuit on November 20, 2020, in Case No. 19-1044, *In Re Public Employees for Environmental Responsibility and Hawai'i Coalition Malama Pono* (Compliance Plan).

Need: The Act requires an ATMP or voluntary agreement to be developed for the Park. Air tours have the potential to impact natural and cultural resources, Native Hawaiian sacred sites and ceremonial areas, Wilderness character, and visitor experience. The Act requires that the FAA and the NPS develop acceptable and effective measures to mitigate or prevent significant adverse impacts, if any, of commercial air tour operations on natural and cultural resources, Native Hawaiian sacred sites and ceremonial areas, Wilderness character, and visitor experience.

VI. Alternatives

Prior to public scoping, the preliminary ATMP alternatives were developed by an NPS interdisciplinary team comprised of subject matter experts from the NPS's Natural Sounds and Night Skies Division, Environmental Quality Division, Pacific West Regional Office, and the Park. In developing the alternatives, the team considered the noise impacts of existing air tour routes and operations, the Park's cultural and natural resources, Native Hawaiian sacred sites and ceremonial areas, the Park's existing and natural acoustic environment, and visitor experience, as well as potential protective measures that could be included in an ATMP. The interdisciplinary team also considered input received during past ATMP planning efforts and Park-specific planning and management documents. The alternatives identified by the NPS and justifications for restrictions on commercial air tours were reviewed by the FAA, including the FAA's local Flight Standards District Office (FSDO) who noted any aviation safety concerns.

The FAA, in coordination with the NPS, initiated consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA), including consultation with Native Hawaiian Organizations and individuals. The input from consultation and preliminary environmental analysis was used to further refine or dismiss potential alternatives prior to the public scoping period.

On February 28, 2022, the FAA and the NPS initiated a NEPA public scoping process. Four alternatives were presented during scoping as defined in the Public Scoping Newsletter (refer to Appendix J of the EA). Scoping was conducted by an interdisciplinary team of NPS and FAA planners, scientists, cultural resource specialists, and managers. The agencies notified the public of the scoping period through a press release, posting notice on the Park's website and social media, and sending emails and hard copy mailings to the Park's civic engagement stakeholder list and congressional officials. In addition, Park staff responded to media inquiries and requests for interviews. Comments were accepted from February 28 through April 1, 2022. The agencies posted a newsletter describing the potential alternatives to the NPS Planning, Environment, and Public Comment (PEPC) website at the start of the scoping period and attached the newsletter to the notification emails and hard copy mailing notifications. The newsletter on potential alternatives provided a project introduction, the purpose and need for the project, resources for consideration in the environmental assessment, elements common to all alternatives, and an overview of four potential alternatives, including routes, altitudes, time-of-day restrictions, restrictions for particular events, maximum numbers of flights, or other provisions. The potential alternatives also included a justification for the provisions and conditions designed to protect Park resources and visitor experience.

The agencies received 957 correspondences, of which 22 were duplicates and eight were form letters. The agencies coded 1,449 comments by topic. Support air tours (246), benefits of air tours (135), and routes and altitudes (131) were the most common comment topics. Refer to Appendix J of the final EA, *Public Scoping Materials*, for more information.

A. Development of the Draft ATMP

In the development of the draft ATMP, the agencies considered modifications to the number of flights per year, routes, altitudes, restrictions for particular events, and other operating parameters that would meet the purpose and need for the ATMP.

The agencies considered but eliminated alternatives that would allow air tour operations at or above existing numbers, but these alternatives were eliminated from further study because the NPS determined they would result in unacceptable impacts to the Park's natural and cultural resources, Wilderness character, and visitor enjoyment, (NPS Management Policies 1.4.7.1, 2006), and do not meet the purpose and need for the plan. The agencies also considered but dismissed alternatives that would authorize fewer air tours than existing conditions but more than 1,565 annual air tour operations (estimated to be equivalent to five

per day on the 313 days when air tours would occur). However, these higher numbers of air tours per year would inhibit the NPS's ability to perpetuate traditional Hawaiian cultural connections to the Park's landscapes, impede the NPS's ability to fully meet the Park's purpose of perpetuating endemic Hawaiian ecosystems, and diminish the visitor experience and unreasonably interfere with Park programs, activities, and the atmosphere of peace and tranquility.

The agencies also considered an alternative that included a Northern Route, which was included as one of the four alternatives shared during public scoping (Public Scoping Alternative 3). During scoping, several commenters provided information about sensitive resources that would be overflown by the Northern Route included in that alternative. The NPS considered adjustments to the route which would avoid those sensitive resources, but ultimately found that they were unable to be avoided or minimized by adjusting ATMP route parameters. Therefore, the agencies dismissed Public Scoping Alternative 3 from further consideration because the alternative would not meet the objectives of the ATMP.

The agencies considered three alternatives in the draft EA for the draft ATMP. The draft ATMP released for public comment would limit the annual number of air tours within the ATMP planning area to no more than 1,565 tours per year and implement designated routes, altitudes, and time-of-day restrictions and reflected Alternative 3 in the draft EA. The draft ATMP developed by the NPS interdisciplinary team and justifications for restrictions on commercial air tours were reviewed by the FAA for aviation safety concerns. As noted in the plan, the pilot-in-command is always required to take action to ensure the safe operation of the aircraft.

B. Alternatives Considered in the EA

The comments received during the scoping process informed the alternatives included in the draft EA. As a result of the agencies' consideration of the comments received, the agencies refined the No Action Alternative to be the three-year average instead of the IOA, recognizing that IOA is not reasonably foreseeable. The agencies also dismissed Public Scoping Alternative 3 from further consideration. As a result of the comments received from the February 2022 public scoping period, the agencies also refined the time-of-day restrictions, restrictions for particular events, and training and education ATMP elements described in Public Scoping Alternative 4 based on public and stakeholder feedback. There were no changes made to Alternative 2 following public scoping.

The final EA, in Section 2, includes the three alternatives that were carried forward for analysis as well as a detailed description of the alternatives considered but eliminated from further study:

- **Alternative 1 (No Action Alternative).** The No Action Alternative would allow a continuation of air tours under IOA without implementation of an ATMP or voluntary agreement. The No Action Alternative represents the yearly average number of commercial air tours within the ATMP planning area from 2017-2019 (11,376 commercial air tours per year) across six operators that have reported conducting commercial air tours over the Park during this period. The No Action Alternative provides a basis for comparison but is not a selectable alternative because it does not meet the purpose and need for the ATMP and is not in compliance with the Act. The impacts of the number of air tours authorized under IOA are not analyzed nor included in the baseline condition. Section 2.4 of the final EA provides a more detailed description of Alternative 1.
- **Alternative 2.** Alternative 2 would prohibit air tours within the ATMP planning area. Except when necessary for safe operation of an aircraft as determined under Federal Aviation Regulations requiring the pilot-in-command to take action to ensure the safe operation of the aircraft, or unless otherwise authorized for a specified purpose, commercial air tours would not be allowed to enter the ATMP planning area. Alternative 2 would provide the greatest protection for the purposes, resources, and values of the Park. Section 2.5 of the final EA provides a more detailed description of Alternative 2.
- **Alternative 3 (Preferred Alternative).** In general, under Alternative 3, the ATMP would:
    - Authorize up to 1,548 commercial air tours per year within the ATMP planning area, provide an initial allocation of commercial air tours to each operator based on the proportion of their average number of air tours they flew annually from 2017-2019 compared to all operators that reported flying over the Park during that period, and set a daily maximum number of air tours that each operator may conduct.
    - Set minimum altitudes depending on location within the ATMP planning area and direction of flight with exceptions for emergency situations.
    - Designate three air tour routes that avoid the summit of Kīlauea, key cultural and visitor use areas, and designated Wilderness: the Coastal Route; the Puʻuʻōʻō Route; and the Kahuku Route.
    - Prohibit hovering, loitering and circling on the Kahuku Route and the Coastal Route, while limiting hovering, loitering and circling on the Puʻuʻōʻō Route and in the Puʻuʻōʻō quiet technology zone to no more than a minute in a given location and five minutes total per air tour.

- Set time of day restrictions under which air tours may only operate from 10:00 AM to 2:00 PM unless they are flown using aircraft that qualify for the quiet technology incentive.
- Set Sundays as a weekly no-fly day, set 8 annual no-fly days, and provide for the establishment of additional no-fly periods by the NPS for Park management or special events, including Native Hawaiian events, with advance notice to the operators.
- Authorize specific types of aircraft to be used on air tours and specify that any new or replacement aircraft must not be noisier than the authorized aircraft.
- Establish quiet technology incentives, including: setting Wednesdays as a quiet technology only day; expanding the hours during which air tours may be conducted that use quiet technology aircraft; setting a quiet technology zone in which air tours may only be conducted using quiet technology aircraft.
- Provide for operator training and education as well as annual meetings to which other stakeholders may be invited.
- Establish procedures to be followed in the event of an emergency landing inside the Park.
- Require operators to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted in the format requested by the agencies and in compliance with all applicable laws.
- Include safety requirements relating to in-flight communications.
- Allow for minor modifications to the ATMP through adaptive management, so long as the impacts of such changes have already been analyzed in previous environmental compliance.
- Outline a process for amending the ATMP.
- Provide information regarding the process for operators to apply for operating authority as a new entrant.
- Set forth a general process for conducting competitive bidding for air tour allocations, where appropriate.

Under all action alternatives, all IOA for the Park would terminate by operation of law 180 days after establishment (effective date) of the ATMP, after which time no operator could continue to rely on any Operations Specifications (OpSpecs) issued under IOA as authority to

conduct commercial air tours within the ATMP planning area. Additionally, under all action alternatives, OpSpecs that incorporate the operating parameters set forth in the ATMP would be issued by the FAA within 180 days of the establishment of the ATMP.

VII. Agency Actions and Approvals

The FAA and NPS actions, determinations, and approvals include the following:

- Approval of the Air Tour Management Plan (FAA and NPS)
- Issuance of implementing Operations Specifications (FAA)

VIII. Environmental Impact Categories Not Analyzed in Detail

The following environmental impact categories were considered but not analyzed in detail in the EA because the topics do not exist in the analysis area, would not be affected by the ATMP, or the likely impacts are not reasonably expected. Refer to Section 1.5 of the EA for a discussion of the following impact categories.

- Biological Resources (Fish, Invertebrates, and Plants)
- Children's Environmental Health and Safety Risks
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Farmlands
- Land Use
- Natural Resources and Energy Supply
- Visual Effects – Light Emissions
- Water Resources (Including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

IX. Affected Environment

Under the Act and its implementing regulations, an ATMP regulates commercial air tours over a national park or within ½-mile outside the park's boundary during which the aircraft flies below 5,000 ft. AGL (ATMP planning area). Air tours outside of the ATMP planning area are not subject to the Act and are therefore not regulated under the ATMP. The study area, referred to as the ATMP planning area, for each environmental impact category includes the Park and areas outside the Park within ½-mile of its boundary. Environmental impact categories that considered a study area different from the ATMP planning area are Cultural Resources, Wilderness, Environmental Justice and Socioeconomics, Visual Effects, and Department of Transportation (DOT) Act Section 4(f) Resources.

Detailed information regarding the affected environment with respect to each impact category analyzed in detail is presented in Chapter 3 of the final EA.

X. Environmental Consequences

The final EA analyzed the following environmental impact categories in detail: Noise and Noise-Compatible Land Use; Air Quality and Climate Change; Biological Resources; Cultural Resources; Wilderness; Visitor Use and Experience and Other Recreational Opportunities; Environmental Justice and Socioeconomics; Visual Effects; Coastal Resources; and DOT Act Section 4(f) Resources. The FAA, in cooperation with the NPS, considered the impact categories specified in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* (FAA, 2015) and NPS Director's Order #12, Conservation Planning, Environmental Impact Analysis, and Decision-making, and other categories identified during the agency and public scoping process. See Section 1.5 of the EA, Environmental Impact Categories Not Analyzed in Detail. Section 3 of the final EA and the agencies' separate Findings of No Significant Impact sections below provide more detailed descriptions and analysis of the environmental impact categories that could potentially be affected by the proposed action.

A. The NPS's Finding of No Significant Impact under NEPA

A description of all potential environmental effects associated with the selected action/final ATMP and other alternatives are included in the final EA, incorporated by reference herein. *40 CFR 1501.6(b).*

Consistent with CEQ regulations § 1501.3(b), the NPS evaluates the significance of the selected action/final ATMP, which was Alternative 3/the Preferred Alternative, by evaluating the affected environment and the degree of effect of the action including effects on public health and safety and effects that would violate federal, state, tribal, or local laws protecting the environment. A description of the affected environment is described in Chapter 3 of the final EA and summarized above in Section II, Description of the Park (Affected Environment). The affected environment also includes lands outside the Park but within ½-mile of its boundary. This significance determination considers the effects of the selected action/ATMP. Per NPS policy, the NPS only completes a significance determination for the selected action and does not determine the significance of unselected alternatives. Here, the No Action Alternative would result in unacceptable impacts to Park resources and values which the NPS considers to be significant impacts under NEPA because they may lead to impairment and the NPS Organic Act prohibits the NPS from taking actions that would result in impairment of Park resources and values. 54 U.S.C. § 100101(a); NPS 2006 Management Policies § 1.4.7.1. The NPS's determination does not include a significance discussion for impacts under Section 4(f) since only FAA must comply with Section 4(f). Coastal resources are a separate impact category in the EA. Coastal resources are not separately discussed below. Impacts to coastal resources within the Park are evaluated under the more specific categories, i.e. Noise and

Noise-Compatible Land Use, Biological Resources, Cultural Resources, Visitor Use and Experience, etc. rather than under a separate broad discussion for coastal resources.

i. Degree of Effect

Alternative 3, the selected action/final ATMP, will result in long-term beneficial effects to Park resources and the visitor experience at the Park. As disclosed in the EA, the selected action will reduce the intensity of noise in the Park and move the Park closer to natural ambient conditions. As described in the non-impairment determination, Attachment B, effects will continue to occur from air tours authorized under the ATMP boundary, but the effects will not be significant, nor rise to the level of impairment.

a. Park Soundscape (Noise and Noise-Compatible Land Use)

Under current conditions, commercial air tours may be audible throughout 46% of the Park for up to an hour a day (non-continuous). Approximately 27% of the Park experiences audible air tour noise for more than two hours a day (non-continuous). Across 3% of the Park, air tour noise is audible for five hours or more per day (300 minutes). Air tours are audible in 82% of the Park (Figure 9, *Noise Technical Analysis*, Appendix F of the EA). The agencies modeled the extent and duration of noise above 35 decibels, A-weighted (dBA), the level at which wildlife may experience disturbance, and 52 dBA, the level at which speech is interrupted, to determine the severity of the effects from commercial air tours. The modeling demonstrated that noise at or above 35 dBA would be expected up to 120 minutes a day in a very small area to the northwest of Puʻuʻōʻō (location point 9) and noise above 52 dBA is expected up to approximately 19 minutes per day at the loudest location, Cone Peak (location point 5) under current conditions (Figure 10, *Noise Technical Analysis*, Appendix F of the EA).

The ATMP limits the number of commercial air tours to 1,548 per year, designates routes and altitudes for those air tours, establishes up to 60 no-fly days per year, limits flights to certain hours each day, and includes a quiet technology incentive. Thus, under the ATMP, the overall duration, extent and intensity of air tour noise will be substantially less than current conditions. Noise modeling for the ATMP discloses that noise from 1,548 annual commercial air tours will remain audible throughout the Park on days commercial air tours will be allowed, but the noise will be at a low intensity and for a limited duration. The ATMP limits the number of air tours per day per operator, such that on most days only five air tours would occur, and on other days six or seven air tours may occur. Under the ATMP, eight air tours could occur only one day per year. This restriction limits the frequency of air tour noise on days air tours are allowed. On a standard day, air tour noise will be audible in 66% of the Park for up to one hour a day (Figure 12, *Noise Technical Analysis*, Appendix F of the EA). Approximately 25% of the Park will experience noise above 35 dBA for no more than 15 minutes a day during a standard day. Noise above 35 dBA would occur between 30-45 minutes (non-continuous) in approximately 1% of the Park and will not exceed 45 minutes at any location in the Park (Figure 13, *Noise Technical Analysis*, Appendix F of the EA). Noise at

35 dBA is considered low intensity noise. Under the ATMP, air tour noise will not exceed 52 dBA, the level at which speech is interrupted, for more than six minutes (non-continuous) at eight of the modeled location points, while air tour noise will not exceed 52 dBA at the remaining 27 location points within the Park (Table 8, *Noise Technical Analysis*, Appendix F of the EA). Noise will reach these levels under and adjacent to the designated routes, but the intensity of noise dissipates in locations further away from the designated routes. Thus, while air tour noise will be audible in most of the Park during a standard day, that noise will be very limited in intensity and of a short duration and will not be a significant impact on Park resources and visitors. The heart of the Park, including the summit of Kīlauea, Mauna Loa, the majority of designated Wilderness areas, and key cultural and visitor use areas, would be free of commercial air tours.

Additional measures to reduce impacts from the commercial air tours include up to 60 air tour free days, and on most days, only five air tours would occur (no more than eight air tours can occur on any day). Air tour noise would only occur during limited hours of the day and would be short in duration. Based on the measures described, most areas would only have noise from air tours that is low intensity, and some areas would have no noise. Therefore, there will be no significant noise effects from the air tours authorized by the ATMP, and there would be beneficial impacts compared to current conditions.

b. Wildlife and Wildlife Habitat (Biological Resources)

Many of the impacts to other Park resources from air tours are directly a result of noise. The NPS considered the effects of air tour noise on wildlife and wildlife habitat, including the endemic mammals and bird species of the Park. As disclosed in the final EA, the NPS considers, based on existing literature, noise levels above 35 dBA to have the potential to result in effects to wildlife. The analysis demonstrates that on a standard day, commercial air tours would result in noise levels above 35 dBA for 30 to 45 minutes (non-continuous) in 1% of the Park, while approximately 71% of the Park would experience no noise above 35 dBA during a standard day. Additionally, as noted above, air tours would not occur on up to 60 days each year and would be limited to only four hours a day for non-quiet technology aircraft (and eight hours a day for those who qualify for the quiet technology incentive) on days they are allowed, providing sufficient days for research and education opportunities for wildlife to be uninterrupted by air tour noise, including times of dawn and dusk.

Further, the agencies concluded, and the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concurred, that the commercial air tours authorized by the ATMP may affect but are not likely to adversely affect threatened and endangered species in the Park[4] (*Section 7 Consultation*, Appendix H to the EA). This determination supports the conclusion that while noise from air tours authorized under the ATMP may have some

[4] "May affect, but not likely to adversely affect" means that all effects are beneficial, insignificant, or discountable.

ongoing effect, there will be no take of endangered species as a result of implementation of the ATMP.

In summary, the noise from air tours authorized under the ATMP is limited in intensity and duration. These impacts will not result in take of listed species under the Endangered Species Act. Thus, there will be no significant impacts to wildlife or wildlife habitat from the air tours authorized by the ATMP. Additionally, the ATMP will result in an overall reduction in noise from air tours which will beneficially impact wildlife and wildlife habitat, compared to current conditions.

c. Cultural Resources

The EA also evaluated the effects to cultural resources within the Park, including ethnographic resources, sacred sites, traditional cultural properties (TCP), archeological resources, cultural landscapes and prehistoric and historic structures. Native Hawaiians have consistently noted that air tours persistently and unreasonably interfere with the silence needed to perform ceremonies conducted by Native Hawaiian practitioners at these sacred sites, which rely on hearing natural sounds (refer to Section 3.4.2 of the EA). Air tours currently impact the Park's historical, architectural, and archeological resources, including cultural landscapes, and prehistoric and historic structures when air tour noise and visual effects detract from the feeling and setting of those resources.

Under the ATMP, the potential for impacts to cultural resources and Native Hawaiian activities would be greatly reduced compared to current conditions since, as described above, the frequency, duration, and intensity of noise from air tours will be greatly reduced. The ATMP limits the duration, frequency, and intensity of these impacts providing opportunities for silence without noise from commercial air tours. Up to 60 days of the year will be completely free of commercial air tours, and on those days when commercial air tours do occur the intensity of noise is very low over most of the Park. On days when air tours are allowed, there will likely be between four and eight air tours. The air tours must occur within a four-hour window for non-quiet technology aircraft (and eight hours a day for those who qualify for the quiet technology incentive), providing times of the day when no air tour noise can intrude on cultural activities. The ATMP designates eight no-fly days that are culturally important and intended to mitigate impacts on cultural practitioners. In addition, the NPS may designate additional days or periods to be air tour free to preserve the natural quiet necessary for ceremonies or other practices by providing two months' notice to the operators. Additionally, while air tours may be audible in many locations in the Park, the duration and intensity of noise in most locations is very limited. In 71% of the Park, noise will not exceed 35 dBA; while approximately 25% of the Park will experience noise above 35 dBA for no more than 15 minutes a day. Further, restricting air tours to designated routes limits noise and visual effects to many sacred sites and ethnographic resources within the Park, including the Moku‘āweoweo Caldera, Kīlauea Crater, and many contributing resources to the Hawai‘i Volcanoes National Park TCP. To understand how specific cultural resource sites may be

impacted, see the *Noise Technical Analysis* (Appendix F to the final EA). The designation of no-fly days, routes, altitude restrictions and other ATMP parameters were designed specifically to mitigate impacts to these important Park resources, and to the opportunity for traditional cultural use, which is one of the Park's fundamental resources.

In summary, there will be no significant impacts to cultural resources in the Park from the air tours authorized under the ATMP because there are a substantial number of days (approximately 60) when air tours will not occur, the times of day during which air tours could occur are limited (no more than eight hours), and when air tours do occur the intensity of noise is low and the duration of noise is short, and the designated routes avoid many of the sacred and noise sensitive areas in the Park. Additionally, compared to current conditions, there will be beneficial impacts to cultural resources in the Park under the ATMP. Finally, the FAA determined and NPS concurred that the ATMP would not have an adverse effect on historic properties under Section 106 of the National Historic Preservation Act, discussed more fully in Section XIII(B) below.

d. Viewsheds (Visual Effects)

Within the Park, visual resources can be related to the Park's geologic features, including lava flows, craters, coastal areas, mountains, and other natural scenic areas, such as forests, coastal plains, and grasslands, and are often tied to visitor use and ethnographic resources. Visitor overlook areas along Chain of Craters Road and Crater Rim Drive currently experience the heaviest concentrations of commercial air tours flying directly overhead. These are also among the most heavily visited areas of the Park. Currently, air tours disrupt scenic views within the Park an average of 31 times per day, with a maximum of 90 disruptions a day on peak days (refer to Section 3.8.2 of the EA).

Under the ATMP, there will be fewer disruptions of air tours to the Park's viewsheds resulting in beneficial effects to viewsheds compared to current conditions. Air tours conducted within the ATMP boundary under the ATMP may disrupt a viewshed five times a day on most days when they are allowed, but up to a maximum of eight times per day on one day a year. Some visitors may experience multiple disruptions in one day from air tours depending on where they are and what they are doing, however those disruptions will be short in duration for only as long as the tour passes through the viewshed. The ATMP limits the impacts of these air tours by designating routes that avoid most scenic points of interest and overlooks. Under the ATMP, commercial air tours along an authorized route could be visible from the Park's coastal areas, but they would avoid most other scenic points of interest or overlooks. Because the ATMP includes daily limits on air tours by operator such that on most days when tours are allowed air tours would occur five times per day, limits the hours in which air tours may disrupt the viewshed, limits those tours to routes not visible from most scenic points of interests and overlooks, and the disruption is short in nature, there are no significant impacts to the Park's viewsheds from the ATMP and compared to current conditions, the viewsheds in the Park would improve.

e. Air Quality and Climate Change

The Park is a designated Class I Airshed, which means that it is afforded the highest degree of protection. Air quality within the Park is affected by several emission sources, primarily from Kīlauea volcano. Emissions of sulfur dioxide (SO_2) and other gases from Kīlauea chemically interact with sunlight, oxygen, water, and dust to form acidic volcanic smog or "vog." Vog creates a haze that obscures visibility and can contribute to acid rain that can degrade human health, natural resources, and cultural resources. In addition to vog, another source of volcanic activity that affects air quality is known as laze, which is created when hot lava reaches sea water and forms large clouds of mist. Laze often contains hydrochloric acid and other airborne contaminants that impact human health. Commercial air tours within the ATMP boundary currently emit 1,851 metric tons (MT) of carbon dioxide (CO_2) per year (refer to Section 3.2.2 of the EA).

The EA included an air quality and climate change analysis which disclosed that 1,548 commercial air tours authorized under the ATMP (which is 17 less flights than what was modeled as part of the draft EA) contributes a minimal amount of emissions to the local air quality and would not have a regional impact (refer to Section 3.2.2 of the EA). Authorized air tours within the ATMP boundary would contribute less than 463 metric tons of CO_2 annually. Also, the ATMP's authorization of these air tours would not cause pollutant concentrations to exceed one or more of the national ambient air quality standards (NAAQS) for any of the time periods analyzed. Because the amount of emissions is so small, the ATMP impacts to air quality are not significant. Compared to existing conditions, the ATMP will result in beneficial impacts to air quality.

f. Visitor Use and Experience

Some Park visitors may hear noise from commercial air tours, which can degrade the visitor experience by disrupting verbal communications and masking the sounds of nature. Air tours also can detract from the visitor experience by interrupting the viewshed. Those impacts are described in more detail above under viewsheds. Noise from commercial air tours can disrupt visitors during interpretive and educational programs or while hiking or participating in other activities. Visitors respond differently to noise from commercial air tour overflights – noise may be more acceptable to some visitors than others. As described above, 27% of the Park currently experiences audible air tour noise for more than 120 minutes per day (non-continuous) and 82% of the park experiences audible air tour noise. Under the ATMP, the frequency, duration and intensity of noise within the Park will be substantially reduced, which will result in fewer interruptions during Park programs and make it less likely that visitors experience noise while visiting the Park. Specifically, under the ATMP, air tour noise will not exceed 52 dBA, the level at which speech is interrupted, for more than ten minutes (non-continuous) at any of the modeled location points within the Park on any day when air tours are allowed (Tables 8 and 9, *Noise Technical Analysis*, Appendix F to the EA). Furthermore, most locations within the Park will have no air tour noise above 52 dBA. Thus, Park programs

are unlikely to be interrupted and if interruptions occur, they will be short in duration. Additionally, there will be approximately 60 days a year when visitors will not see or experience noise from air tours within the Park boundary, which may have a beneficial effect on many visitors. Compared to current conditions, Park visitors will be less likely to see or experience noise from air tours during their visit which will improve the scenic views from the Park as discussed above. Since the extent, frequency, duration, and intensity of noise is limited, there are no potentially significant adverse effects to visitor experience from the air tours authorized by the ATMP, and compared to existing conditions, visitor experience is expected to improve.

The ATMP would result in adverse but not significant impacts on some air tour patrons since the number of commercial air tours authorized in the ATMP would be less than current operations. Some potential air tour patrons may not be able to take an air tour over the Park because of the reduced number of authorized air tours authorized within the ATMP boundary. However, opportunities for air tours outside the ATMP boundary are not affected by the ATMP. Commercial air tour patrons represent a very small fraction of those who see the Park each year. The number of Park visitors on an annual basis is estimated to be 1.5 million. Additionally, air tours are only one of many ways for a person to experience the Park and many air tour patrons also visit the Park by ground as well.

g. Wilderness

Under existing conditions, multiple air tour routes fly over the Park's Wilderness which adversely impacts the Park's Wilderness character, including the natural quality of Wilderness and the opportunity for solitude. Currently noise from air tours adversely impacts Mauna Loa, East Rift, Great Crack, and Kaʻū Desert Wilderness units. Some air tours have been flown over the Kahuku and ʻŌlaʻa Wilderness units in the past. The noise modeling demonstrated that noise above 35 dBA currently occurs for greater than 120 minutes a day in certain areas of the Park, which includes some Wilderness areas and which detracts from the opportunity to experience natural quiet which necessary to experience solitude. Under the ATMP, on days when air tours occur, noise above 35 dBA would occur for less than 15 minutes a day in the Great Crack, East Rift, and Kaʻū Desert Wilderness units. This would occur during both a standard day and quiet technology-only day, though the spatial footprint of noise above 35 dBA in Wilderness would be smaller during a quiet technology-only day. The *Noise Technical Analysis* (EA Appendix F, Figure 12) shows that on standard days when air tours occur, the maximum time that air tours could be audible within Wilderness is less than 135 minutes a day (non-continuous) in the East Rift Wilderness unit. Other Wilderness units would experience audible air tour noise for less time. The ʻŌlaʻa Wilderness unit would experience approximately 200 fewer minutes of audible air tour noise per day on a standard day under the ATMP. Only portions of the Kahuku and Mauna Loa Wilderness units have portions of the Wilderness that would not experience audible air tour noise during a standard day. On quiet technology-only days, the total maximum time that air tours could be audible within

Wilderness is less than 120 minutes a day (non-continuous). All Wilderness units except the Mauna Loa unit would experience at least some audible air tour noise, and the spatial footprint of audible air tour noise is smaller in the Kahuku, Kaʻū Desert, and ʻŌlaʻa units on quiet technology only days as compared to standard days, and approximately the same spatial footprint of audible air tour noise for the Great Crack unit. This noise detracts from the opportunity for solitude and natural quality of Wilderness as it introduces sounds of human activity and therefore detracts from this quality of Wilderness character, although it would be substantially less than current conditions. Because there are days without air tour noise, and noise is limited in duration and frequency and intensity, there are no significant impacts to Wilderness character from the air tours authorized by the ATMP. Compared to current conditions, Wilderness character would improve substantially.

h. Environmental Justice and Socioeconomics

As described in the EA, in 2021, the air tour industry represented less than 1% of employment in Hawaiʻi County. Air tour operators in this area provide air tours over other sites besides the Park. The ATMP will result in lost revenue from air tours within the ATMP boundary. However, the ATMP does not prohibit operators from making up this revenue in other ways such as using their aircraft for other business ventures or conducting air tours elsewhere within the region. Also, the ATMP could result in some economic benefit to businesses within the study area that benefit from quieter noise levels and/or the absence of human-caused sounds, which may include Park visitation. Thus, it is expected that there would only be minor impacts on regional socioeconomics, including the community tax base, which may fluctuate in response to changes in the air tour industry. Therefore, there would be no significant socioeconomic impacts as a result of the ATMP.

Some environmental justice populations are present within the study area and currently experience the noise, air quality, and visual effects associated with air tours. The ATMP would result in a reduction in noise, air quality, and visual impacts compared to those currently occurring, and, therefore, would result in beneficial impacts to environmental justice populations within the study area. There would be no disproportionately high and adverse noise, air quality, or visual impacts to environmental justice populations and therefore no significant impacts.

i. Indirect Effects

Under the ATMP, air tour operators may shift routes or altitudes to outside the ATMP boundary, some of which could result in impacts to resources outside the ATMP boundary. It is difficult to predict with specificity if, where, and to what extent any air tours would be displaced to areas outside the ATMP boundary, including at altitudes at or above 5,000 ft. AGL. It is reasonably foreseeable that operators would continue to fly to points of interest outside of the ATMP boundary where they already fly and fly just outside of the ATMP boundary to view the Park. Operators may also offer new or increased tours to other points

of interest on the island. Specific routes, altitudes and numbers of air tours would be necessary to assess the noise and other potential indirect and cumulative impacts associated with reducing air tours within the ATMP boundary. Consistent with the CEQ regulations, NPS disclosed in the EA that specific air tour routes, altitudes, and numbers of tours are not available with enough specificity to assess noise and other potential indirect and cumulative impacts associated with the ATMP. However, it is unlikely that displaced air tours outside the ATMP boundary would generate noise at or above the yearly day-night average sound level (DNL, denoted by the symbol Ldn) of DNL 65 dB, which is the threshold that the FAA applies for determining the significance of noise impacts. The NPS does not have jurisdiction over air tours outside the ATMP boundary. For additional discussion see the EA, page 46-48 and Appendix F to the EA, *Noise Technical Analysis*, Section 8.

j. Effects on Public Health and Safety

The NPS does not anticipate any impacts to public health or safety within the Park from the selected action.

k. Effects that Would Violate Federal, State, or Local Law Protecting the Environment

The ATMP would not result in any effects that would violate federal, state, or local laws that protect the environment. The NPS and FAA have documented compliance with Section 106 of the National Historic Preservation Act, the Coastal Zone Management Act, and Section 7 of the Endangered Species Act. *See* Section XIII of this ROD and Appendices G, H, and K to the final EA. The NPS's Non-Impairment Determination is included as Attachment B. The ATMP, including Section 5.0, Justification for Measures Taken, and Section XV, Basis and Justification for the Decision, demonstrate how the agencies' decision to establish and implement the ATMP complies with the Act.

B. The FAA's Finding of No Significant Impact

In order for the FAA to make a finding of no significant impact, no impact category can have a significant impact. In determining significance, the FAA has identified thresholds that serve as specific indicators of significant impacts for some environmental impact categories. For those impact categories that do not have significance thresholds, the FAA has identified factors that are considered in evaluating the context and intensity of potential environmental impacts.

Of the impact categories discussed in detail in Chapter 3 of the final EA, the FAA has considered the significance threshold and/or significance factors for each applicable impact category. The following impact categories (Noise and Noise-Compatible Land Use, Air Quality and Climate Change, Biological Resources, and DOT Act Section 4(f) Resources) have thresholds that the FAA uses as specific indicators of significant impact and are described in a specific significance determination section below. Impact categories that do not have significance thresholds (Cultural Resources, Environmental Justice and Socioeconomics,

Coastal Resources, and Visual Effects) have factors considered in evaluating the context and intensity of potential environmental impacts and are discussed below in the specific impact category and are also included in the final EA, Table 16, *Summary of Environmental Consequences of the ATMP Alternatives*.

In addition, the FAA's determination does not include a significance discussion for impacts under Wilderness or Visitor Use and Experience and Other Recreational Opportunities as these are not impact categories in FAA Order 1050.1F.

i. Noise and Noise-Compatible Land Use

The impact analysis analyzed noise metrics consistent with both FAA and NPS noise guidance. The FAA's primary noise metric established in FAA Order 1050.1F is the yearly day-night average sound level (DNL, denoted by the symbol L_{dn}) metric; the cumulative noise energy exposure from aircraft over 24 hours. The FAA impact analysis also considered NPS metrics. The NPS considers various metrics to analyze impacts to Park resources and values from noise, including equivalent continuous sound level (LA_{eq}), time audible (the amount of time you can hear air tour aircraft noise), the amount of time that the noise from a commercial air tour operation would be above specific sound levels that relate to different Park management objectives (e.g., 35 and 52 dBA), and maximum sound level (L_{max}).

a. Alternative 1 (No Action Alternative)

Under the No Action Alternative, the acoustic conditions described in the affected environment would be expected to continue (see Section 3.1.1 of the EA). For purposes of assessing noise impacts from commercial air tours on the acoustic environment under FAA Order 1050.1F, the analysis indicates that the resultant DNL is expected to be below 50 dB. The 12-hour equivalent sound level is expected to be below 50 dBA and affected portions of the ATMP planning area would continue to be 35 to <50 dBA, representing 13% of the total area. The maximum time that air tours would be audible would be between 360 and 480 minutes a day, representing less than 1% of the ATMP planning area, while 82% of the ATMP planning area would experience audible air tour noise. Twenty-seven percent of the ATMP planning area would continue to experience over 120 minutes of audible air tour noise (non-continuous) a day. The time that noise from air tours would be above 35 dBA would be 120 minutes per day or greater, representing less than 1% of the ATMP planning area, while 15% of the ATMP planning area would continue to experience noise above 35 dBA for more than 30 minutes per day. Across the entire ATMP planning area, noise above 52 dBA would occur for a maximum of 18.9 minutes a day at the points modeled, and the maximum sound level would be 72.0 dBA at the points modeled under the No Action Alternative. This alternative would not be expected to result in indirect impacts, although it would result in the greatest level of cumulative noise impacts across the three alternatives evaluated in the final EA.

b. Alternative 2

Under Alternative 2, there would be 365 days per year without air tours within the ATMP planning area and a reduction in noise in the most noise-sensitive regions of the Park. While Alternative 2 would result in indirect impacts from air tours displaced outside the ATMP planning area, the agencies' conservative, screening-level noise analysis indicates that it would be highly unlikely that air tours that are displaced outside the ATMP planning area under these alternatives would generate noise at or above DNL 65 dB.

c. Alternative 3 (Preferred Alternative)

Compared to the No Action Alternative, Alternative 3 would provide up to 60 days per year during which air tours would not be conducted within the ATMP planning area. Alternative 3 contains provisions for both a standard day and a quiet technology-only day.

For a standard day, the maximum 12-hour equivalent sound level would be less than 45 dBA, and 35 to <40 dBA in 3% of the ATMP planning area. For a quiet technology-only day, the 12-hour equivalent sound level would be less than 45 dBA, and 35 to <40 dBA in 2% of the ATMP planning area. Compared to the No Action Alternative, the average sound levels under Alternative 3 would be lower for the regions of the Park near Halemaʻumaʻu Crater and the Kīlauea Visitor Center but would be higher in coastal regions. The noise footprint for Alternative 3 potentially affects 10% less of the ATMP planning area on standard days, and 11% less on quiet technology-only days.

For a standard day, the time that air tours could be audible would be less than 150 minutes a day, representing 2% of the ATMP planning area, while 18% of the ATMP planning area would experience audible air tour noise for at least 60 minutes a day (non-continuous). For a quiet technology-only day, the time audible would equal or exceed 135 minutes per day, representing 1% of the ATMP planning area. Compared to the No Action Alternative, the overall time audible noise footprint for Alternative 3 during a standard day potentially is 2% larger than the No Action Alternative due to higher aircraft altitudes under Alternative 3. For the quiet technology-only day, the overall time audible noise footprint potentially is 32% smaller than the No Action Alternative. The approximately 25% of the ATMP planning area where time audible exceeds 150 minutes under the No Action Alternative would no longer exceed this duration on both standard and quiet technology-only days under Alternative 3. The largest reductions would be at Puʻuʻōʻō (301-321 minutes) and Top of Mauna Loa Road (247 minutes). However, increases in time audible would occur at 14 of the modeled locations.

For a standard day, the time above 35 dBA would be between 30 and 45 minutes a day, representing 1% of the ATMP planning area, while 29% of the Park would experience noise above 35 dBA for at least 0.1 minutes a day. For a quiet technology-only day, the time above 35 dBA would be between 45 and 60 minutes a day, representing less than 1% of the ATMP planning area, while 21% of the Park would experience noise above 35 dBA for at least 0.1

minutes a day. Compared to the No Action Alternative, the time above 35 dBA under Alternative 3 would be up to 70 minutes less at Puʻuʻōʻō. However, time above 35 dBA would be greater under Alternative 3 at ten locations (up to 11 minutes). The noise footprint for Alternative 3 (standard day) potentially affects 31% less of the ATMP planning area and 39% less for Alternative 3 quiet technology-only day.

The maximum time above 52 dBA at the points modeled would be 5.8 minutes for a standard day and 9.7 minutes for a quiet technology-only day. A majority of points modeled would not experience sound levels above 52 dBA (83% for a standard day; 85% for a quiet technology-only day). Compared to the No Action Alternative, the time above 52 dBA under Alternative 3 would be up to 19 minutes less (see Cone Peak, Nēnē Area). Time above 52 dBA would be only slightly greater (up to 2.2 minutes) under Alternative 3 at seven modeled locations. Sound levels above 52 dBA would occur in fewer locations under Alternative 3 (six modeled locations) compared to the No Action Alternative (24 modeled locations).

The maximum sound level at the points modeled would be 63.7 dBA for a standard day and 61.5 dBA for a quiet technology-only day. Compared to the No Action Alternative, the maximum sound levels under Alternative 3 would be notably lower (more than 20 dBA, perceived as four times quieter) in 27 locations in areas surrounding Halemaʻumaʻu Crater and the Kīlauea Visitor Center. However, maximum sound levels under Alternative 3 on a standard day may be greater at points such as Frontcountry Kahuku (5 dBA greater), Halapē Wilderness Camp (8 dBA greater), and ʻĀpua Point Camp (5 dBA greater), as well as two other locations. These increases are mitigated under quiet technology-only days as the maximum sound levels are 5-10 dBA lower than on standard days.

For purposes of assessing noise impacts from commercial air tours on the acoustic environment under FAA Order 1050.1F, the analysis indicates that the resultant DNL is expected to be less than 50 dB on a standard day and less than 45 dB on a quiet technology-only day.

Indirect noise impacts may occur due to air tours being displaced outside the ATMP planning area.

d. Noise and Noise-Compatible Land Use Significance Determination

The FAA has determined that the resultant DNL is expected to below 50 dB for the alternatives and would not generate noise at or above DNL 65 dB over noise-sensitive areas as described in the final EA, which includes the Park, resources discussed in Sections 3.4, Cultural Resources and Section 3.9, DOT Act Section 4(f) Resources, and residential areas outside the Park but within ½ mile of its boundary. Therefore, there would be no significant impacts for any of the alternatives.

ii. Air Quality and Climate Change

Under the No Action Alternative, emissions of criteria pollutants would not cause NAAQS exceedance or increase the frequency or severity of any existing violations. Emissions for criteria pollutants under the No Action Alternative are provided in Table 8 of the EA. Greenhouse gas (GHG) emissions would be 1,851 MT of CO_2 per year. Under Alternative 2, there would be a reduction in criteria pollutants by the amounts reported in Table 6 of the EA and a reduction in GHG emissions of 1,851 MT of CO_2 per year compared to the No Action Alternative within the ATMP planning area. Under Alternative 3, there would be a reduction in criteria pollutants by the amounts reported in Table 9 of the EA and a reduction in GHG emissions of 1,388 MT CO_2 per year compared to the No Action Alternative within the ATMP planning area. Alternative 3 would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed.

Under the No Action Alternative, indirect effects are not expected to occur. For Alternatives 2 or 3, indirect impacts may occur due to air tours outside the ATMP planning area if winds transport emissions within the ATMP planning area, and some areas not currently exposed to emissions from air tours (outside the ATMP planning area) may be exposed to emissions. However, it is highly unlikely that air tours displaced outside the ATMP planning area would result in air quality impacts or change the current attainment status of the Park. Alternatives 2 and 3 would likely result in no noticeable change to a slight improvement in overall cumulative air quality in the Park, with no change in the current NAAQS attainment status.

a. Air Quality and Climate Change Significance Determination

The FAA has determined that the alternatives would not cause pollutant concentrations to exceed one or more of the NAAQS, as established by the Environmental Protection Agency under the Clean Air Act and described in the final EA, Section 3.2. Therefore, there would be no significant impacts for any of the alternatives.

iii. Biological Resources

a. Alternative 1 (No Action Alternative)

Under the No Action Alternative, commercial air tour noise would continue to affect wildlife within the ATMP planning area and interfere with wildlife activity research in Special Ecological Areas. Current altitudes of commercial air tour operations do not meet the guidelines for protection of marine mammals. On days when air tours occur, noise above 35 dBA would occur for more than 120 minutes a day in portions of the ATMP planning area. This alternative would not be expected to result in indirect impacts.

b. Alternative 2

Under Alternative 2, commercial air tours would not be conducted within the ATMP planning area, which would eliminate this source of noise from the planning area. Alternative 2 has the

most potential to result in the displacement of air tours and could result in more indirect effects to biological resources from air tours flying outside of the ATMP planning area.

c. Alternative 3 (Preferred Alternative)

The reduction in tours per year, routes, altitudes, and time-of-day restrictions included in Alternative 3 would provide protection to biological resources as compared to the No Action Alternative. This both reduces the frequency and duration of noise and the sound levels experienced by wildlife within the ATMP planning area, as well as reduces the likelihood of collisions with aircraft. Under Alternative 3, 1% of the ATMP planning area would experience noise above 35 dBA between 30 and 45 minutes a day on a standard day. When compared to existing conditions, in which air tours are flying at 500 ft. AGL minimum, Alternative 3 would increase the minimum altitudes for air tours within the ATMP planning area anywhere from 1,500 to 3,000 ft. AGL depending on location within the ATMP planning area and the direction of travel. Higher altitudes reduce the likelihood of bird strikes, reduce maximum sound levels at sites directly below the flight path, and meet the guidelines for protection of marine mammals.

Alternative 3 could result in indirect effects to wildlife due to air tour displacement outside the ATMP planning area. Alternative 3 would result in less cumulative noise and wildlife disturbance in the ATMP planning area than the No Action Alternative given the designated routes and other ATMP conditions; however, this alternative could allow for more cumulative noise and associated wildlife disturbance than Alternative 2, where flights would not be authorized in the ATMP planning area.

d. Biological Resources Significance Determination

While all alternatives were presented for review to the U.S. Fish and Wildlife Service, the FAA has determined that the Preferred Alternative may affect, but is not likely to adversely affect, the following federally listed threatened or endangered species within the action area: ʻŌpeʻapeʻa (*Lasiurus semotus*); forest birds including the Hawaiʻi ʻākepa (*Loxops coccineus*), ʻalawī (*Loxops mana*), ʻiʻiwi (*Drepanis coccinea*) and their proposed critical habitat, ʻakiapōlāʻau (*Hemignathus wilsoni*), and ʻalalā (*Corvus hawaiiensis*); seabirds including the ʻuaʻu (*Pterodroma sandwichensis*), ʻaʻo (*Puffinus newelli*), and the ʻakēʻakē (*Oceanodroma castro*); nēnē (*Branta sandvicensis*); sea turtles, including the honu (*Chelonia mydas*), loggerhead sea turtle (*Caretta caretta*), leatherback sea turtle (*Dermochelys coriacea*), olive ridley sea turtle (*Lepidochelys olivacea*), and honuʻea (*Eretmochelys imbricata*). The U.S. Fish and Wildlife Service concurred with this determination on June 16, 2023. Additionally, the FAA has determined that the Preferred Alternative may affect, but is not likely to adversely affect Hawaiian monk seals (*Neomonachus schauinslandi*) and their critical habitat and received concurrence from National Marine Fisheries Service on May 31, 2023. The FAA has also determined that the Preferred Alternative would have No Effect on all other federally listed threatened or endangered species within the action area (see Appendix H, *Section 7*

Consultation). Further, the FAA determined that the alternatives would not adversely impact species protected under the Migratory Bird Treaty Act (MBTA), including Hawai‘i ‘amakihi (*Chlorodrepanis virens*), ‘apapane (*Himatione sanguinea*), ‘io (*Buteo solitarius*), ‘ōma‘o (*Myadestes obscurus*), pueo (*Asio flammeus sandwichensis*), noio (*Anous minutus melanogenys*), koa‘e kea (*Phaethon lepturus*), and kōlea (*Pluvialis fulva*). Therefore, there would be no significant impacts to biological resources for any of the alternatives.

iv. Cultural Resources

a. Alternative 1 (No Action Alternative)

Under the No Action Alternative, cultural resources within the area of potential effect (APE) would continue to be impacted by air tours, as noise and visual effects would impact the feeling and setting of those resources. Native Hawaiians have consistently noted that persistent air tours over the Park unreasonably interfere with the silence needed to perform ceremonies conducted by Native Hawaiian practitioners at sacred sites, some of which rely on hearing natural sounds. In consideration of the noise effects of air tours under the No Action Alternative on cultural resources within the APE, air tour noise above 35 dBA would occur in excess of 120 minutes a day. Noise above 35 dBA would occur across 60% of the ATMP planning area. The 12-hour equivalent sound level would be up to 46.8 dBA in an area just southeast of the Kīlauea caldera. Under the No Action Alternative, flights over significant features including Hawai‘i Volcanoes National Park TCP, Footprints National Register District, Puna Ka‘ū Historic District, Kalapana Fishing and Homesteading Rights (TCP), Kīlauea Crater, Kīpukakī, and Lithic Block Quarry, as well as several other historic roads and trails would continue to occur, resulting in visual and audible intrusions that detract from the sanctity of the entire Park as a TCP.

The No Action Alternative is not expected to result in indirect effects to cultural resources within the APE, although the potential for cumulative noise and visual effects would be the greatest under the No Action Alternative when compared to Alternative 2 and Alternative 3.

b. Alternative 2

Under Alternative 2, commercial air tour aircraft would not fly within the ATMP planning area which would reduce the noise and visual intrusions from impacting the feeling and setting of cultural resources within the APE compared to the No Action Alternative. Indirect noise impacts would have the potential to be greatest under Alternatives 2 due to the displacement of air tours outside the ATMP planning area. The cumulative effects would be the fewest under Alternative 2 as there would be no tours permitted within the ATMP planning area.

c. Alternative 3 (Preferred Alternative)

Alternative 3 would reduce the overall number of air tours in the ATMP planning area and establish flight paths that do not cross directly over most cultural resources in the APE except for the Hawai‘i Volcanoes National Park TCP, over part of the Puna-Ka‘ū Historic District, over

the edge of the Kahuku-Pōhue Parcel Archaeological Sites, and over the Kahuku Ranch Cultural Landscape. Overall, the annual limits on air tours within the ATMP planning area and time-of-day restrictions included in Alternative 3 would eliminate or reduce noise and visual impacts that could detract from the feeling and setting of these resources. Some points in or near cultural resources may experience a slight increase in noise intensity and/or duration as compared to current conditions as more flights may fly near these resources than currently pass those areas.

Compared to the No Action Alternative, the time above 35 dBA across the Park would be reduced by up to 70 minutes on days when air tours would occur (see location point #9, Puʻuʻōʻō), and the noise footprint for Alternative 3 as measured by time above 35 dBA potentially affects 31% less of the ATMP planning area on a standard day and 39% less on a quiet technology-only day. Compared to the No Action Alternative, the time above 52 dBA would be up to 19 minutes less on days when air tours would occur (see Point 5, Cone Peak, Nēnē Area). At some points, time above 35 dBA or 52 dBA may be higher for quiet technology-only days compared to standard days because some quiet technology aircraft, while quieter, are modeled to be audible for a slightly longer period of time than standard aircraft based on the location, route, and type of aircraft modeled for those points.

The 12-hour equivalent sound level would be 29.9 dBA on a quiet technology-only day and at least 30.1 dBA on a standard day at several locations within the APE (location points #12-#15). At other location points, the 12-hour equivalent sound level would be 32.3 dBA on a quiet technology-only day and 32.7 dBA on a standard day at location point #4, Park HQ Developed Area; 9.5 dBA on a quiet technology-only day and 9.6 dBA on a standard day at location point #16, ʻŌlaʻa Transect 19. The time above 35 dBA would be greater than 45 minutes a day on a standard day and greater than 60 minutes a day on a quiet technology-only day. Compared to current conditions, the 12-hour equivalent sound levels would be lower for the interior regions of the Park but may be higher in coastal regions and along the proposed Kahuku Route. As a whole, the noise footprint for Alternative 3, as measured by areas where the 12-hour equivalent sound levels would exceed 35 dBA, would be reduced from 13% of the Park to 3% of the Park on standard days and 2% of the Park on quiet technology-only days. Alternative 3 would also reduce 12-hour equivalent sound levels to zero or near zero for locations near the heart of the Park (e.g., Halemaʻumaʻu Crater and the Kīlauea Visitor Center). Portions of the APE along the proposed flight paths would experience 12-hour equivalent sound levels between 35 dBA and 40 dBA, with small areas rising above 40 dBA but below 45 dBA.

Indirect noise impacts would have the potential to occur under Alternative 3 as this alternative could result in the displacement of air tours outside the ATMP planning area. Compared to the No Action Alternative, the cumulative effects would be fewer for Alternative 3 which would limit the number of routes on which air tours could be conducted within the ATMP planning area, but the cumulative effects would be greater than Alternative 2.

The FAA proposed a finding of no adverse effect to historic properties for the preferred alternative (Alternative 3) and consulted with the Hawai'i State Historic Preservation Division (SHPD), consulting parties, and Native Hawaiian Organizations. Three consulting parties concurred with the finding and the Hawai'i SHPD and five consulting parties objected to the finding. One of the consulting party's objections was resolved through continued consultation; the remaining objections could not be resolved. The FAA requested the Advisory Council on Historic Preservation's (ACHP) review of the finding and the ACHP responded disagreeing with the finding of no adverse effect. After careful review of the ACHP advisory opinion, the FAA confirmed the finding that the ATMP would have no adverse effect and provided this response to the ACHP and all consulting parties.

d. Cultural Resources Significance Determination

While the FAA does not have a significance threshold for cultural resources, it does consider, among other things, whether or not a finding of adverse effect is made under Section 106 of the NHPA when evaluating the context and intensity of potential environmental impacts under this category. The FAA identified the undertaking as the development of an ATMP that would authorize or prohibit commercial air tour operations over the Park. In accordance with the conditions included in the alternative that is identified as preferred, the FAA, in coordination with the NPS, made a finding of no adverse effect for the Preferred Alternative. In addition, under NEPA, the FAA did not find that in evaluating the context and intensity of impacts for the other alternatives that impacts arose to the level of significance. Therefore, there would be no significant impacts to cultural resources for any of the alternatives.

v. Environmental Justice and Socioeconomics

a. Alternative 1 (No Action Alternative)

The No Action Alternative would not result in disproportionately high and adverse noise, air quality, or visual effects to environmental justice (EJ) populations or impact those populations in ways that are unique to those EJ populations, based on impacts on noise, air quality, and viewsheds within the study area. The DNL is expected to be below 50 dB under this alternative. No Action Alternative would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed, or increase the frequency or severity of any such existing violations. The total amount of annual GHG emissions resulting from commercial air tours in the ATMP planning area would be 1,851.2 MT CO_2. Under the No Action Alternative, impacts to viewsheds would continue to affect the nature of the visual character of the area and contrast the scenic vistas and natural areas in the Park, but the visual resources of the Park would still be viewable at times of the day when commercial air tours were not present within the study area (on average, air tours are conducted within the study area 31 times per day).

Under the No Action Alternative, the number of commercial air tours conducted by operators would vary from year to year, but would likely be consistent with the number of tours

reported in the timeframe from 2017-2019. Therefore, the amount of income generated for air tour operators and other ancillary businesses as well as employment would likely be consistent with income generated during that timeframe. The No Action Alternative would not induce substantial economic growth, disrupt or divide physicality of community, cause extensive relocation, disrupt traffic patterns, or produce a substantial change in the community tax base.

There are no indirect impacts that would be expected to occur under the No Action Alternative.

b. Alternative 2

Alternative 2 would result in a reduction in noise, air quality, and visual impacts compared to those currently occurring under existing conditions. Alternative 2 would not result in disproportionately high and adverse noise, air quality, or visual impacts to EJ populations. Alternative 2 could impact employment or the amount of income that air tour operators and other ancillary businesses generate from conducting air tours within the ATMP planning area.

Under Alternative 2, is difficult to predict with specificity if, where, and to what extent any air tours that are displaced outside the ATMP planning area would result in indirect noise, air quality, or visual impacts to EJ populations. However, the effects are not likely to change substantially as compared to current conditions. Therefore, disproportionately high or adverse indirect noise, air quality, or visual impacts to EJ populations are not expected to occur. Cumulative effects would be greatest under the No Action Alternative and fewest under Alternative 2 based on the number of flights authorized per year.

c. Alternative 3 (Preferred Alternative)

Alternative 3 would reduce impacts through an annual (1,548) limit on air tour operations; time-of-day restrictions; and increased altitudes (1,500-3,000 ft. AGL depending on location within the ATMP planning area and direction of travel). Compared to the No Action Alternative, Alternative 3 would result in fewer direct impacts to noise, air quality, and visual effects to EJ populations. The DNL analysis indicates that Alternative 3 would not result in noise in excess of 65 dB DNL; the resultant DNL for Alternative 3 is expected to be below 45 dB. Alternative 3 would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations. The total change in annual GHG emissions for Alternative 3 as compared to the No Action Alternative is modeled to be a reduction of 1,388 MT CO_2 within the ATMP planning area. Some impacts to visual resources would occur under Alternative 3 as commercial air tours would continue to affect the nature of the visual character of the area and contrast the scenic vistas and natural areas in the Park, but impacts would be fewer than those under the No Action Alternative. Alternative 3 would not result in disproportionately high and adverse impacts to EJ populations or impact those populations in ways that are unique to those EJ populations.

The same socioeconomic effects stated under Alternative 2 would occur under Alternative 3, but those effects would be fewer (including the potential for impacts associated with changes to the community tax base), as some air tours would still occur within the ATMP planning area. Alternative 3 would not induce substantial economic growth, disrupt or divide physicality of community, cause extensive relocation, or disrupt traffic patterns.

Under Alternative 3, is difficult to predict with specificity if, where, and to what extent any air tours that are displaced to outside the ATMP planning area would result in indirect noise, air quality, or visual impacts to EJ populations within the study area. However, the effects are not likely to change substantially as compared to the No Action Alternative. Therefore, disproportionately high or adverse indirect noise, air quality, or visual impacts to EJ populations are not expected to occur.

d. Environmental Justice and Socioeconomics Significance Determination

While the FAA does not have a significance threshold for socioeconomics or environmental justice, it has a number of factors that it considers when evaluating the context and intensity of potential environmental impacts under these categories. Under socioeconomics, the FAA considers whether the action will induce substantial economic growth in the area; disrupt or divide the physical arrangement of an established community; cause extensive relocation when sufficient replacement housing is unavailable; cause extensive relocation of community businesses that would cause severe economic hardship for affected communities; disrupt local traffic patterns; or produce a substantial change in the community tax base. The FAA analysis did not find any of these issues to be triggered for any of the alternatives. Under environmental justice, the FAA considers whether the action would have the potential to lead to a disproportionately high and adverse impact to an environmental justice population due to significant impact in other environmental impact categories or impacts on the physical or natural environment that affect an environmental justice population in a way that the FAA determines are unique to the environmental justice population and significant to that population. The FAA analysis did not find any of these issues to be triggered for any of the alternatives. Therefore, there would be no significant impacts to environmental justice or socioeconomics for any of the alternatives.

vi. Visual Effects

a. Alternative 1 (No Action Alternative)

Under the No Action Alternative, air tours would continue to impact visitor overlook areas primarily along Chain of Craters Road and Crater Rim Drive. Reporting data from 2017-2019 indicates that visitors have the potential, on average, to see commercial air tour aircraft approximately 31 times per day, and the maximum number of tours reported over the Park during this time period was 90 tours a day. The visual resources within the Park of scenic vistas and natural areas contrast with commercial air tours and would continue to detract from the visitor's opportunity to observe these resources when commercial air tours are

present (which occurs 31 times per day on average). However, the visual resources of the Park would still be viewable at times of the day when commercial air tours were not present within the ATMP planning area. No indirect impacts would be expected to occur under this alternative. Across the alternatives, the cumulative visual effects under the No Action Alternative would have the greatest potential for impacts within the visual effects study area.

b. Alternative 2

Alternative 2 would provide the greatest protection to Park viewsheds across the four alternatives. Alternative 2 has the most potential to result in the displacement of air tours and could result in more indirect effects to visual resources from air tours flying outside of the ATMP planning area but within the visual effects study area. Across the alternatives, cumulative impacts would be fewest under Alternative 2 as there would be no tours permitted within the ATMP planning area.

c. Alternative 3 (Preferred Alternative)

Under Alternative 3, annual (1,548) limit of air tour operations, designated routes, and time-of-day restrictions would protect the Park's viewsheds. Commercial air tours along the authorized routes could be visible from the Park's coastal areas, the East Rift zone, and over Highway 11 near Kahuku, but they would avoid most other scenic points of interest or overlooks within the study area. Visual impacts would primarily be associated with air tour aircraft contrasting natural scenery. Indirect impacts to viewsheds could occur if flights were displaced outside the ATMP planning area. Compared to the No Action Alternative, the cumulative impacts would be fewer under Alternative 3 due to the reduced number of routes on which tours could be conducted, but the cumulative impacts would be greater than Alternative 2.

d. Visual Effects Significance Determination

While the FAA does not have a significance threshold for visual resources and visual character, the FAA has established factors to consider when evaluating the context and intensity of potential environmental impacts for visual resources and character. The FAA considers the extent the action would have the potential to affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources; contrast with the visual resources and/or visual character in the study area; and block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

Based on the analysis, the FAA did not find any of the issues to be triggered for any of the alternatives. Therefore, there would no significant impacts to visual effects for any of the alternatives.

vii. Coastal Resources

The agencies analyzed the potential for direct, indirect, and cumulative impacts on coastal resources in the relevant environmental impact categories for all three alternatives in the EA (see Noise and Noise Compatible Land Use (Section 3.1), Biological Resources (Section 3.3), Cultural Resources (Section 3.4), Visitor Use and Experience and Other Recreational Opportunities (Section 3.6), Environmental Justice and Socioeconomics (Section 3.7), Visual Effects (Section 3.8), and DOT Act Section 4(f) Resources (Section 3.10)).

The agencies only prepared a consistency determination for the preferred alternative (Alternative 3) and have evaluated Alternative 3's consistency with the enforceable policies of the Hawai'i Coastal Zone Management (CZM) Program, including their objectives and supporting policies. Alternative 3 is not expected to result in impacts to coastal resources. This alternative would be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the Hawai'i CZM Program. The Hawai'i CZM Program Office conditionally concurred with the agencies' determination on June 22, 2023, provided that: the proposed activity is carried out as represented in the CZM federal consistency application and certification; the mitigation measures for protected terrestrial and marine species included in the draft EA are fully implemented; and, the proposed activity is in compliance with the requirements of the SHPD consultation under Section 106 of the NHPA. The agencies' compliance with these conditions is described in Section XIII.F. See Section 3.9 and Appendix K of the EA.

a. Coastal Resources Significance Determination

While the FAA does not have a significance threshold for coastal resources, it has a number of factors that it considers when evaluating the context and intensity of potential environmental impacts under these categories. The FAA considers whether the action would be inconsistent with the relevant state coastal zone management plan(s); whether the action would impact a coastal barrier resources system unit (and the degree to which the resource would be impacted); whether the action would pose an impact to coral reef ecosystems (and the degree to which the ecosystem would be affected); whether the action would cause an unacceptable risk to human safety or property; or whether the action would cause adverse impacts to the coastal environment that cannot be satisfactorily mitigated. The FAA analysis did not find any of these issues to be triggered.

viii. Department of Transportation (DOT) Act Section 4(f) Resources

a. Alternative 1 (No Action Alternative)

The FAA consulted with the NPS on the potential for substantial impairment to Section 4(f) resources that would occur under the No Action Alternative, and the NPS determined that the No Action Alternative cannot be mitigated to avoid or prevent unacceptable impacts to Park resources including those that unreasonably interfere with ceremonies conducted by Native

Hawaiian practitioners at cultural sites, Park programs, activities, the atmosphere of peace and tranquility, and the natural soundscapes in Park's Wilderness areas. The FAA determined that the No Action Alternative would result in substantial impairment to Section 4(f) resources. No indirect impacts would be expected to occur under this alternative.

b. Alternative 2

The FAA determined there would be no substantial impairment of Section 4(f) resources in the Section 4(f) study area and there would be no constructive use to any Section 4(f) properties. Effects to Section 4(f) resources under Alternative 2 would be expected to be similar or less than those under Alternative 3 as there would be no air tours authorized in the ATMP planning area under this alternative. Therefore, the Section 4(f) analysis does not analyze the potential for constructive use of Section 4(f) resources in detail under Alternative 2.

c. Alternative 3 (Preferred Alternative)

The FAA determined there would be no substantial impairment of Section 4(f) resources from noise, visual, or vibrational related effects caused by air tours in the ATMP planning area under Alternative 3. Under Alternative 3, annual (1,548) limit of air tour operations, time-of-day restrictions (10:00 AM to 2:00 PM for non-quiet technology, 9:00 AM to 5:00 PM for quiet technology aircraft), and increased altitudes (1,500-3,000 ft. AGL depending on location within the ATMP planning area and direction of travel) would reduce the likelihood of impacts compared to the No Action Alternative.

As indicated by the supplemental noise metrics, some points overlapping with or near Section 4(f) resources may experience an increase in noise intensity or duration as compared to existing conditions as routes include flights near these resources under Alternative 3. At some points that are closest to the authorized routes under Alternative 3, time above 35 dBA or 52 dBA may be higher for quiet technology-only days compared to standard days because some quiet technology aircraft, while quieter overall, may be audible for a slightly longer period of time than standard aircraft based on the specific route location and type of aircraft modeled.

Nine modeled location points are modeled to experience increases in noise under both standard and quiet technology-only days as indicated by the supplemental metrics (time audible natural ambient, time above 35 dBA, time above 52 dBA, and maximum sound level) as compared to current conditions. Because noise is modeled using conservative assumptions and implementing the ATMP under Alternative 3 would result in limiting the number of flights to 14% of the three-year average of flights flown from 2017-2019 using three consolidated routes and the same aircraft to fly at higher altitudes than existing conditions, noise impacts to Section 4(f) parks and recreational resources are expected to experience an overall reduction under Alternative 3. Air tours are currently occurring in these areas, and Alternative 3 would substantially reduce the number of air tours within the ATMP planning area, move the air tours away from most Section 4(f) resources in the Section 4(f) study area,

and increase the altitude at which air tours must fly. Although Alternative 3 would shift authorized air tour operations to the three proposed flight paths and may expose some Section 4(f) resources to increased noise impacts, any increases in noise impacts would not result in substantial impairment of these Section 4(f) resources. The inclusion of no-fly days, time-of-day restrictions to avoid sunrise and sunset, quiet technology incentives, and limiting flights to certain days of the week minimizes impacts to Section 4(f) resources. Furthermore, air tours are transitory in nature, and any noise impacts would be temporary, infrequent, and in many cases less intrusive than current conditions in the Section 4(f) study area. The resultant DNL due to Alternative 3 is expected to be below 45 dB and would eliminate or reduce noise in many noise sensitive regions of the Park compared to current conditions.

Alternative 3 would not introduce visual elements or result in visual impacts that would substantially diminish the activities, features or attributes of a Section 4(f) resource. Vibrational impacts are not anticipated to affect surrounding parkland given that aircraft overflights do not contain vibrational energy at levels which would affect outdoor areas of natural features and there would be no substantial change from existing conditions.

As a result, FAA concludes there would be no substantial impairment on Section 4(f) resources in the Section 4(f) study area from noise-related effects under Alternative 3. This conclusion supports the FAA's determination that Alternative 3 would not constitute constructive use of Section 4(f) resources in the Section 4(f) study area.

Alternative 3 would have the potential to result in some displacement of air tours outside the ATMP planning area, resulting in more indirect impacts as compared to the No Action Alternative, but it is highly unlikely that the air tours that are displaced to outside the ATMP planning area under Alternative 3 would generate a noise exposure level at or above DNL 65 dB in a single location. Visual impacts could occur if operators choose to move their air tours just outside the ATMP planning area; however, it is difficult to predict with specificity if, where, and to what extent any displaced air tours would result in visual impacts in different and/or new areas, including Section 4(f) resources. Alternative 3 would result in less cumulative noise and visual effects to Section 4(f) properties than the No Action Alterative, but more than Alternative 2.

d. DOT Act Section 4(f) Resources Significance Determination

The FAA has determined that the alternatives would not result in a physical use of a Section 4(f) resource. The No Action Alternative does not meet the purpose and need and therefore was not advanced for a detailed Section 4(f) analysis.

The FAA determined that there would be no constructive use of Section 4(f) resources under Alternatives 2 and 3 because the noise, visual, or vibrational impacts would not constitute a substantial impairment of the protected activities, features, or attributes of the Section 4(f) resources. Therefore, no significant impacts to Section 4(f) resources would occur.

XI. Mitigation and Minimization

The attached final EA examined each of the environmental impact categories that were determined to be present in the ATMP planning area or had the potential to be impacted by the Proposed Action. The FAA is not proposing mitigation as part of this project, because implementation of this ATMP for the Park would not cause any environmental impacts that would exceed the FAA thresholds of significance for any environmental impact category.

The NPS does not require additional mitigation because measures that avoid or mitigate impacts are included in the selected action/final ATMP.

XII. Public Involvement

The FAA, in coordination with NPS, prepared a draft EA in compliance with NEPA to analyze a range of alternatives and evaluate potential issues and impacts as part of the ATMP planning process. In addition, the Act requires that the agencies publish notification of the availability of a draft ATMP in the Federal Register for public comment and to hold at least one public meeting for each draft ATMP. A draft ATMP and draft EA were released on May 16, 2023, for public review and comment. The FAA published a Notice of Availability of the draft ATMP and draft EA for the Park on May 18, 2023. The agencies notified the public of the availability of the draft ATMP and draft EA using various methods including a notice in the Federal Register issued on May 18, 2023, a news release posted on the Park's website and social media accounts, emails, and hard copy mailings to the Park's civic engagement stakeholder list and other stakeholder groups including federal, state, and local agencies and community organizations, associations, businesses, and interest groups.

The agencies held the public meeting for the draft ATMP and draft EA for the Park on June 7, 2023 and accepted public comments between May 16 and June 20, 2023. In addition, Park staff responded to media inquiries.

In total, the agencies received 5,447 correspondences, including two different form letters, which comprised 97% or 5,290 of the total number of correspondences. The agencies reviewed and analyzed the public comments and used them to revise the draft ATMP and draft EA and prepare a final ATMP, final EA, and FONSIs/ROD. See Appendix K of the final EA, *Draft ATMP and Draft EA Public Involvement Materials*, for more information.

XIII. Consultation and Compliance with Other Laws

A. Endangered Species Act and Migratory Bird Treaty Act

The FAA and the NPS conducted a Section 7 analysis for those federally listed species described in Section 3.3.1 of the EA, Affected Environment for Biological Resources, in accordance with 50 CFR Part 402.02. The FAA and the NPS initiated technical assistance with the U.S. Fish and Wildlife Service and National Marine Fisheries Service in December 2022 during which all three alternatives were reviewed. The agencies determined the ATMP may

affect, but is not likely to adversely affect federally listed threatened or endangered species or their critical habitat. The U.S. Fish and Wildlife Service concurred with this determination on June 16, 2023 and the National Marine Fisheries Service concurred with this determination on May 31, 2023. See Appendix H of the EA, *Section 7 Consultation*, for additional analysis.

i. Species Protected under the MBTA

The agencies analyzed potential impacts to other native bird species, including those protected under the MBTA but are not classified as endangered or threatened under the Endangered Species Act. Other protected native birds that occur throughout the majority of the ATMP planning area, including Hawai‘i ‘amakihi, ‘apapane, ‘io, ‘ōma‘o, pueo, and other migratory or transiting birds, would be exposed to noise under Alternative 3. However, this would represent a reduction in noise compared to current conditions. The three designated routes under Alternative 3 limit the number of air tours flying directly over sensitive habitats for the Park's wildlife which reduces the likelihood of impacts to those species including noise that could alter wildlife behavior. The authorized altitudes under Alternative 3 (minimum 1,500 ft. AGL over land and 2,000 – 3,000 ft. AGL over the ocean depending on location within the ATMP planning area and direction of travel) also limit the potential for direct strikes to wildlife. Based on the agencies' analysis, there would be no impacts from the Preferred Alternative on species protected under the MBTA.

B. National Historic Preservation Act

The agencies conducted consultation under Section 106 with an evaluation of the effects of Alternative 3, as the Preferred Alternative, on historic properties. A letter was sent on March 27, 2023, to the Hawai‘i SHPD and all consulting parties outlining the Section 106 process, including a description of the undertaking, delineation and justification of the APE, identification of historic properties within the APE, and an evaluation and proposed finding of effects to historic properties within the APE. Based on this consultation, the FAA found that the ATMP undertaking would result in no adverse effect to historic properties (36 CFR § 800.5(b)). Bobby Camara, Elizabeth Bell, and the Hawai‘i Department of Lands and Natural Resources Division of Forestry and Wildlife concurred with the finding. The Hawai‘i SHPD, John Carse, National Trust for Historic Preservation, Office of Hawaiian Affairs (OHA), Kamehameha Schools, and the National Parks Conservation Association objected to the finding. OHA's objection was resolved through continued consultation. After continued consultation with the consulting parties that objected, the remaining objections could not be resolved; therefore, on July 24, 2023, the FAA requested the ACHP's review of the finding pursuant to 36 CFR §§800.5(c)(2) and (3). The ACHP provided their opinion in a letter dated August 23, 2023, disagreeing with the finding of no adverse effect. After careful review of the ACHP advisory opinion, the FAA confirmed the finding that implementing the ATMP for Hawai‘i Volcanoes National Park would have no adverse effect on historic properties. The FAA provided the agency response to the ACHP and all consulting parties on the project in a letter

dated September 12, 2023, thereby concluding the Section 106 process. See Appendix G of the EA, *Cultural Resources Consultation and Summary*, for more information.

C. Section 4(f) of the Department of Transportation Act of 1966

The FAA has determined that the alternatives would not result in a physical use of a Section 4(f) resource. The No Action Alternative does not meet the purpose and need and therefore was not advanced for a detailed Section 4(f) analysis.

The FAA determined that there would be no constructive use to Section 4(f) properties under Alternatives 2 and 3 because noise, vibrational, and visual impacts from commercial air tours under these alternatives would not constitute a substantial impairment of Section 4(f) resources in the Section 4(f) study area.

As part of the draft ATMP and draft EA development, the FAA consulted with the NPS and other Officials with Jurisdiction over Section 4(f) resources in the Section 4(f) study area regarding FAA's preliminary finding of no substantial impairment, and hence, the FAA's proposed no constructive use determination. The FAA sent letters to each Section 4(f) property's Official with Jurisdiction with this preliminary finding concurrent with the release of the draft EA for public review. On May 16, 2023, the FAA sent an email with an attached letter to the U.S. Fish and Wildlife Service and the Hawai'i Department of Land and Natural Resources (DLNR), describing the proposed action and FAA's preliminary determination and requested response within a 14-day review period. A follow-up email was sent on May 23, 2023. Additionally, the FAA notified the NPS of the determination via email. The 14-day response period for both review requests closed on May 30, 2023. No responses were received during this timeframe. The DLNR submitted a response to the FAA's preliminary determination on August 30, 2023 but did not concur nor object to the FAA's finding. No other responses were received. Following the public comment period on the draft EA and draft ATMP, the FAA sent emails to each Official with Jurisdiction describing the changes to the ATMP parameters reflected in the final ATMP, which did not result in a change to the FAA's determination of no constructive use. Refer to Appendix I of the final EA, *Section 4(f) Analysis*, for additional details on this coordination.

D. Clean Air Act, Section 176 (c) (1) Conformity Determination (42 U.S.C. § 7506(c))

The Park is currently in an area of attainment for all NAAQS. The ATMP would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed.

E. National Park Service Organic Act and Management Policies

In managing National Park System units, the NPS is bound by the Organic Act of 1916, 54 U.S.C. §§ 100101 et seq., which requires the NPS to manage parks to "conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the

enjoyment of future generations." In addition, NPS management of System units is guided by the 2006 NPS Management Policies and other policy and guidance documents that do not apply to the FAA. The NPS has prepared a non-impairment determination and found that the selected action/final ATMP, which was Alternative 3/the Preferred Alternative, will not result in impairment of Park resources. The NPS's Statement of Compliance, Attachment B, includes the NPS's non-impairment determination, and explains the NPS's compliance with relevant NPS policies.

F. Coastal Zone Management Act

The State of Hawai'i administers a CZM program and has established objectives and their supporting policies (Hawai'i Revised Statutes § 205A-2) to help the Hawai'i CZM Program evaluate the consistency of proposed federal actions. As part of this compliance with the Coastal Zone Management Act (CZMA), the agencies requested a federal consistency review by the Hawai'i CZM Program Office simultaneous with the release of the draft EA for public review and comment. See Appendix K of the EA. The Hawai'i CZM Program Office conditionally concurred with the agencies' determination on June 22, 2023, provided that: (1) the proposed activity is carried out as represented in the CZM federal consistency application and certification; (2) the mitigation measures for protected terrestrial and marine species included in the draft EA are fully implemented; and, (3) the proposed activity is in compliance with the requirements of the SHPD consultation under Section 106 of the NHPA. The agencies complied with all three conditions of the conditional concurrence. First, the ATMP will be carried out as represented in the consistency determination, with minor changes that will have primarily beneficial impacts on coastal resources. These minor beneficial changes are: a slight reduction of authorized air tours; the inclusion of eight no-fly days; and the establishment of daily air tour limits. In addition, for safety reasons, the Coastal Route minimum altitude was raised from 2,000 ft. to 3,000 ft. AGL when flying northeast-to-southwest. The overall result of this would be a decrease in the intensity of noise (<4 dBA; $LA_{eq,12hr}$ and L_{max} metrics) and a potential increase in time audible and time above for these flights. Because the increase in audibility is negligible compared to the decrease in intensity, the NPS found this change to be more protective of coastal resources. Second, the ATMP and final EA include the mitigation measures in the draft EA that protect terrestrial and marine species and the agencies have committed to implementing the ATMP. Third, as explained in Section VIII(B) above, the agencies complied with Section 106 of the NHPA, and its implementing regulations.

XIV. Changes from the Draft ATMP

The agencies considered and responded to public comments received on the draft ATMP and draft EA. In addition to minor, editorial changes made for clarity, the final ATMP includes the following substantive changes from the draft ATMP made in response to public comments or based on further agency review, as follows:

A. Section 3.1 Commercial Air Tours Authorized

The number of tours per year authorized was reduced from 1,565 to 1,548 commercial air tours per year because two operators are no longer authorized to conduct commercial air tours over the Park. These operators held IOA for a combined total of 1,784 commercial air tours annually. Based on reporting data from 2017 to 2019, they conducted a combined average of 121 commercial air tours over the Park annually. One operator voluntarily surrendered their air carrier certificate and is no longer in business. The other operator is no longer doing commercial air tours and voluntarily surrendered their IOA. The total number of air tours authorized on an annual basis in the final ATMP was reduced to no longer account for the air tours conducted by these two operators.

B. Section 3.2 Commercial Air Tour Routes and Altitudes

Clarifying edits were included in response to a comment on the draft ATMP questioning whether operators would be permitted to hover, loiter or circle for up to five minutes in multiple locations along the Puʻuʻōʻō Route or whether they could only hover for a total of five minutes. The final ATMP makes clear that hovering, loitering and/or circling on the Puʻuʻōʻō Route and in the Puʻuʻōʻō quiet technology zone would be permitted for no more than one minute in a given location and would be permitted for a total of up to five minutes per air tour. Edits were also made to make clear that the Puʻuʻōʻō Route may only be flown in a single direction (counterclockwise).

Edits were included to clarify that air tours on the Coastal Route must maintain a minimum of 2,000 ft. lateral distance from the shore at all times and that the provision explaining that there was a ¼ mile buffer on either side of flight routes depicted in Figure 2 of the ATMP that represented an acceptable range of deviation from the depicted route that would not trigger enforcement action did not apply to the Coastal Route. These edits were made in response to a comment that assumed that flights on the Coastal Route could deviate ¼ mile closer to shore from the designated route, which would have been inconsistent with the lateral offset.

The altitudes for the Coastal Route were changed to require a minimum altitude of 2,000 ft. AGL when flying southwest-to-northeast and a minimum altitude of 3,000 ft. AGL when flying northeast-to-southwest. This is a safety modification made to vertically separate aircraft flying in different directions on this bidirectional route.

Though the final ATMP continues to allow operators to deviate from designated routes and altitudes to avoid hazards, it was modified to make clear that the pilot-in-command should return to the designated route and altitude as soon as safely possible after a hazard has passed.

C. Section 3.5 Restrictions for Particular Events

In response to public comments requesting that no-fly days be set on days important to Native Hawaiians, the final ATMP was modified to establish six no-fly days per year for

commercial air tours based on days that follow the Hawaiian Moon Calendar and Makahiki Season, and which vary from year to year: End of Makahiki (typically in January); Zenith Noon (typically in May); Summer Solstice (June); Zenith Noon (typically in July); Start of Makahiki (typically in October); Winter Solstice (December). Since these no-fly days vary from year to year, the ATMP was revised to specify that they will be determined through outreach to Native Hawaiian Organizations and confirmed during the annual meeting provided for in Section 3.7B. At least two months' notice of these no-fly days will be provided to all operators. The final ATMP also added two no-fly days per year to honor and acknowledge important Hawai'i Island ali'i that are fixed (i.e., do not vary from year to year): Ruth Ke'elikōlani (February 9th) and Bernice Pauahi Bishop (December 19th). The draft ATMP authorized the NPS to establish no-fly periods for planned Park management or special events, which could include Native Hawaiian events as well as cultural resources programs, and the final ATMP retains this language but specifies that these no-fly periods are in addition to the eight specifically identified no-fly days.

D. Section 3.7B Annual Meeting

This section was revised to make clear that the agencies may invite stakeholders with relevant subject matter expertise to attend annual meetings between Park staff, the local FAA Flight Standards District Office and the operators.

E. Section 3.7C In-Flight Communication

Changes were made to this section to require pilots provide more specific information when entering or departing a route. These changes were made for safety reasons. When entering a route, in addition to identifying their company and aircraft, pilots are now required to identify the name and location of the route, as well as their direction of travel and altitude. They must also identify the name of the route when departing the route. Clarifying edits were included to make clear that pilots may identify their location along the route for the awareness of other operators as needed.

F. Section 3.7G Daily Air Tour Limitation

This section was added to set a limit for the number of air tours that each operator could conduct each day. Though the draft ATMP provided only an annual limit on the number of air tours each operator may conduct, on further review the agencies determined that daily limits were needed in the final ATMP so that there was an upper limit on the number of tours that could be conducted each day. This change was made both for resource protection and safety reasons to limit the number of aircraft that may be on a route at a time. These limits are also set out in Appendix A to the final ATMP, Table 1.

G. Section 5.0 Justification for Measures Taken

This section was reorganized for improved clarity and readability. In addition to editorial or clarifying edits, this section was substantively revised to explain the justification for allowing

other stakeholders, including Native Hawaiian Organizations, to attend the annual meeting between air tour operators, Park staff and the FAA's local Flight Standards District Office. Changes were also made to make clear that the required altitudes for commercial air tour operators were safety measures given the minimum altitudes set for resource protection.

H. Section 9.0 Amendment

This section was amended to make clear that one of the reasons that the ATMP could be amended is if the NPS, by notification to the FAA and the operator, determines that it is not adequately protecting the Park's Wilderness.

I. Section 13.0 Compliance with All Laws

In response to comments regarding Section 4.1 of the draft ATMP, the agencies added a section to the final ATMP acknowledging that the ATMP will be implemented in compliance with all applicable laws, including but not limited to 44 U.S.C. § 3501 et seq.

XV. Basis and Justification for the Decision

This section, together with the final EA and all appendices, including Appendix L, *Draft ATMP and Draft EA Public Involvement Materials*, which includes the public comments, summary of comments, and the agency responses to substantive comments, which are attached to this document and are incorporated herein by reference, explain the decision made by the agencies, and provides the justifications for that decision required by 49 U.S.C. § 40128(b)(3)(F).

The agencies have decided to establish an ATMP implementing Alternative 3 (the Preferred Alternative in the final EA). The ATMP will permit up to 1,548 commercial air tours within the ATMP boundary per year, subject to the operating parameters, restrictions, and other provisions included in the ATMP. The Act contemplates that air tours may be an appropriate use over parks subject to restrictions that prevent or mitigate significant impacts on park resources and visitor experience. The ATMP includes measures designed to protect the Park's natural and cultural resources, Native Hawaiian sacred sites and ceremonial areas, and visitor experience, as well as Wilderness character, and continues to allow opportunities for air tours to be safely conducted. As explained in the agencies' significance findings above, the measures included in the ATMP mitigate or avoid significant impacts of commercial air tours on Park resources and visitor experience and as explained in the NPS's Statement of Compliance, Attachment B, it will not result in impairment of or unacceptable impacts to the Park's resources.

The NPS determined that current levels of air tours create unacceptable impacts on the Park's natural and cultural resources, Native Hawaiian TCPs including Native Hawaiian sacred sites and ceremonial areas, Wilderness character, and visitor enjoyment. See Section 2.2.1 of the final EA and NPS Statement of Compliance, Attachment B. Additionally, the current level of air tours is inconsistent with the Park's purpose and values including perpetuating the traditional

Hawaiian cultural connections to the Park's landscapes. The NPS's Management Policies direct that the NPS may not select an action that would cause unacceptable impacts or that are inconsistent with the Park's purposes or values. NPS 2006 Management Policies § 1.4.7. Further, the agencies found that authorizing air tours at current levels did not meet the purpose and need for the ATMP. Thus, the agencies considered but dismissed alternatives that would have allowed air tours at or above existing numbers (11,376 commercial air tours average per year).

The agencies also considered alternatives that would establish an ATMP that would allow air tour operations between 1,565 air tours per year and existing numbers. These alternatives were dismissed from further consideration because the NPS found that the level of impacts to Park resources did not meet Park preservation objectives and the impacts associated with air tours could not be further mitigated. These alternatives were dismissed because they did not meet the purpose and need for the ATMP because they did not sufficiently mitigate the adverse impacts of commercial air tours on the Park's natural and cultural resources, Native Hawaiian sacred sites and ceremonial areas, Wilderness character, and visitor experience.

The Park's ambient acoustic environment is very low (below 35 decibels in many places, which is comparable to a low whisper). These low ambient background levels, coupled with the high number of annual air tours flying at low altitudes, make helicopter noise intrusions very noticeable and difficult to mitigate at current levels. The ATMP uses a combination of designated routes, minimum altitudes, flight-free days, an 86% reduction in annual air tours from current levels, condensed operating hours, and quiet technology incentives to reduce the noise footprint (average sound level over a 12-hour day). As a whole, the noise footprint for the ATMP, as measured by areas where the $LA_{eq,12h}$ sound levels would exceed 35 dBA, would be reduced from 13% of the ATMP boundary under the existing condition to 3% of the ATMP boundary on standard days and 2% of the ATMP boundary on quiet technology-only days. The ATMP also reduces average sounds levels to zero or near zero for locations near the heart of the Park (e.g., Halemaʻumaʻu Crater and the Kīlauea Visitor Center) and over endangered forest bird habitat.

The agencies considered an alternative that would prohibit commercial air tours within the ATMP boundary (Alternative 2 in the final EA) but did not select that alternative because they found that the mitigation measures in the ATMP, including annual air tour limits, daily air tour limits, designated routes and minimum altitudes, sufficiently mitigated the impacts of air tours on Park resources and visitor experience, while still providing some opportunities for commercial air tours for those who wished to take those tours. A ban is not necessary to fulfill the objectives of the Act or to avoid significant impacts under NEPA or adverse effects under NHPA. The mitigation and other measures included in the ATMP are explained in more detail below.

The conservation mandate in the NPS Organic Act "applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be

impaired." NPS 2006 Management Policies § 1.4.3. Thus, the ATMP includes measures not just to mitigate the significant impacts of air tours on Park resources, but measures determined by the NPS to be protective of such resources and that support NPS management objectives for the Park, as well as measures determined by the agencies to be necessary to effectively implement the ATMP. However, NPS Management Policies do not require the NPS to mitigate the impacts of commercial air tours to the point that they no longer have any impact at all or no longer can occur. Rather, the NPS has to consider whether there are mitigations that can reduce impacts to Park resources and whether the impacts of those uses, after applying mitigations, result in unacceptable impacts or impairment. See NPS 2006 Management Policies §§ 8.1.1, 8.4. As demonstrated in the NPS's Statement of Compliance, Attachment B, the NPS concluded that the ATMP will not result in impairment or unacceptable impacts and complies with NPS Management Policies.

After considering the full technical analyses of noise and other impacts, input from the public and other federal and state agencies, information and input from consulting parties, including Native Hawaiian Organizations and individuals, the Hawai'i SHPD, and the ACHP, the NPS and the FAA have determined that the operating parameters and other measures included in the ATMP strike the appropriate balance between mitigating impacts on Park resources and visitor experience while still providing opportunities for commercial air tours to occur.

While none of the action alternatives in the final EA trigger any FAA thresholds of significance or factors that the FAA considers in determining significance, the Act requires the FAA to work in cooperation with the NPS in developing either a voluntary agreement or an ATMP. To that end, the FAA has recognized NPS expertise regarding the management of the National Park System and considered NPS criteria in determining impacts on National Park System units. Consequently, the FAA has determined that the Preferred Alternative is a reasonable and safe basis for the ATMP.

The FAA reviewed the ATMP to identify and address any safety concerns. The FAA also reviewed all public comments received on the draft ATMP that raised safety concerns. Under FAA regulations, the pilot-in-command is always required to take action to ensure the safe operation of the aircraft.

A. Annual and Daily Air Tour Limits

The ATMP limits the number of commercial air tours authorized per year to 1,548 tours and includes daily limits on the number of tours that may be conducted. The draft ATMP proposed to authorize 1,565 air tours annually. This number was selected to avoid or minimize impacts to Wilderness values, cultural resources, Native Hawaiian TCPs including Native Hawaiian sacred sites and ceremonial areas, the natural acoustic environment, and visitor experience. However, after the draft ATMP was released for public review, the agencies became aware that two operators who conducted air tours over the Park from 2017-2019 are no longer authorized to conduct commercial air tours over the Park. As a result, the number

of tours per year authorized was reduced from 1,565 to 1,548 commercial air tours per year. The agencies did this to maintain the annual air tour allocations in the draft ATMP for the remaining operators (which, as noted below is a proportional allocation based on the operator's proportional share of the total reported flights from 2017-2019) and because the NPS found the lower number of authorized tours to be more protective of Park resources and visitor experience. As a result, the final ATMP authorizes 14% of the existing condition of tours conducted based on the three-year average of reporting data from 2017-2019 (11,376 commercial air tours per year), excluding tours previously proposed to be allocated to operators who are no longer currently authorized to conduct commercial air tours over the Park.

The ATMP also provides an initial allocation of commercial air tour operations to current commercial air tour operators that identifies the maximum number of commercial air tours that each operator may conduct in a year. The initial allocation of commercial air tours for each operator in the draft ATMP was based on the proportional number of each operator's average reported total flights per year from 2017-2019 compared to the total number of tours reported during that timeframe.

The number of air tours each operator may conduct on a single day is limited under the ATMP, which makes clear that the daily limitations are subject to the annual allocations (i.e., the annual allocations provide the upper limit on the total number of air tours that operators may conduct in a single year). The operator allocated the highest number of air tour operations may conduct up to four commercial air tours in a single day, while the other four operators allocated operations may conduct only a single commercial air tour per day. The daily air tour limits that were developed were based on what the NPS determined would be protective of Park priority resources and values documented in the noise modeling (*Noise Technical Analysis*, Appendix F to the EA) which modeled five air tours per day. It was also based on limits the FAA determined were necessary to address safety concerns. Given the variation in the operators' annual air tour allocations, the agencies decided to include a limit for each operator, rather than a hard cap for all operators, because a hard cap would be more difficult to implement. While there is a possibility that up to eight commercial air tours could occur on a single day, this could only occur once a year because one of the operators is allocated a single air tour per year. This is a somewhat unlikely scenario as it assumes all operators will fly up to their daily limit on a single day. There is a potential for more than five tours to occur on 35% of days on which air tours are authorized, and a potential that five or fewer tours per day will occur on 65% of flight days.

B. Designated Routes and Minimum Altitudes

The ATMP includes three designated routes (the Puʻuʻōʻō Route, the Kahuku Route, and the Coastal Route) and one designated quiet technology zone in which qualifying aircraft need not adhere to a specific route (Puʻuʻōʻō QT Zone). The routes and quiet technology zone were

designed to shift air tours away from key avian habitat, avoid key cultural and visitor use areas, and designated Wilderness, while providing desirable views for air tour patrons.

The Puʻuʻōʻō Route was established to provide expansive views of historic volcanic activity along the East Rift Zone, with additional west side viewing of volcanic landscapes west of Puʻuʻōʻō for quiet technology aircraft. It follows the East Rift of Kīlauea in the Puʻuʻōʻō area with a single entry and exit over the ocean. It is a loop that must be flown in a counterclockwise direction, meaning that air tours entering the route must first fly the eastern portion of the loop, then turn and exit the route via the western portion of the loop.

The Puʻuʻōʻō QT Zone is an expanded fly zone directly to the west of the Puʻuʻōʻō Route that is only available to operators using aircraft that have been approved for the ATMP's quiet technology incentive. Air tours would enter ATMP boundary via the entry for the Puʻuʻōʻō Route, can then fly into the expanded area available in the Puʻuʻōʻō QT Zone. The Puʻuʻōʻō QT Zone avoids the designated Wilderness boundary at Nāpau.

Commercial air tours conducted on the Puʻuʻōʻō Route or in the Puʻuʻōʻō QT Zone must maintain a minimum altitude of 1,500 ft. AGL over land and 2,000 ft. AGL over water. These minimum altitudes were identified by the NPS as needed to protect Park resources, including marine species, and visitor experience from the impacts of tours. Hovering, loitering, and/or circling for no more than one minute in a given location, up to five minutes total per air tour, is allowed for aircraft on the Puʻuʻōʻō Route or in the Puʻuʻōʻō QT Zone. However, in order to minimize noise, circling aircraft are required to turn away from the advancing blade as much as possible.

The Kahuku Route runs across the south side of the Kahuku Unit following Highway 11. It was established to allow expansive views of Mauna Loa from the summit to the sea and past volcanic activity while protecting endangered birds found at higher elevations and eligible Wilderness in Kahuku. Air tours may be flown in either direction on the Kahuku Route and must maintain a minimum altitude of 1,500 ft. AGL. This minimum altitude was identified by the NPS as needed to protect Park resources and visitor experience from the impacts of tours. Hovering, loitering and/or circling are prohibited because these activities could negatively impact visitor experience and cultural and natural resources, including sensitive sites by prolonging noise impacts from air tours.

The Coastal Route runs offshore along the edge of the Park's boundary, maintaining a minimum lateral distance of 2,000 ft. from shore at all times. Air tours on the Coastal Route may be flown in either direction. However, air tours must maintain a minimum altitude of 2,000 ft. AGL when flying southwest-to-northeast and a minimum altitude of 3,000 ft. AGL when flying northeast-to-southwest. The NPS identified a minimum altitude of 2,000 ft. AGL as required to protect Park resources. Given that the route may be flown in either direction, the minimum altitude of 3,000 ft. AGL was identified as a safety measure to deconflict the airspace. The Coastal Route was established for protection of Wilderness, cultural, and

sensitive resources, while providing expansive views of the coastal areas. Hovering, loitering and/or circling are prohibited because these activities could negatively impact visitor experience and cultural and natural resources, including sensitive sites by prolonging noise impacts from air tours.

The ATMP makes clear that operators are required to adhere to the designated routes and altitudes except in case of a hazard where a deviation is necessary for safe operation of the aircraft under Federal Aviation Regulations, though the operator should return to the designated route as soon as safely possible after the hazard has passed. However, if upon entering a route, an operator encounters weather that does not allow them to proceed further at the prescribed altitude, they must safely exit the route either follow another route where weather conditions allow or exit the ATMP boundary. Further, the Pu‘u‘ō‘ō and Kahuku Routes include a ¼-mile buffer on either side of the routes as depicted in the ATMP that represents an acceptable deviation from the route within which no enforcement action would be triggered. This ¼ mile buffer does not apply to the Coastal Route, where operators must maintain the 2,000 ft. lateral offset from shore at all times.

The designated routes, minimum altitudes, and prohibitions on hovering, loitering and circling were included in the final ATMP to reduce air tour noise in order to protect Park resources, Native Hawaiian TCPs, including Native Hawaiian traditional practices and sacred sites, and visitor experience. The routes themselves avoid designated Wilderness areas and key cultural and visitor use areas, and the summit of Kīlauea. The altitude requirements also reduce the likelihood of a bird strike with aircraft and contribute to improved habitat conditions for the nēnē (Hawaiian goose). Additionally, the minimum altitude over the ocean is based on consultation with the National Marine Fisheries Service for the protection of marine species. The final EA and each agencies’ separate findings of no significance determinations (above) demonstrate that these provisions, together with other measures included in the final ATMP, do substantially mitigate the impacts of commercial air tours on Park resources and visitor experience.

C. Hours and Days of Operation

The ATMP restricts the hours during which commercial air tours may occur within the ATMP boundary. Unless flown using aircraft that qualify for the quiet technology incentive, air tours may only operate during the four-hour window from 10:00 AM to 2:00 PM daily. Sunrise and sunset are important times of the day for Native Hawaiian traditional cultural practices and ceremonies, wildlife, and visitor use and experience. Biologically important behaviors for many species occur during this time, such as prime foraging, mating, and communication. These restrictions help protect critically endangered forest birds by providing noise free times for critical activity which is highest one hour before and two hours after sunrise, and help protect crepuscular activity of federally listed seabirds. They also allow the NPS to conduct acoustic based bird surveys which are done by active listening.

The ATMP also restricts the days of the week that commercial air tours may operate. Unless they are flown using aircraft that qualify for the quiet technology incentive, air tours may only operate on Mondays, Tuesdays, Thursdays, Fridays, and Saturdays. The ATMP sets Wednesdays as a quiet technology only day, i.e., a day on which any air tours conducted must be flown using aircraft that qualify for the quiet technology incentive. No air tours are permitted on Sundays. The Sunday no-fly day provides opportunities for visitor enjoyment, such as bird watching. Sunday was selected as a no-fly day for consistency with the Park's Mission Critical Administrative Aviation Plan and Environmental Assessment and allows for one weekend flight-free day at the Park. This no-fly day also addresses comments and requests from the local community and Native Hawaiian cultural practitioners.

D. Emergency Landings

The ATMP does not authorize any aircraft to take off or land within the Park. However, helicopters conducting commercial air tours have landed in the Park in the past due to equipment issues. The agencies recognize emergencies may occur in the future and that operators may need to land aircraft in order to protect the lives or safety of staff and air tour patrons. Thus, the ATMP includes a requirement that any operator that has made an emergency landing within the Park must, once the aircraft has safely landed and any medical or other emergency issues have been addressed, immediately notify the NPS through Park Dispatch of the incident and location. Prior approval from the Park superintendent, or their designee, is then required for the removal or take-off of the landed aircraft in order to coordinate joint resources for the safety of Park visitors and resources. Any non-emergency landing within the Park, including replacement aircraft deployed to retrieve passengers who are not able to exit via ground transportation, requires prior approval from the Park superintendent or their designee.

E. Restrictions for Particular Events

The ATMP establishes eight annual no-fly days for commercial air tours and allows the NPS to establish additional no-fly periods. The provisions are intended to prevent noise interruptions of Park events or some Native Hawaiian practices or ceremonies. Six of the no-fly days vary from year to year and are based on days that follow the Hawaiian Moon Calendar and Makahiki Season: End of Makahiki (typically in January); Zenith Noon (typically in May); Summer Solstice (June); Zenith Noon (typically in July); Start of Makahiki (typically in October); and Winter Solstice (December). The specific dates on which these no-fly days will occur each year will be identified by NPS the through outreach with Native Hawaiian Organizations. The agencies intend to confirm these dates at the annual meeting in order to provide the operators with at least two months' notice of these no-fly dates. Two of the annual no-fly days do not vary from year to year: Ruth Keʻelikōlani (February 9th) and Bernice Pauahi Bishop (December 19th). These no-fly days were included to honor and acknowledge important Hawaiʻi Island aliʻi.

The ATMP also allows the NPS to establish additional no-fly periods either for special events (including Native Hawaiian events or natural or cultural resource programs) or planned Park management by providing two months' notice to operators, unless there are exigent circumstances or emergency operations. For special events that could be impacted by overflights, there is a mandatory five-mile standoff which means that routes within the five-mile standoff may not be flown during the no-fly period.

F. Required Reporting

Operators are required to submit semi-annual reports to the agencies identifying the number of commercial air tours they conducted within the ATMP boundary and to include the flight monitoring data required under Section 4.1 of the ATMP as well as any other information requested by the agencies. The reporting will comply with all applicable laws, including 44 U.S.C. § 3501 et seq. The Act requires operators to report their commercial air tour operations conducted under an ATMP to the agencies but provides the agencies the discretion to prescribe the frequency and format for such reports. 49 U.S.C. § 40128(d). The ATMP establishes reporting periods of January 1 through June 30 and July 1 through December 31 and provides that reports are due to both agencies no later than 30 days after the close of a reporting period.

G. Quiet Technology Incentives

The Act requires that each ATMP include incentives for the use of quiet technology. The final ATMP includes three provisions designed to incentivize the adoption and use of quiet technology aircraft. First, air tours flown using aircraft that qualify for the incentive may be conducted on Wednesdays, which are set aside as quiet technology-only days. Second, the hours during which air tours flown using qualifying aircraft may be conducted are expanded. While tours using non-quiet technology aircraft are restricted to the hours from 10:00 AM to 2:00 PM, quiet technology air tours may be flown between 9:00 AM and 5:00 PM. Third, the ATMP opens an additional flight area, the Puʻuʻōʻō QT Zone, to quiet technology aircraft. The Puʻuʻōʻō QT Zone only flies over a small amount of forest habitat and is close to but not directly over designated Wilderness. Allowing only quiet technology aircraft will reduce the impacts to native species, visitor use and experience, and Wilderness character. The quiet technology incentives do not apply on the no-fly days identified in the ATMP, and tours conducted using quiet technology aircraft may be restricted in the same manner as other tours, consistent with Section 3.5 of the ATMP, Restrictions for Particular Events.

The ATMP sets up a consultation process between the operators and the agencies regarding which of their aircraft qualify for the incentive. If operators believe that any or all of the aircraft authorized for use under the ATMP should qualify for the quiet technology incentive, they may request that the agencies allow them to conduct air tours using such aircraft during the expanded dates and times identified above as being available for quiet technology air tours and in the Puʻuʻōʻō QT Zone. The eligibility of each aircraft type for this incentive will be

considered by the agencies on a case-by-case basis. In the future, should operators wish to purchase new aircraft, the ATMP allows for consultation with the agencies before the operator makes the investment in a new aircraft to determine whether such aircraft would qualify for the incentive.

The quiet technology incentives were included in the ATMP to be effective in incentivizing the adoption and use of quiet technology aircraft for commercial air tours while at the same time minimizing noise impacts to Park resources. The ATMP provides that the NPS will periodically monitor Park conditions and coordinate with the FAA to assess the effectiveness of this incentive. If it results in unanticipated effects to visitor experience and Park resources, or Native Hawaiian TCPs, including Native Hawaiian traditional practices and sacred sites, further agency action may be required to ensure their protection. This action could include either adaptive management measures or an ATMP amendment modifying the incentive.

H. Monitoring and Compliance

In order to successfully implement the ATMP, the agencies determined that it should include provisions to allow the agencies to adequately monitor and ensure compliance with its conditions. To this end, Section 4.1 of the final ATMP requires that operators equip aircraft used for air tours with flight monitoring technology, to use such technology when conducting air tours, and to include flight monitoring data in their semi-annual reports. The NPS consulted with the National Parks Overflights Advisory Group regarding the cost of various flight following technologies and found that there are relatively inexpensive off the shelf options that could meet the requirements of the ATMP. Operators are not required to install a specific type or brand of flight monitoring equipment as long as the tracking technology selected by the operator meets the performance requirements in the ATMP.

These requirements, together with the required semi-annual reports operators are required to submit to the agencies, will enable the agencies to appropriately monitor operations and ensure compliance with the ATMP. The ATMP acknowledges that NPS will report identified instances of noncompliance to the appropriate FSDO and that the public may also report allegations of noncompliance to the FSDO. Written reports of noncompliance will be investigated by the relevant FSDO consistent with FAA policy.

I. Adaptive Management

The provisions in Section 8.0 are included to allow minor modifications to the authorized operating parameters (for example, slight deviations in routes) to avoid adverse impacts to the Park's resources, values, or visitor experiences; address safety concerns; or address new information or changed circumstances. Such modifications could only be made through adaptive management if the impacts to the Park's resources are within the scope of impacts already analyzed under NEPA, the Endangered Species Act, the Coastal Zone Management Act, and Section 106 of the National Historic Preservation Act. This process was designed to ensure that actions that are potentially more impactful to resources would only be made

through the amendment process, which requires public participation, after further environmental compliance. Adaptive management could not be used to remove, or lessen, measures designed to mitigate impacts on the Parks' resources and visitor experience or increase the number of commercial air tours allowed. Authorization of additional air tours, beyond the those authorized in the ATMP including an increase of commercial air tour operations authorized annually on designated routes or an increase of daily commercial air tour operations, would require an amendment to the ATMP, which requires public notice and comment as well as environmental compliance.

J. Annual Meetings and Annual Training

The ATMP requires the operators, Park staff and the FSDO to attend an annual meeting regarding the implementation of the ATMP and any potential amendments or other changes to the ATMP, if such meeting is requested by the NPS or the FAA. The annual meeting requirement was included to facilitate effective implementation of the ATMP, and to be used to review and discuss issues related to the implementation of the ATMP. The agencies intend that meeting be used to ensure that air tour operators remain informed regarding the terms and conditions of the ATMP, including any adaptive management measures or amendments, and that operators are made aware of new or reoccurring concerns regarding Park resources. It is also intended to provide opportunities for operators to enhance their interpretive narrative for air tour clients and thus to increase understanding of Park natural and cultural resources by air tour companies and their clients.

The agencies may invite other stakeholders with relevant subject matter expertise to attend the annual meeting. In allowing stakeholders to attend all or part of the meetings, the agencies are providing opportunities for stakeholders to provide input to the agencies and the operators. For example, during the annual meeting, stakeholders can inform agencies of the dates on which the six no-fly days per year occur that are based on days that follow the Hawaiian Moon Calendar and Makahiki Season. This would enable the agencies to provide the maximum amount of advance notice to operators regarding the no-fly days. Allowing stakeholders to attend may also advance understanding, respect, and appreciation for what these days are and why they are culturally significant for Native Hawaiians.

The ATMP also requires operators to take at least one training course per year, when such course is made available by the NPS. Operator training and education will provide opportunities for operators to enhance their interpretive narrative for air tour clients and increase understanding of Park natural and cultural resources by air tour companies and their clients. This training may be provided in conjunction with the annual meeting or may be provided separately. In addition, all helicopter pilots must complete the FAA's Introduction to Fly Neighborly training within 180 days of the effective date of the ATMP and retain certifications on file.

K. Competitive Bidding

The Act requires that where an ATMP limits the number of authorized commercial air tours within a specific time frame, the agencies must develop an open and competitive process for evaluating competing proposals to conduct commercial air tours. 49 U.S.C. § 40128(a)(2)(B). Because the ATMP provides an initial allocation of operations based on the proportion of air tours flown by each current operator during the period from 2017-2019, the agencies do not plan to conduct a competitive bidding process prior to finalization of the ATMP. However, the agencies anticipate holding a competitive bidding process in the future, consistent with the Act. The ATMP identifies conditions under which a competitive bidding process may be appropriate.

L. Interim Operating Authority

Under the Act, the FAA was required to grant IOA for commercial air tours over the Park as a temporary measure until an ATMP could be established. This was a nondiscretionary, Congressionally mandated action. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than an annual limit. Currently, eight commercial air tour operators hold IOA for a combined total of 24,880 commercial air tours per year over the Park. The ATMP will be established and effective on the date that it is signed by all required signatories. Within 180 days of the effective date of the ATMP, the FAA, through the appropriate FSDO, will issue amended OpSpecs to all operators with IOA for the Park that incorporate the operating parameters set forth in the ATMP. Operators will be permitted to continue to conduct air tours within the ATMP boundary up to the limit of their IOA until their OpSpecs are amended to incorporate the ATMP's operating parameters. All IOA for the Park terminates by operation of law 180 days after the effective date of the ATMP, 49 U.S.C. § 40128(c)(2)(E), after which time no operator may continue to rely on any OpSpec issued under IOA as authority to conduct commercial air tours within the ATMP boundary.

XVI. Decision and Order

After careful and thorough consideration of the facts herein, and the reasons stated in Sections X(B) and XV, the FAA finds that the Preferred Alternative is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of NEPA and other applicable environmental requirements and is not a major federal action significantly affecting the quality of the human environment or otherwise, including any condition requiring consultation pursuant to Section 102(2)(c) of NEPA.

After careful and thorough consideration of the facts herein, and for the reasons stated in Sections X(A) and XV, the NPS finds that the selected action/final ATMP (Preferred Alternative) is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of NEPA and other applicable environmental requirements and is not a major federal action significantly affecting the quality of the human environment or otherwise including any condition requiring consultation pursuant to Section 102(2)(c) of NEPA. As a

result of these findings, the FAA and the NPS will not prepare an Environmental Impact Statement.

The FAA and the NPS have also considered the agencies' common and respective goals in relation to issuance of an ATMP for the Park including the environmental impacts of this decision, the mitigation measures available to preserve the Park's resources, visitor experience, and aviation safety, and find that the Preferred Alternative is reasonably supported and consistent with the Act.

Accordingly, under the authority delegated to us by the Administrator of the FAA and the Director of the NPS, we select the Preferred Alternative, and approve and direct that action be taken – issuance of the ATMP for Hawai'i Volcanoes National Park consistent with this document and issuance or modification of applicable operations specifications – to carry out the agency decisions as detailed in this ROD.

RANDOLPH LAVASSEUR Digitally signed by RANDOLPH LAVASSEUR Date: 2023.12.19 12:22:28 -08'00'

Randolph Lavasseur Date
Acting Regional Director
Interior Regions 8, 9, 10, 12
National Park Service

RAQUEL GIRVIN Digitally signed by RAQUEL GIRVIN Date: 2023.12.19 12:37:29 -08'00'

Raquel Girvin Date
Regional Administrator
Western-Pacific Region
Federal Aviation Administration

RAYMOND SAUVAJOT Digitally signed by RAYMOND SAUVAJOT Date: 2023.12.19 15:30:46 -05'00'

Raymond M. Sauvajot Date
Associate Director
Natural Resource Stewardship
and Science Directorate
National Park Service

JULIE ANN MARKS Digitally signed by JULIE ANN MARKS Date: 2023.12.19 15:42:56 -05'00'

Julie Marks Date
Executive Director (A)
Office of Environment & Energy
Federal Aviation Administration

XVII. Right of Appeal

This FONSIs/ROD constitutes a final order of the FAA Administrator and is subject to the exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay the

implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.

XVIII. Attachments

A. Final EA (which includes the following appendices):

Appendix A: References

Appendix B: List of Acronyms, Abbreviations, and Glossary

Appendix C: List of Preparers

Appendix D: Distribution List

Appendix E: Environmental Impact Analysis Methods

Appendix F: Noise Technical Analysis

Appendix G: Cultural Resources Consultation and Summary

Appendix H: Section 7 Consultation

Appendix I: Section 4(f) Analysis

Appendix J: Public Scoping Materials

Appendix K: CZMA Compliance

Appendix L: Draft ATMP and Draft EA Public Involvement Materials

B. National Park Service – Statement of Compliance

C. Final Air Tour Management Plan for Hawai‘i Volcanoes National Park