ATTACHMENT B

National Park Service – Statement of Compliance

ATTACHMENT B

NATIONAL PARK SERVICE STATEMENT OF COMPLIANCE FOR HALEAKALĀ NATIONAL PARK AIR TOUR MANAGEMENT PLAN

Compliance with NPS Management Policies Unacceptable Impact and Non-Impairment Standard

As described in National Park Service (NPS or Service) 2006 Management Policies, § 1.4.4, the National Park Service Organic Act prohibits the impairment of park resources and values. *Guidance for Non-Impairment Determinations and the NPS NEPA Process* (September 2011) provides guidance for completing non-impairment determinations for NPS actions requiring preparation of an environmental assessment (EA) or environmental impact statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The NPS has completed a non-impairment analysis for the Haleakalā National Park (Park) Air Tour Management Plan (ATMP) and determined that it will not result in impairment of Park resources, or in unacceptable impacts as described in § 1.4.7.1 of the 2006 NPS Management Policies.

Sections 1.4.5 and 1.4.6 of Management Policies 2006 further explain impairment. Section 1.4.5 defines impairment as an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Section 1.4.5 goes on to state:

An impact to any park resource or value may, but does not necessarily, constitute an impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Section 1.4.6 of Management Policies 2006 identifies the park resources and values that are subject to the no-impairment standard. These include:

the park's scenery, natural and historic objects, and wildlife, and the processes and
conditions that sustain them, including, to the extent present in the park: the ecological,
biological, and physical processes that created the park and continue to act upon it;
scenic features; natural visibility, both in daytime and at night; natural landscapes;
natural soundscapes and smells; water and air resources; soils; geological resources;

paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

NPS non-impairment analysis normally does not include discussion of impacts to visitor experience, socioeconomics, public health and safety, environmental justice, land use, Park operations, Wilderness, etc., as these do not constitute impacts to Park resources and values subject to the non-impairment standard under the Organic Act. *See* Management Policies § 1.4.6.

Non-Impairment Determination for the Haleakalā National Park ATMP

As a basis for evaluating the potential for impairment or unacceptable impacts on the Park's resources, the NPS relied on the *Final Environmental Assessment for an Air Tour Management Plan for Haleakalā National Park* (EA) and specifically the Noise Technical Analysis: Haleakalā National Park, Appendix F to the EA (Noise Technical Analysis). Additionally, the non-impairment analysis for biological resources was informed by the Section 7 documentation for the Endangered Species Act (Appendix H to the EA).

The EA includes analysis of impacts to the soundscape (noise and noise-compatible land use); air quality and climate change; biological resources including federally listed species; cultural resources including ethnographic resources, sacred sites and traditional cultural properties, archeological resources, cultural landscapes and prehistoric and historic structures; Wilderness; visitor use and experience; environmental justice and socioeconomics; viewsheds (visual effects); and coastal resources. Consistent with NPS guidance described above, the NPS has not included a non-impairment determination here for Wilderness, environmental justice and socioeconomics, and visitor experience. The NPS has included the analysis for coastal resources within the Park boundary under other categories rather than a stand-alone analysis in order to avoid redundancy. A discussion of compliance with Wilderness policy is included at the end of this Statement of Compliance.

The EA evaluated the impacts of two action alternatives including the selected alternative. The selected alternative, or ATMP, authorizes 2,224 commercial air tours a year on a designated route at minimum altitude of 2,000 ft. above ground level (AGL) over land and 3,000 ft. AGL

over the ocean. The ATMP prohibits air tours over the most sensitive areas of the Park, including the Haleakalā Crater and includes monitoring provisions that provide the agencies' ability to monitor and ensure compliance with mitigations under the ATMP. A detailed description of the alternative is presented in the EA, pages 18-25 and final EA/errata, pages 10-14.

The EA discloses that the ATMP may result in the displacement of some air tours outside the ATMP boundary (flights ½-mile outside the Park's boundary during which the aircraft flies below 5,000 ft. AGL). Air tours outside of the ATMP boundary are not subject to the National Parks Air Tour Management Act of 2000 (NPATMA) and therefore are not regulated under the ATMP. The NPS does not have jurisdiction over flights outside the ATMP boundary. Because flights outside of the ATMP boundary are outside the jurisdiction of the ATMP and the NPS, this non-impairment determination focuses on the impacts of air tours within the ATMP boundary as authorized in the ATMP.

The purposes of Haleakalā National Park, along with Park significance statements and a description of the Park's fundamental resources and values, are described in the *Foundation Document Haleakalā National Park* (Foundation Document), 2015. The Park's purpose is:

For the inspiration of current and future generations, Haleakalā National Park protects a wild volcanic landscape with a wide array of fragile and diverse native ecosystems, including plant and animal species found nowhere else on earth. Our stewardship perpetuates the unique and continuing connections between Hawaiian culture and this sacred and evolving land. (Foundation Document, page 5).

The Park significance statements and fundamental resources and values highlight resources and values that may be impacted by commercial air tours including: the Park's native ecosystems; exceptional scenery and viewsheds; threatened and endangered species, many of which exist nowhere else on earth; natural sounds and solitude; Kīpahulu Moku District; kuleana, which is the responsibility passed down from the kūpuna (ancestors) to present and future generations for stewardship and respect for all things spiritual and physical; the sacredness and ongoing connections of the Park to Native Hawaiians and other cultural resources. Some fundamental resources and values will not be impacted by commercial air tours. Commercial air tours will not impact the Park's night sky, the Park's museum archive and collections, and geological resources. (See Foundation Document, pages 6-9).

As disclosed in Section 3 of the EA, the ATMP would result in overall beneficial impacts to all Park resources, including the fundamental resources and values described above, compared to current conditions. The ATMP authorizes less than half the number of air tours currently conducted and is a 90% reduction from air tours currently authorized under IOA, substantially increases the altitude at which air tours are authorized to fly and eliminates the potential for air tours over some of the most sensitive areas of the Park. These changes will result in measurable beneficial effects to Park resources compared to current conditions since air tour noise will be

less frequent and less intense overall.¹ However, the 2,224 annual air tours authorized under the ATMP will continue to result in some negative effects to Park resources. The analysis presented below focuses on the actual effect or condition of the resource from 2,224 air tours (not the impact of the change from current conditions) and whether those effects are an unacceptable impact or rise to the level of impairment.

Soundscape Non-Impairment Analysis

Haleakalā's natural soundscape is a fundamental resource of the Park as the Park's low ambient sounds play a vital role in the health of Park natural ecosystems (NPS, 2015a). Both natural and existing acoustic conditions in the Park were measured in 2003 (Lee et al., 2016). Median daytime natural ambient (L₅₀) sound levels² ranged from 21 dBA, A-weighted (dBA) in backcountry areas to 45 decibels (dBA) along the shoreline. The Haleakalā Crater is one of the quietest areas measured in the National Park System, with sound levels, at times, approaching the threshold of human hearing and as low as 10 dBA (Lynch, 2012; Wood, 2015). Other areas in the Park, specifically those along the coast, have much louder natural ambient conditions. The median daytime existing ambient (L₅₀) sound levels exhibit similar variability as natural ambient conditions, ranging from 23 dBA in the backcountry to 46 dBA in the front country where visitors are more prevalent. To provide context for understanding sound levels, Table 2 in the Noise Technical Analysis explains that, in quiet settings, outdoor sound levels exceeding 35 dBA degrade experience in outdoor performance venues. At 52 dBA, one may reasonably expect interference with Park interpretive programs or normal voice communication at five meters (two people five meters apart). See also Figure 1, page 6 of Appendix F, Noise Technical Analysis, for additional details about comparative noise levels. These metrics confirm that currently the natural acoustic environment at these sites sometimes experiences disturbances from anthropogenic noise, including air tour noise. Air tour noise is currently audible throughout 95% of the Park for up to an hour a day (non-continuous). Approximately half (50%) of the Park experiences audible air tour noise for more than two hours a day (non-continuous). In approximately 1% of the Park, air tour noise is audible for nearly 4 hours per day (225 minutes). Air tours are audible in 100% of the Park for up to 15 minutes per day (Figure 9, Noise Technical Analysis, final EA/errata, page 15). These severe noise impacts result in unacceptable impacts to the Park's soundscape and other resources (EA, page 9).

To determine the severity of the effect and potential for impairment or unacceptable impacts under the ATMP, the NPS considered not just the presence of noise and potential for

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¹ As described in the EA, some locations may experience slightly louder and more prolonged noise compared to current conditions because of specific route designations. However, overall, the intensity and frequency of air tour noise will be less than current conditions which will have an overall beneficial effect on resources.

 $^{^2}$ Natural Ambient (L₅₀): The sound level exceeded 50 percent of the time determined from the natural sound conditions found in a study area, including all sounds of nature (i.e., wind, streams, wildlife, etc.), and excluding all human and mechanical sounds. Ambient data were based on a 12-hour, daytime, time period, 7:00 AM to 7:00 PM, typical operating hours for air tours.

disturbance, but also the duration, frequency, and amplitude of noise. Under the ATMP, for nearly 1/3 of the year (non-continuous), the Park's soundscape will be free from commercial air tour noise from air tours within the ATMP boundary (118 commercial air tour free days represents approximately 32% of the year). During these days, air tour noise from within the ATMP boundary will not degrade the soundscape. Additionally, air tours may only occur between 11:00 AM and 2:00 PM local time (or 11:00 AM and 4:00 PM for quiet technology aircraft), limiting potential impacts to the soundscape to only five hours a day.

Noise modeling for the ATMP discloses that noise from 2,224 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 very low intensity and for a limited duration. Air tour noise will be audible in just over a third of the Park (37%) for at least an hour a day (Table 10, Noise Technical Analysis, final EA/errata, page 16). Noise would be audible for the shortest duration, no more than 30 minutes, in the Haleakalā Crater which is one of the most sensitive areas of the Park since the lowest natural ambient sound measurements were reported in this area. In fact, noise levels will not exceed 35 dBA, a level at which many natural sounds may be masked and at which wildlife may experience disturbance, over most of the Crater on any day (Figure 13, Noise Technical Analysis). While likely audible, noise at 35 dBA is very low intensity noise. Approximately 58 % of the Park will experience noise above 35 dBA for less than a minute a day. Approximately 42% of the Park will have no noise above 35 dBA while approximately 33% of the Park will experience noise above 35 dBA for no more than 15 minutes per day (Table 11, Noise Technical Analysis, final EA/errata, page 29). Noise above 35 dBA would occur between 30-45 minutes in approximately 3% of the Park. Air tour noise will not reach or exceed 52 dBA, the level at which speech is interrupted, for more than 10 minutes (non-continuous) at any modeled location on any day (Table 8, Noise Technical Analysis). Noise will be the loudest, 65 dBA, under and adjacent to the designated route, but the intensity of noise dissipates in locations further away from the designated route. Thus, while air tour noise will be audible throughout the Park on days when air tours are authorized, that noise will be limited in intensity and of a short duration.

In summary, the natural and cultural soundscapes of the Park will be unimpaired and without unacceptable impacts under the ATMP since noise impacts from commercial air tours do not occur every day (nearly 1/3 of the year there will be no noise from air tours within the boundary), may only occur five hours a day on days when air tours are allowed, noise above 35 dBA only occurs in just over half the Park and noise at this decibel level should not exceed 1 minute in most locations and does not exceed 45 minutes at any location. The most severe noise impacts are near or directly below the designated route and those noise impacts do not reach or exceed 52 dBA at any modeled location for more than 10 minutes. The highest noise is 65 dBA which occurs at both Nu'u (West Park boundary) and 'Ohe'o Coastal area below the designated route. There is not a designated route over the Haleakalā Crater, which limits noise in this sensitive area. The ATMP perpetuates the opportunity to experience natural sounds and protect this fundamental resource in Haleakalā National Park by providing days without air tour

noise, limiting the intensity of the air tour noise when air tours do occur and by limiting noise in the Haleakalā Crater.

Biological Species Non-Impairment Analysis

The Park protects a unique diversity of native wildlife species, over 90% of which are endemic to the Hawaiian Islands. All native mammals and several bird species in the Park are federally and state listed threatened or endangered species. These species are fundamental resources of the Park since the perpetuation of these species is a component of the Park's purpose. ATMP impacts to wildlife occur from noise generated by commercial air tours. The analysis in the EA discloses that noise would likely be heard by wildlife. Generally, noise from commercial air tours may impact wildlife in a number of ways: altered vocal behavior, breeding relocation, changes in vigilance and foraging behavior, predator avoidance, reproductive success, and impacts on individual fitness and the structure of ecological communities to name a few (Shannon et al., 2016; Kunc et al., 2016; Kunc and Schmidt, 2019). Air tour noise currently interferes with research and education activities such as listening to or recording bird vocalizations which is necessary to monitor and document the presence of these species in the Park (EA, page 62).

To determine the severity of the effect and potential for impairment and unacceptable impacts to wildlife under the ATMP, the NPS considered not just the presence of noise and potential for disturbance, but also the duration, frequency, and amplitude of noise. The analysis demonstrates that 2,224 commercial air tours would result in noise levels above 35 dBA up to 45 minutes in 3% of the Park on a representative peak month average day. Approximately 42% of the Park would not experience noise above 35 dBA on a representative peak month average day. Over half of the location points modeled would not experience noise exceeding 35 dBA for more than 1 minute on a representative peak month average day. Additionally, as noted above, air tours would not occur on a substantial number of days each year, 118, and are limited to a five-hour window on days they are allowed, providing sufficient days for research and education opportunities for wildlife to be uninterrupted by air tour noise.

The NPS also considered the potential for bird strikes. The minimum altitude of 2,000 ft. AGL over land and 3,000 ft. AGL over the ocean substantially limits both noise exposure to wildlife in the Park, as well as the potential for bird strikes since the air tours can only be conducted on a single flight path through the ATMP planning area, avoiding many habitat areas for sensitive species. Air tours will not be permitted at dusk and dawn, which are the times of day birds are most active. The minimum altitude of 3,000 ft AGL over the ocean sufficiently protects turtles, whales, and other marine mammals that use the waters and beaches on and off the Park boundary.

Further, the NPS concluded, and 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 Park³ (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 impact on wildlife, and specifically threatened and endangered species, these impacts are insignificant and discountable and will not result in harassment, death, or harm to these species.⁴ The ATMP includes a flight tracking monitoring provision that enables the NPS to ensure that the operators are flying at the designated routes and altitudes that protect these species.

In conclusion, the ATMP will not impair the Park's wildlife or its habitat because the impacts from the commercial air tours do not individually rise above 35 dBA over more than half the Park for more than 1 minute on a representative peak month average day and do not exceed 45 minutes at any location. In addition, the single flight path through the ATMP planning area avoids many habitat areas for sensitive species. As documented through this analysis, there are not expected to be direct or cumulative impacts to wildlife species on an individual or population level. These impacts do not impair the functioning of the Park's endemic species and unique ecosystems and the wildlife within. Consistent with the "may affect, not likely to adversely affect" determination, wildlife, including threatened and endangered species, will persist in the Park without a loss of integrity due to the ATMP.

Cultural Resources Non-Impairment Analysis

The Park includes many cultural resources, including ethnographic resources, sacred sites, traditional cultural properties (TCPs), archeological resources and historical and architectural resources. These resources are described in detail in the EA on pages 71-79. Native Hawaiians view Haleakalā in its entirety as an important cultural place, a wahi pana or place of mo'olelo (stories), traditions, and legends. Based on oral and written traditions, as well as current cultural beliefs, Haleakalā is a sacred mountain. Native Hawaiians use Haleakalā for conducting ceremonies and other traditional practices including the period of Makahiki, which is an annual festival lasting approximately four months and includes ceremonies and hula. Many traditional Hawaiian practices require that the sounds of nature are heard and not interrupted by other human noises. The Haleakalā Summit, including Kīpahulu Valley and Kaupō Gap, is eligible for the National Register as a TCP for its association with the cultural landscape of Maui and because it has known uses, oral history, mele (song), and legends, is a source for both traditional materials and sacred uses, and is considered a place exhibiting spiritual power (EA, page 72). Sustaining these connections and interrelationships between Native Hawaiians and culturally significant Park resources and places is fundamental resource and value of the Park (Foundation Document, page 8). Archeological resources document the Native Hawaiian ka

³ May affect, but not likely to adversely affect" means that all effects are beneficial, insignificant, or discountable.

⁴ <u>Section 3. Definitions | U.S. Fish & Wildlife Service (fws.gov)</u>

noho 'ana (way of life in traditional land divisions, or ahupua'a, extending from the uplands to the sea). These archeological resources are also fundamental resources of the Park (Foundation Document, page 8). The historic districts the Park protects are significant for their association with Native Hawaiian culture, tradition, and settlement. The Park also contains cultural landscapes that are significant for their association with early park master planning during the 1930s including the work of the Civilian Conservation Corps (CCC), World War II development in the Park, and the post-War Mission 66 era of NPS park planning. The concept of kuleana is also a fundamental resource of the Park. The Native Hawaiian concept of kuleana is generally recognized as the responsibility passed down from the kūpuna (ancestors) to present and future generations for stewardship and respect for all things spiritual and physical (Foundation Document, page 9).

Native Hawaiians have consistently noted that the air tours over the Park unreasonably interfere with the silence needed for ceremonies conducted by Native Hawaiian practitioners at these sacred sites, some of which rely on hearing natural sounds. Kūpuna, cultural practitioners, Native Hawaiians and kama'āina (the present residents in a place; a citizen; especially one of long standing) have repeatedly noted that overflights from commercial air tours severely degrade the sacredness of Haleakalā and the sky above, detract from the sanctity of the mountain, and interrupt traditional practices, including fishing (EA, page 81). The NPS determined the current number of air tours unacceptable impact the Park's cultural resources.

Noise impacts to the Park's cultural resources from the ATMP would be similar in frequency, amplitude, and duration to those described above in the non-impairment analysis for soundscapes and wildlife. The analysis in the EA evaluated the impacts from the ATMP on ethnographic resources, sacred sites, traditional cultural properties, archeological sites, and historic resources. It is likely that air tours will continue to impact these resources, including disruptions to the silence needed for ceremonies conducted by Native Hawaiian practitioners at sacred sites and air tours will continue to detract from the sacredness of the mountain. However, the ATMP limits the duration, frequency, and intensity of these impacts so that they do not unreasonably interfere or impair these purposes since there are opportunities for silence without noise from commercial air tours for 1/3 of the year and on those days when commercial air tours do occur the intensity of noise is very low over most of the Park. Commercial air tours will be prohibited 118 days per year, leaving a substantial number of days without air tour noise. On days when air tours are allowed, they must occur within a 5-hour window, providing time when no air tour noise can intrude on cultural activities. After consulting with stakeholders, the NPS may designate additional days be noise 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 anywhere in the Park, the duration of noise in most locations is very limited. In more than half of the Park, noise will exceed 35 dBA for less than a minute on a representative peak month average day, leaving the majority of the day free from audible noise or noise exceeding 35 dBA.

Further restricting air tours to designated routes limit noise and visual effects to significant features of the Haleakalā Summit TCP, and the Park's National Register listed and eligible resources, including the Crater Historic District, Kīpahulu Historic District, Nu'u Archeological Sites, Ka'āpahu Archeological Sites, and Naholoku Archeological Sites. Both the Kīpahulu Historic District and the Haleakalā Summit TCP have a quiet setting or natural sounds as a significant characteristic. Some sites within the Kīpahulu Historic District may experience a slight increase in noise intensity from existing conditions, yet not all of these resources have settings where quiet and natural sounds are significant, and the duration flights may be heard would be reduced due to the higher minimum altitudes and other restrictions (EA, page 82). The Kīpahulu Historic District would experience noise above 35 dBA for approximately 31 minutes, which is a decrease by 4.9 minutes compared to existing conditions but would experience an increase in time above 52 dBA by seven minutes (from 2.2 to 9.3 minutes) compared to existing conditions.

The 'Ohe'o Coastal area is near the coast, where natural ambient sound level is between 45 and 50 dBA. The time audible considers the natural ambient sounds as well as the noise generated by the air tours. Despite the slight sound level intensity increases cited above, the time the air tours may be audible would decrease to approximately 80 minutes, which is a decrease of 104 minutes compared to existing conditions. To understand how specific cultural resource sites may be impacted, see the Noise Technical Analysis. The designation of routes, altitude restrictions and other ATMP parameters were designed specifically to mitigate impacts to Park cultural resources and values. The Park is a sacred place to kānaka maoli (Native Hawaiians) and is fundamentally linked to their traditional and contemporary beliefs, practices, and way of life, with the concept of kuleana central to these beliefs (Foundation Document, page 4). The Park recognizes that how kuleana is managed affects other moku (traditional Hawaiian land districts) outside Park boundaries as well as ocean resources. During the development of the ATMP, the Park considered and refined the ATMP routes and altitudes as a result of comments received during public scoping. The single flight route would avoid identified culturally significant areas, including those used by traditional cultural practitioners, the Kīpahulu Historic District, Crater Historic District, the Kapahu Living Farm, and cultural fishing access and use in certain coastal areas (EA, page 18). Kūpuna, cultural practitioners, Native Hawaiians and kama'āina (the present residents in a place; a citizen; especially one of long standing) have repeatedly noted that overflights from commercial air tours severely degrade the sacredness of Haleakalā and the sky above, detract from the sanctity of the mountain, and interrupt traditional practices, including fishing. Thus, the ATMP would overall reduce noise and visual impacts that could detract from the feeling and setting of these resources (EA, page 81) and would not result in impairment.

In summary, there will be impacts to cultural resources in the Park under the ATMP, but these impacts will not rise to the level of impairment and are not unacceptable because there are a substantial number of days when air tours will not occur, the times of day during which air

tours could occur are limited, the intensity of noise is low and the duration of noise is short, and the designated route avoids the most important sacred sites in the Park.

Viewshed or Scenery Non-Impairment Analysis

The Park's panoramic views greatly contribute to Haleakalā's unique sense of place (Foundation Document, page 7) and are a fundamental resource of the Park. Visitors come to the Park to witness spectacular sunrises over the natural landscape from a high elevation vantage along with other views in the Park. Studies indicate that aircraft noise in national parks can impact human perceptions of aesthetic quality of viewsheds (Weinzimmer et al., 2014; Benfield et al., 2018). Visitors may notice aircraft because of the accompanying noise. Aircraft are particularly noticeable in the Haleakalā backcountry and Wilderness areas and from the high elevation crater overlooks (EA, page 117). Currently, air tours disrupt scenic views within the Park an average of 14 times per day, with a maximum of 50 disruptions a day on peak days (EA, page 118).

In order to determine whether the ATMP would result in unacceptable impacts or impairment to the Park's viewsheds, the NPS considered both the frequency in which air tours would disrupt viewsheds and which viewsheds would be impacted. As disclosed in the EA, under the ATMP, air tours may disrupt a viewshed a maximum of 14 times per day on days in which air tours are authorized (EA, page 119, final EA/errata, page 20). 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 14 potential air tours by designating a route that avoids most scenic points of interest and overlooks, including Waimoku Falls and the Haleakalā Crater. Under the ATMP, commercial air tours along the authorized route could be visible from the Park's coastal areas, but they would avoid most other scenic points of interest or overlooks. Air tours will not be permitted over the Summit District under 5,000 ft. AGL. As noted in the EA, it is unlikely that operators will fly outside the ATMP boundary above 5,000 ft. AGL in this area because of the requirements for supplemental oxygen. Thus, viewsheds in this especially sensitive area would not experience many impacts from air tours, including viewpoints along Haleakalā Highway overlooking the Haleakalā Crater (EA, page 119). The ATMP would prohibit early morning flights and late evening flights, preserving the spectacular sunrises and sunsets and the views in the immediate hours both before and after sunrise and sunset. Because the ATMP limits air tours to only 14 tours a day, limits the hours in which air tours may disrupt the viewshed, the disruption is short in nature, and limits those tours to a route not visible from most scenic points of interests and overlooks, the Park's outstanding scenery and viewsheds will be unimpaired under the ATMP.

Air Quality Non-Impairment Analysis

The Park is a designated Class I Airshed, which means that it is afforded the highest degree of protection (NPS, 2015a). The Park is removed from many sources of air pollution. However,

volcanic gases and particulate emissions from active volcanic activity, approximately 100 miles away on the Island of Hawai'i, may affect air quality and visibility within the Park. Commercial air tours currently contribute 267 metric tons (MT) of carbon dioxide (CO₂) (EA, page 48).

The NPS completed an air quality and climate change analysis and determined that the 2,224 commercial air tours authorized under the ATMP contributes a minimal amount of emissions to the local air quality and would not have a regional impact (EA, page 49). The ATMP would contribute 109 MT of CO₂. 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 for any of the time periods analyzed. Because the amount of emissions is so small the ATMP will not affect the integrity of the Park's air quality, leaving it unimpaired for future enjoyment.

Conclusion

As demonstrated here and in the analysis referenced above, the impacts from the ATMP to these resources, neither individually nor cumulatively, will not preclude the NPS from achieving the purpose of the Park or desired conditions for resources. Also, the ATMP will not unreasonably interfere with Park programs or activities, will not unreasonably interfere with another appropriate use, the overall atmosphere of peace and tranquility or the natural soundscape, or NPS concessioner or contractor operations or services. As a result, there will not be impairment of or unacceptable impacts to the Park's natural and cultural resources or visitor experience because of the ATMP. Impacts to other resources potentially affected were considered so small and insignificant that they did not warrant a written analysis here.

The ATMP sections on adaptive management and amending the plan will allow Park managers to ensure that unanticipated or unacceptable impacts do not occur and the requirement for implementing flight tracking technologies included in the ATMP will better enable the NPS to monitor and enforce the restrictions in the ATMP.

Compliance with NPS Management Policies Regarding Appropriate Uses

A separate written appropriate use analysis is not required under NPS 2006 Management Policies. In recognition of comments suggesting that the NPS consider whether commercial air tours are an appropriate use over the Park, for this ATMP the NPS has decided to briefly address the issue of appropriate use below.

NPS 2006 Management Policies § 1.5 state:

An "appropriate use" is a use that is suitable, proper, or fitting for a particular park, or to a particular location within a park. Not all uses are appropriate or allowable in units of the national park system, and what is appropriate may vary from one park to another and from one location to another within a park."

Section 8.1.2 of Management Policies further explain:

The fact that a park use may have an impact does not necessarily mean it will be unacceptable or impair park resources or values for the enjoyment of future generations. Impacts may affect park resources or values and still be within the limits of the discretionary authority conferred by the Organic Act. In these situations, the Service will ensure that the impacts are unavoidable and cannot be further mitigated.

In determining whether a use is appropriate, the NPS evaluates:

- consistency with applicable laws, executive orders, regulations, and policies;
- consistency with existing plans for public use and resource management;
- actual and potential effects on park resources and values;
- total costs to the Service;
- whether the public interest will be served.

Parks may allow uses that are appropriate even if some individuals do not favor that particular use. NPATMA contemplates that commercial air tours may be an acceptable use over National Park System units so long as protections are in place to protect park resources from significant impacts of such tours, if any. Therefore, commercial air tours are authorized by law, though not mandated, and generally may be appropriate where they do not result in significant impacts or cause unacceptable impacts on park resources and values.

Haleakalā National Park ATMP — Consistency with NPS Management Policies for Appropriate Uses

The NPS relied on the mitigations in the ATMP (Attachment C to the Record of Decision (ROD)), the agencies' ability to monitor and ensure compliance with those mitigations under the ATMP, the analysis in the EA (Attachment A to the ROD), the Section 7 Consultation for the Endangered Species Act (Appendix H to the EA), the unacceptable impact and non-impairment analysis above, and the language in NPATMA as a basis for finding that the ATMP's authorization of 2,224 commercial air tours over Haleakalā National Park is an appropriate use.

- The ATMP for Haleakalā National Park is consistent with applicable laws, executive orders, regulations, and policies. NPATMA specifically provides that air tours may be allowed over National Park System units where they do not result in significant impacts. Commercial air tours are not prohibited in applicable laws, regulations, or policies.
- The ATMP's authorization of 2,224 commercial air tours over the Park is consistent with the Park's existing management plans. No existing management plans preclude commercial air tours, though the Park may set different management direction in the future. Mitigations, including limiting the number of commercial air tours per year, restricting air tours to a 5-hour window on days tours are allowed, restricting

- commercial air tours to the designated route, and setting minimum altitudes, limit impacts to visitor experience and other resources.
- The effects of the 2,224 commercial air tours authorized in the ATMP on Park resources were evaluated in the materials referenced above and unacceptable impact and nonimpairment discussion above. Half of the Park will not experience noise at or above 35 dBA from air tours for more than 1 minute a day. Air tour noise will not exceed 35 dBA for more than 45 minutes at any location. The commercial air tours are short in duration and occur at decibel levels that do not rise to the level of an unacceptable impact nor impair Park resources. The NPS does not interpret § 8.1.1 to require the NPS to contemplate mitigating Park uses to the point that the use no longer has any impact or no longer can occur. Rather, this section requires the NPS 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. In this case, the NPS evaluated the impacts of 2,224 commercial air tours and included specific mitigations in the ATMP to minimize impacts to Park resources. The NPS acknowledges that prohibiting commercial air tours entirely would avoid all impacts to Park resources, but the elimination of commercial air tours is not required at this time to avoid unacceptable impacts or impairment of Park resources. The mitigations in the ATMP are sufficient to protect Park resources. Additional mitigations are not required because the impacts associated with the ATMP are not significant and do not result in unacceptable impacts or impairment.
- The cost to the NPS from implementing the ATMP includes yearly compiling of operator reported commercial air tours and aircraft monitoring data which is done in coordination with the Federal Aviation Administration. These activities would occur anyway, because they are required under NPATMA, regardless of whether the Park has an ATMP because commercial air tours are currently authorized under interim operating authority (IOA). This is done by the NPS's Natural Sounds and Night Skies Division which also provides noise monitoring, modeling, and planning support to parks across the country. The Park also participates in the annual meetings with operators.
- While some visitors may not like commercial air tours, air tour patrons may appreciate the opportunity to view the Park from a commercial air tour. Commercial air tours, as contemplated in NPATMA, serve the public in this way.

Additional commercial air tours and commercial air tours on other routes may not be appropriate. However, the NPS has determined that because the ATMP authorizes 2,224 commercial air tours, and because those commercial air tours are restricted to a designated route which avoids many of the Park's most sensitive resources, are relatively short in duration, and are at an acceptable altitude, the ATMP is protective of Park resources and the commercial air tours it authorizes are an appropriate use at this time.

Compliance with NPS Management Policies for Soundscape Management

A separate written compliance analysis for Soundscape Management is not required under NPS 2006 Management Policies. In recognition of comments suggesting that the NPS consider whether the ATMP complies with NPS soundscape policies and guidance, the NPS has opted to briefly discuss the issue with respect to this ATMP.

Management Policies § 4.9 states, "The National Park Service will preserve, to the greatest extent possible, the natural soundscapes of parks." Section 5.3.1.7 similarly addresses cultural and historic resource sounds.

Section 8.4 specifically addresses overflights, including commercial air tours, which notes:

"Although there are many legitimate aviation uses, overflights can adversely affect park resources and values and interfere with visitor enjoyment. The Service will take all necessary steps to avoid or mitigate unacceptable impacts from aircraft overflights."

Because the nation's airspace is managed by the Federal Aviation Administration (FAA), the Service will work constructively and cooperatively with the Federal Aviation Administration and national defense and other agencies to ensure that authorized aviation activities affecting units of the national park system occur in a safe manner and do not cause unacceptable impacts on park resources and values and visitor experiences.

Director's Order #47 (NPS, 2000) gives further guidance for the management of natural and cultural soundscapes, requiring the consideration of both the natural and existing ambient levels.

Haleakalā National Park ATMP — Consistency with NPS Management Policies for Soundscape Management.

Consistent with Management Policies § 8.4, the NPS worked constructively and collaboratively with the FAA to develop the ATMP. The NPS relied on the mitigations in the ATMP (Attachment C to the ROD), the agencies' ability to monitor and ensure compliance with those mitigations under the ATMP, the analysis in the EA (Attachment A to the ROD), the Section 7 Consultation for the Endangered Species Act (Appendix H to the EA), and the unacceptable impact and non-impairment analysis above as a basis for finding that the ATMP complies with the policies and guidance for management of natural and cultural soundscapes.

Consistent with Management Policies § 4.9, the ATMP eliminates some noise, or moves the Park closer to natural ambient conditions, by limiting commercial air tours to 2,224 per year, which is a reduction from the current three-year average of 4,824 and the current authorized number 20,145 under IOA (final EA/errata, page 6). In addition, the ATMP limits the operation of commercial air tours on days when tours are allowed to 11:00 AM – 2:00 PM for non-quiet technology flights and 11:00 AM – 4:00 PM for quiet technology flights, establishes a

designated air tour route, increases the minimum altitude that commercial air tours may fly over the Park from as low as 500 ft. AGL under existing operations to a minimum 2,000 ft. AGL over land, minimum 3,000 ft. AGL over the ocean, and includes quiet technology incentives which could further reduce noise. When developing the ATMP, the NPS considered the existing commercial air tour routes and evaluated the potential for noise to reach the most sensitive resources in the Park, including cultural and natural resources, Wilderness, and areas where commercial air tours could disrupt educational opportunities and detract from the Park's outstanding views. The designated commercial air tours route limits the duration, frequency and intensity of noise to the Park's most sensitive locations.

Management Policies § 5.3.1.7 prohibits excessive noise and § 1.4.7.1 prohibits actions that unreasonably interfere with "the atmosphere of peace and tranquility, or the natural soundscape maintained in Wilderness and natural, historic, or commemorative locations within the park." As discussed above under the soundscape non-impairment discussion, the noise from commercial air tours is limited in frequency, duration and intensity. Therefore, the noise from commercial air tours is neither excessive nor does it unreasonably interfere with the peace and tranquility of the Park, Wilderness character, or natural or historic or commemorative locations. In conclusion, the ATMP complies with § 8.4, § 4.9, and § 5.3.1.7 of the Management Policies because the NPS has successfully collaborated with the FAA and developed an ATMP that will not result in unacceptable impacts to natural or cultural soundscapes or impairment of Park resources.

Compliance with NPS Management Policies for Wilderness Preservation and Management

A separate written compliance analysis for Wilderness Preservation and Management is not required under NPS Management Policies. In recognition of comments suggesting that the NPS consider whether the ATMP complies with NPS Wilderness policies and guidance, the NPS has elected to briefly discuss the issue with respect to this ATMP.

Management Policies for Wilderness preservation and management do not specifically address commercial air tours. However, § 7.3 of Director's Order #41 (NPS, 2013) notes that commercial air tours are inconsistent with preservation of Wilderness character and requires the NPS to consider ways to further prevent or minimize impacts of commercial air tours on Wilderness character.

The ATMP does not allow commercial air tours to take off or land within Wilderness. Therefore, § 4(c) of the Wilderness Act and § 6.4 of Director's Order #41 do not apply and a minimum requirements analysis is not required. While the NPS did not complete a minimum requirements analysis, the NPS did analyze and report on the impacts of commercial air tours on Wilderness character and minimized those impacts.

Haleakalā National Park ATMP – Consistency with NPS Management Policies for Wilderness Preservation and Management.

The NPS relied on the mitigations in the ATMP (Attachment C to the ROD), the agencies' ability to monitor and ensure compliance with those mitigations under the ATMP, the analysis in the EA (Attachment A to the ROD), the unacceptable impact and non-impairment analysis above, and soundscape management analysis above as a basis for finding that the ATMP complies with the policies and guidance for Wilderness Preservation and Management.

Approximately 24,719 acres, or 74 percent, of the Park is federally designated Wilderness. The Wilderness area includes the majority of the Haleakalā Crater, Manawainui, and the Kīpahulu Biological Reserve, which protects one of the most intact rainforest ecosystems in the Hawaiian Islands. The Park has a high level of biological diversity with natural processes continuing to take place, largely unaffected by humans. The Upper Kīpahulu Valley features a protected native Hawaiian intact rainforest, the Kīpahulu Biological Reserve, that is managed for resource protection and allows for scientific study. Extensive management activities are focused on protection and management of these natural resources. This reserve is closed to the public to protect its biodiversity (NPS, 2015b). The Park's Wilderness is a fundamental resource of the Park. Because natural sound is such an integral part of Wilderness character, any noise which is audible may detract from Wilderness character. The NPS determined that ongoing air tours unreasonably interfere with the opportunity for solitude and detract from the undeveloped and natural qualities of Wilderness.

The NPS considered the impact of 2,224 commercial air tours on Wilderness character, both the opportunity for solitude and the natural quality of Wilderness. The ATMP prohibits air tours over the Haleakalā Wilderness (EA, Figure 16) limiting the intensity of noise. As described in detail above and in the EA, noise from commercial air tours will be audible for a maximum of 105 minutes a day within Wilderness, although in most of the Park's Wilderness, noise will be audible for a much shorter amount of time. In most of the Park's Wilderness, noise from commercial air tours will not reach 35 dBA. During 1/3 of the year (non-continuous), there will be no air tour noise in Wilderness and air tours will only be audible during a five-hour window on any day they are allowed. This provides ample opportunity for solitude and protection of the natural quality of Wilderness. Wilderness character will remain unimpaired under the ATMP since a Park visitor will have the opportunity to hear the sounds of nature and experience the primeval character of the Park's Wilderness, and the natural and cultural soundscape will remain largely unmarred by air tour noise the vast majority of time.

Consistent with Director's Order #41, § 7.3, the ATMP includes mitigations which minimize impacts to Wilderness character including limiting commercial air tours to 2,224 per year, requiring aircraft to fly a minimum 2,000 ft. AGL over land, minimum 3,000 ft. AGL over the ocean L, and requiring the 2,224 commercial air tours to stay on a designated route (*See* ATMP, § 5.0, Attachment C to the ROD).

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