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 BADLANDS NATIONAL PARK, SOUTH DAKOTA

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 Badlands National Park (Park) in the State of South Dakota, 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 November 15, 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 encompasses 242,756 acres and is located 70 miles east of Rapid City, South Dakota. The rugged beauty of the Badlands and striking geologic deposits contain one of the world's richest fossil beds. The Park protects an expanse of mixed-grass prairie inhabited by bison, bighorn sheep, prairie dogs, federally endangered black-footed ferrets, and raptors which are susceptible to noise disturbance.

Badlands National Park is divided into a North Unit and a South Unit. The North Unit is the area north of the Pine Ridge Indian Reservation and the South Unit is the area entirely within the boundaries of the reservation. The South Unit is co-managed by the NPS and the government of the Oglala Sioux Tribe. There are two visitor centers in the Park, one in the North Unit and one in the South Unit (open seasonally). The Park receives approximately one million visitors per year.

The North Unit preserves the 64,250 acres of Badlands Wilderness Area, which consists of the Sage Creek Unit and the Conata Unit. Badlands Wilderness offers outstanding opportunities for exploration and solitude. The South Unit contains spectacular scenery, including table mesas offering sweeping panoramas, deep canyons, washes, ravines, and foreboding walls, as well as large areas of mixed-grass prairie that provide habitat for many wildlife species. Composed of undeveloped and remote tracts of land, the South Unit offers an experience rich in the history and culture of the Lakota people. The natural heritage and scenery of the White River Badlands is a landscape of great historical and spiritual significance to the Oglala Lakota.

The scenic landscape of the Park has great historical and spiritual significance to many tribes. The entire Badlands area is part of a cultural landscape of great importance to Northern Plains Tribal Nations. The Badlands and entire Black Hills are considered a cultural landscape for these Tribes. A large number of tribal sacred sites, traditional cultural properties, and archeological sites exist within the ATMP planning area and are significant cultural and natural resources of the Park that are fundamental to its purpose and significance. The purposes of the Park, as stated in its Foundation Document, are to: protect the unique landforms and scenery of the White River Badlands for the benefit, education, and inspiration of the public; preserve, interpret, and provide for scientific study of the paleontological and geological resources of the White River Badlands; preserve the flora, fauna, and natural processes of the mixed-grass prairie ecosystem; preserve the Badlands Wilderness Area and associated Wilderness values; preserve and interpret the history, culture, and heritage of the Sioux Nation and Lakota people; and preserve and interpret the archeological and contemporary history of use and settlement of lands within the Park.

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. Badlands 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 Assessment for the Air Tour Management Plan Program at Badlands National Park, 69 FR 20658 (April 16, 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 FR 55060 (Sept. 3, 2020).

On June 21, 2022, the Court ordered the agencies to file a joint supplemental report and propose 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 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. Two commercial air tour operators currently hold IOA to fly up to a combined total of 4,117 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 1,425 commercial air tours per year which is less than 35% of 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 operators with IOA for the Park to identify current air tour routes and other operating conditions. The general route information provided by these commercial air tour operators for their air tour operations within the ATMP planning area is shown in Figure 1. Commercial air tours conducted using helicopters on the Discovery Flight, Valley Tour, Grand Tour, Adventure Tour, and Expedition Tour are flown at operator-reported altitudes that range from 800 ft. above ground level (AGL) to 2,000 ft. AGL depending on the route, except during takeoff and landing from the privately owned and operated heliport within the ATMP planning area. The altitudes that range from 800 ft. to 2,000 ft. AGL result in the mean sea level (MSL) altitude callouts in Figure 1 that range from 3,300 ft. to 5,000 ft. MSL.³ Commercial air tours conducted by fixed-wing aircraft on the Eagle Aviation route are conducted at operator-reported altitudes that range from 1,500 ft. AGL to 2,000 ft. AGL depending on location along the route, which result in altitudes that range from 3,900 ft. to 5,100 ft. MSL as shown on the altitude callouts in Figure 1. Currently, no air tours are conducted over the South Unit of the Park.

-

³ Altitude expressed in units AGL is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in MSL refers to the altitude of an aircraft above sea level, regardless of the terrain below it. Aircraft flying at a constant MSL altitude would simultaneously fly at varying AGL altitudes, and vice versa, assuming uneven terrain is present below the aircraft.

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
Badger Helicopters, Inc.	BHT-206B, BHT-47-G3B1, R-44-II, R-66- 66 (helicopter)	962	1,317	1,205	1,329	1,190	1,729	1,349	2,264	1,423	4,099
Eagle Aviation, Inc.	Cessna 172, Cessna 206 (fixed-wing)	0	0	0	1	4	0	0	0	2	18
TOTAL		962	1,317	1,205	1,330	1,194	1,729	1,349	2,264	1,425	4,117

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.

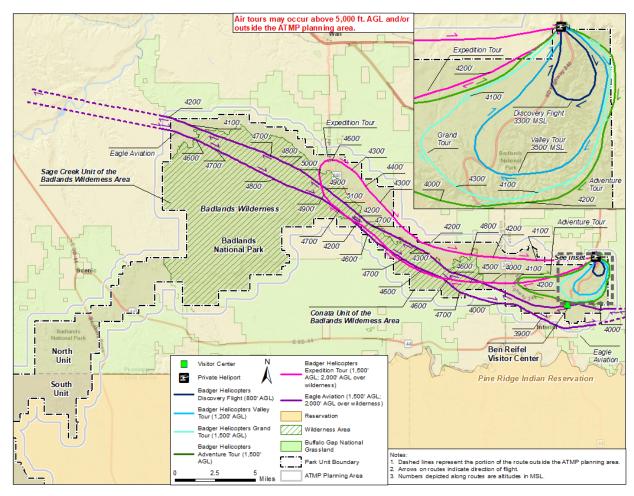


Figure 1. Current routes as reported by operators.

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

<u>Purpose:</u> 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).

<u>Need:</u> 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, tribal sacred sites and ceremonial areas, Wilderness character, visitor experience, and tribal lands. 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, tribal sacred sites and ceremonial areas, Wilderness character, visitor experience, and tribal lands.

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, Midwest 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, the Park's existing and natural acoustic environment, visitor experience, and visual resources, as well as potential protective measures that could be included in an ATMP. The interdisciplinary team considered other existing planning documents for the Park, including its Foundation Document. The alternatives identified by the interdisciplinary team and justifications for restrictions on commercial air tours were reviewed by the FAA 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, including consultation with Native American Tribes. The

input from consultation and preliminary environmental analysis was used to further refine or dismiss potential alternatives prior to the public scoping period. The agencies considered but dismissed alternatives that would allow air tour operations above existing reported numbers as well as current operating parameters at existing numbers. These alternatives were dismissed from further consideration because the NPS determined they would result in unacceptable impacts to the Park's natural and cultural resources, Wilderness character, and visitor enjoyment under the NPS 2006 Management Policies 1.4.7.1, and did not meet the purpose and need for the ATMP.

On September 6, 2022, the FAA and the NPS initiated a 30-day 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 Park news release, notices on the Park's website and social media, and emails. Comments were accepted from September 6 through October 6, 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. 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 the four potential alternatives, including routes, altitudes, time-of-day restrictions, restrictions for particular events, maximum numbers of flights, or other provisions. The potential draft alternatives also included a justification for the provisions and conditions designed to protect Park resources and visitor experience.

The agencies received 43 correspondences, of which two were duplicates. No form letters were received. The agencies coded 100 comments by topic. Some comments received more than one code. Adverse impacts on visitor use and experience (28) and soundscape (24) and support for Alternative 2 (no air tours) (22) 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 raising the altitudes of flights to mitigate noise impacts, but this was not feasible due to the location of the private heliport near the Park boundary and existing route configurations would not allow an operator to reach an altitude that would be protective of Park resources before beginning the descent back to the private heliport. The agencies also considered moving the routes to mitigate noise, but this was not feasible because it would result in the air tours flying over Wilderness areas, which would create new impacts to Wilderness character or would increase the flight time and distances of air tours which would also increase the amount of noise from air tours.

In extensive consultation with Northern Plains Tribes, the Tribes articulated strong opposition to air tours over the Park because of their effects to the cultural landscape, wildlife, and plants, and concerns over privacy during traditional cultural practices and ceremonies within the ATMP planning area. Noise from the existing level of air tours negatively impacts sacred sites within the Park associated with many Tribal Nations. Tribes consider the entire landscape, including the Park, to be sacred and believe air tours are inappropriate and constitute an adverse effect to the cultural landscape, wildlife, and plants. Further, the Tribes stated that the plants, animals, the sky, and other natural resources are contributing features of the cultural resources throughout the cultural landscape. During consultation the agencies discussed with the Tribes the idea of restricting flights on specific days or special events; however it was communicated that many Tribal uses were spontaneous, decided only a few days or a week in advance, or may be protected cultural information to specific Tribes. It was further communicated that with so many tribes and people holding this landscape sacred, organizing and communicating events would be extremely challenging. Finally, the Tribes informed the agencies that no-fly days would not be sufficient mitigation as the lands themselves are held to be sacred.

The agencies considered numerous alternatives in the draft EA for the draft ATMP, including allowing air tours within the ATMP planning area at reduced numbers compared to existing levels. However, the NPS identified Alternative 2 – No Air Tours in the Planning Area as the Preferred Alternative because it was the alternative that best fit the purpose and need of the ATMP and because based on Tribal consultation, allowing even a reduced level of air tours would not sufficiently mitigate the impacts to tribal use and their connections to the sacred landscape of the Park and the Badlands. Additionally the other selectable alternatives would still result in noise that would continue to interfere with the Park's management objectives.

The draft ATMP released for public comment would prohibit commercial air tours within the ATMP planning area and reflected Alternative 2 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 advanced all four alternatives from public scoping for analysis in the draft EA.

The final EA, in Section 2, includes these four 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 (1,425 commercial air tours per year) across the two current operators. 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 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 (Preferred Alternative). Alternative 2 would prohibit air tours within the ATMP planning area. Except when necessary for takeoff or landing from the privately owned and operated heliport on the boundary of the ATMP planning area, or as 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 as well as Park management objectives and is most responsive to tribal concerns. Section 2.5 of the final EA provides a more detailed description of Alternative 2, the Preferred Alternative.
- Alternative 3. Alternative 3 would restrict air tour operations within the ATMP planning area. Alternative 3 would permit 1,425 annual flights from May 1 through September 30 each year within the ATMP planning area, with a daily limit of 16 flights per day on days when flights are allowed. Air tours would be permitted five different routes based on existing air tour routes with set minimum altitudes. Under Alternative 3, the NPS would be able to designate no fly periods or no fly days in consultation with Tribal Nations or for special events or Park management. The NPS developed Alternative 3 to provide an alternative most similar to existing air tour operations, with mitigations to avoid or minimize impacts to natural and cultural resources and visitor experience. Section 2.6 of the final EA provides a more detailed description of Alternative 3.
- Alternative 4. Alternative 4 would restrict and reduce air tour operations within the ATMP planning area. Alternative 4 would permit up to 639 commercial air tours July 1 through September 30 each year with a limit of 8 flights per day on days when flights would be allowed. Air tours would be permitted on five different routes based on existing air tour routes with set minimum altitudes. As in Alternative 3, under Alternative 4, the NPS would be able to designate no fly periods or no fly days in consultation with Tribal Nations or for special events or Park management. The NPS developed Alternative 4 to provide an alternative that improves the acoustic

environment of the Park by reducing the number of existing air tour operations but not eliminating air tours. Section 2.7 of the final EA provides a more detailed description of Alternative 4.

Under all action alternatives, all IOA for the Park and the Pine Ridge Indian Reservation 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 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)
- Coastal Resources

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; 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 Decisionmaking, 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 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

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 2/the Preferred Alternative, by evaluating the potentially 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. The affected environment is described in Chapter 3 of the final EA and summarized above in Section II, Description of the Park. The affected environment also includes lands outside the Park but within ½-mile of its boundary. This significance determination considers the effects of the 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, which is not selectable, 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).

i. Degree of Effect

Alternative 2, the selected action/ATMP, will result in long-term beneficial effects to resources within the affected environment. As disclosed in the final EA, the selected action will reduce the intensity of noise and number of noise events within the Park and move the Park closer to natural ambient conditions consistent with NPS Director's Order 47.

Under current conditions, commercial air tours may be audible 165 minutes per day with 94% of the area within the Park experiencing audible air tour noise. The time audible for natural ambient metric provides context for the total time that aircraft noise levels would be audible to an attentive listener with normal hearing under natural ambient conditions. The agencies also modeled the duration of noise above 35 A-weighted decibels (dBA), the level at which wildlife may experience disturbance, and 52 dBA, the level at which speech is interrupted by noise, in order to determine the severity of the effects from commercial air tours. The modeling demonstrates that noise above 35 dBA would be expected up to 105 minutes a day and noise above 52 dBA is expected up to 21.2 minutes per day at the location points modeled under current conditions. The acoustic impacts of the ATMP cannot be modeled because, although some speculation about air tour routes can be made, it is unknown where air tours would fly when outside the ATMP boundary or over it at or above 5,000 ft. AGL. However, because under the ATMP air tours are not permitted within the ATMP boundary, the intensity of noise within the Park would improve, especially within the North Unit of the Park and Cedar Pass where most of the visitor use occurs. Additionally, the Park would likely experience fewer noise events. Since the only noise impacts from the ATMP are both beneficial and reduce or eliminate the intensity and timing of noise, there is no potential for significant adverse noise effects.

Many of the impacts to other resources from air tours are directly a result of noise. The NPS considered the effects of air tour noise on biological species in the ATMP boundary, including the federally endangered black-footed ferret. 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. As noted above, it is not possible to model noise levels under the ATMP. However, the ATMP will result in less intense noise or fewer minutes of noise above 35 dBA compared to current conditions. The NPS also determined that there would be no effect on any federally listed species within the ATMP boundary. Thus, there will be no significant

adverse impacts to biological resources within the ATMP boundary since all effects are beneficial and the ATMP greatly reduces noise within the ATMP boundary.

The NPS also considered the effects to cultural resources within the Park, including ethnographic resources, sacred sites, traditional cultural properties, archeological resources, cultural landscapes and prehistoric and historic structures. Impacts to these resources currently occur from both noise and visual effects of commercial air tours. In extensive consultation with Northern Plains Tribes, the Tribes articulated strong opposition to air tours over the Park because of their effects to the cultural landscape, wildlife, and plants, and concerns over disruptions during traditional cultural practices and ceremonies within the Park. Under the ATMP, the potential for impacts to cultural resources and tribal practices would be greatly reduced since both the intensity of noise from air tours and potential visual disruption from air tours are reduced. The associated Tribes strongly supported no air tours within the ATMP boundary. Because these impacts would be reduced and, in many places within the Park, eliminated, there is no potential for significant adverse effects to cultural resources within the Park. 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. Because these impacts would be reduced and, in many places within the Park, eliminated, there is no potential for significant adverse effects to cultural resources within the Park.

Currently noise from air tours adversely impacts the Wilderness character of the Badlands Wilderness. Two of the existing operator-reported routes (Expedition Tour and the Eagle Aviation route) currently fly over the Badlands Wilderness resulting in noise above 35 dBA for up to 30 minutes per day. Both the noise from these tours and the presence of air tours in the Park's viewsheds within Wilderness detract from the opportunity for solitude. Noise from air tours also detracts from the natural quality of Wilderness character. Compared to the current conditions, the ATMP would directly enhance these qualities of Wilderness character by reducing the intensity of noise and number of noise events over the Badlands Wilderness. The elimination of air tours over the Park is consistent with NPS Director's Order 41 § 7.3 which requires the NPS to consider ways to further prevent or minimize impacts of commercial air tours on Wilderness character since the ATMP will improve both the solitude and the natural qualities of Wilderness character. Because the opportunity to experience solitude will improve and the natural quality of Wilderness will be enhanced by the elimination of the current routes over Wilderness, there are no potential significant impacts to Wilderness character from the ATMP.

Air tour noise currently disrupts visitors and degrades the Park's visitor experience by disturbing verbal communications and masking the sounds of nature during interpretive and educational programs or while hiking, camping or participating in other activities in the Park. Noise above 52 dBA occurs most frequently at the Scenic / Sheep Lambing Overlook, Castle and Medicine Root Trail, and Big Badlands Overlook – all visitor use areas in the popular Cedar

Pass area. Also, air tours currently detract from the Park's scenic views. The elimination of air tour routes within the ATMP boundary reduces the likelihood visitors will hear air tours or notice them when viewing the scenic views. Under the ATMP, it is unlikely that noise will reach 52 dBA at the Scenic Overlook / Sheep Lambing Area, Castle and Medicine Root Trail, and Big Badlands Overlook. Because the only noise impacts from the ATMP are both beneficial and limited in intensity and timing, there are no potentially significant adverse effects to visitor experience or the Park's scenic viewsheds.

The ATMP would result in adverse but not significant impacts on air tour patrons since commercial air tours would no longer be authorized within the ATMP boundary. Commercial air tour patrons are a very small fragment of those who see the Park each year. The number of Park visitors on an annual basis is estimated to be 1.22 million. Also, the Park would be visible from an air tour outside the ATMP boundary, just at a further distance. Additionally, air tours are only one of many ways for a person to experience the Park and many air tour patrons also likely visit the Park by ground as well.

As described in the EA, in 2021, the air tour industry represented less than 1% of employment in Pennington County, Jackson County, and Oglala Lakota Counties. Air tour operators in this area provide air tours over a number of other sites besides the Park. The ATMP may result in lost revenue from air tours over the Park but would 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 within the ATMP boundary, 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.

Air quality in the ATMP boundary may improve under the ATMP. As described in the final EA, aircraft that currently conduct air tours over the Park emit pollutants that contribute to regional emissions in the area but do not cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS) for any of the time periods analyzed. Under the ATMP, there would only be beneficial effects to air quality since emissions with the ATMP boundary would be eliminated. However, if the operator chooses to

fly outside the ATMP boundary those emissions may still occur and may impact the area within that area.

Finally, 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 where the Park may be viewed. Operators may also offer new or increased tours to other points of interest in the region. Specific routes, altitudes and numbers would be necessary to assess the noise and other potential indirect and cumulative impacts associated with eliminating 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 L_{dn}) 65 decibels (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 60-62 and Appendix F to the EA, Noise Technical Analysis, Section 8.

a. <u>Effects on Public Health and Safety</u>

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

b. <u>Effects that Would Violate Federal, State, or Local Law Protecting the</u> 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 and Section 7 of the Endangered Species Act. *See* Section XIII of this ROD and Appendices G and H 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 Section 3 of the 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; 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 EA, Table 18, 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 Ldn) 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 (LAeq), 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 (Lmax).

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 Sec. 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 60 dB. The 12-hr equivalent sound level would not exceed 60 dBA and would be less than 35 dBA in 89% of the ATMP planning area. The non-contiguous audible air tour noise would not exceed 165 minutes per day. Time audible would be 150-165 minutes per day in 4% of the ATMP planning area, and greater than 15 minutes per day in 62% of the ATMP planning area. In the ATMP planning area, 94% of the area would experience non-contiguous audible air tour noise. The maximum time above 35 dBA would be 105 minutes per day, and levels would be greater than 35 dBA in 35% of the ATMP planning area. Less than 1% of the ATMP planning area would experience time above 35 dBA for 90-105 minutes. At the 31 points modeled across

the entire ATMP planning area, noise above 52 dBA would occur for a maximum of 21.2 minutes a day, and the maximum sound level would be 76.9 dBA 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 four alternatives evaluated in the final EA.

b. Alternative 2 (Preferred Alternative)

Under Alternative 2, there would be 365 days per year without air tours within the ATMP planning area. There would be 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

Compared to the No Action Alternative, Alternative 3 would provide 212 days per year during which air tours would not be conducted within the ATMP planning area.

The maximum 12-hour equivalent sound level would be less than 60 dBA, and less than 35 dBA in 96% of the ATMP planning area. Compared to the No Action Alternative, the average sound levels at most modeled location points under Alternative 3 would not significantly change, as Alternative 3 represents a small (6%) reduction in the number of daily operations. Locations under or near the Expedition Tour (not authorized under Alternative 3) would experience a decrease; average sound levels may be up to 10 dBA lower. The noise footprint (for 12-hour average sound levels exceeding 35 dBA) for Alternative 3 would affect 7% less of the ATMP planning area than the No Action Alternative.

The maximum time audible (natural ambient) would be less than 135 minutes per day, with 120-135 minutes per day in 4% of the ATMP planning area, and with more than 15 minutes per day in 65% of the ATMP planning area. Compared to the No Action Alternative, the average time audible at most modeled location points under Alternative 3 would be 15 minutes less. Modeled location points #10 (Backcountry), #13 (Sun Dance Area), and #14 (Sun Dance Area) would be the exception, as the altitude for the Eagle Aviation route would increase from 1,500 ft. under the No Action Alternative to 2,600 ft. under Alternative 3. The time audible footprint for Alternative 3 would affect 1% more of the ATMP planning area due to the increased altitude of the Eagle Aviation route as compared to the No Action Alternative.

The maximum time above 35 dBA would be 90 minutes a day, and 75-90 minutes a day in less than 1% of the ATMP planning area. Noise levels would exceed 35 dBA in 36% of ATMP planning area. Compared to the No Action Alternative, the average time above 35 dBA at the modeled location points under Alternative 3 would be 2 minutes less. Locations under or

near the Expedition Tour experience the largest decrease, up to 12 minutes. The time above 35 dBA footprint for Alternative 3 would affect 1% more of the ATMP planning area than the No Action Alternative due to the increase in altitude of the Eagle Aviation route as compared to the No Action Alternative.

The maximum time above 52 dBA at modeled points would be 21.2 minutes, and compared to the No Action Alternative, the average time above 52 dBA at the modeled location points under Alternative 3 would be <1 minute less. Locations under or near the Expedition Tour experience the largest decrease, up to 4 minutes.

The maximum sound level at the modeled points in ATMP planning area would be 76.9 dBA. Since this metric represents the loudest sound level, in dBA, generated by the loudest event and is independent of the number of operations, there would be little to no change in the maximum sound level compared to the No Action Alternative. Under Alternative 3, locations under or near the Expedition Tour (not authorized by Alternative 3) would experience a reduction in maximum sound level.

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 60 dB.

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

d. Alternative 4

Compared to the No Action Alternative, Alternative 4 would provide 273 days per year during which air tours would not be conducted within the ATMP planning area.

The maximum 12-hr equivalent sound level would be less than 45 dBA, and less than 35 dBA in 98% of the ATMP planning area. Compared to the No Action Alternative, the average sound levels at all modeled location points under Alternative 4 would be lower, as Alternative 4 represents a 53% reduction in the number of daily operations. As with Alternative 3, much lower sound levels would be experienced at locations under or near the Expedition Tour which would not be authorized under Alternative 4 as well. Alternative 4 would eliminate areas with average sound levels over 45 dBA. The noise footprint (for 12-hour average sound levels exceeding 35 dBA) would affect 9% less of the ATMP planning area than the No Action Alternative.

The maximum time audible (natural ambient) would be less than 75 minutes per day, with 60-75 minutes per day in 4% of the ATMP planning area. There would be audibility in 78% of the ATMP planning area. Compared to the No Action Alternative, the average time audible at most modeled location points under Alternative 4 would be 34 minutes less. Modeled location points #10 (Backcountry), #13 (Sun Dance Area), and #14 (Sun Dance Area) would be the exception, as the altitude for the Eagle Aviation route would increase from 1,500 ft. under

the No Action Alternative to 2,600 ft. AGL under Alternative 4. The time audible footprint for Alternative 4 would affect 16% less of the ATMP planning area due to the decrease in number of operations compared to the No Action Alternative.

The maximum time above 35 dBA would be 45 minutes a day, with 30-45 minutes a day in less than 1% of the ATMP planning area. Levels would be greater than 35 dBA in 36% of ATMP planning area. Compared to the No Action Alternative, the average time above 35 dBA at the modeled location points under Alternative 4 would be 10 minutes less. The time above 35 dBA footprint for Alternative 4 would affect 1% more of the ATMP planning area than the No Action Alternative, due to the increase in altitude of the Eagle Aviation route compared to the No Action Alternative.

The maximum time above 52 dBA at points modeled would be 8.6 minutes. Compared to the No Action Alternative, the average time above 52 dBA at the modeled location points under Alternative 4 would be 3 minutes less.

The maximum sound level in ATMP planning area at points modeled would be 76.2 dBA. Since this metric represents the loudest sound level, in dBA, generated by the loudest event and is independent of the number of operations, there would be little to no change in the maximum sound level compared to the No Action Alternative.

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 45 dB.

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

e. Noise and Noise-Compatible Land Use Significance Determination

The FAA has determined that the resultant DNL is expected to be below 60 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 be 29 tons per year (TPY), which would not cause NAAQS exceedance or increase the frequency or severity of any existing violations. Greenhouse gas (GHG) emissions would be 55.2 metric tons (MT) of carbon dioxide (CO2) per year. Under Alternative 2, there would be a reduction in criteria pollutants of 29 TPY and a reduction in GHG emissions of 55.2 MT of CO2 per year compared to the No Action Alternative within the ATMP planning area. Under Alternative 3, there would

be a reduction in criteria pollutants of 7 TPY and a reduction in GHG emissions of 12.6 MT CO2 per year compared to the No Action Alternative within the ATMP planning area. Under Alternative 4, there would be a reduction in criteria pollutants of 21 TPY and a reduction in GHG emissions of 40.5 MT CO2 per year compared to the No Action Alternative within the ATMP planning area.

Under the No Action Alternative, indirect effects are not expected to occur. For Alternatives 2, 3, or 4, 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, 3, and 4 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. <u>Alternative 1 (No Action Alternative)</u>

Under the No Action Alternative, commercial air tour noise would continue to affect wildlife within the ATMP planning area. On days when air tours occur, noise above 35 dBA would occur for less than 105 minutes a day in the eastern portion of the ATMP planning area, and for less time throughout the Park's North Unit, which may interfere with wildlife behavior including changes in vocal behavior, avoiding an area, breeding relocation, or changes in foraging behavior. This alternative would not be expected to result in indirect impacts.

b. <u>Alternative 2 (Preferred Alternative)</u>

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

Because Alternative 3 would eliminate the Expedition Tour, establish time-of-day restrictions (1-hour after sunrise to 1-hour before sunset), increase minimum altitudes of the route flown by Eagle Aviation, and would authorize a limited 16 air tours per day, the likelihood of effects occurring to biological resources would decrease, including effects resulting from noise or

physical effects caused by collisions with aircraft. On days when air tours occur, noise above 35 dBA would occur for less than 90 minutes a day across the ATMP planning area, which represents a reduction of 70 minutes a day compared to the No Action Alternative. 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. Alternative 4

Alternative 4 would establish annual (639) and daily (8) limits of air tour operations, time-ofday restrictions (three hours after sunrise to three hours before sunset), eliminate the Expedition Tour, and increase the minimum altitude of Eagle Aviation route (2,600 ft.), and establish seasonal restrictions (air tours permitted July 1 – Sept. 30). Compared to the No Action Alternative and Alternative 3, Alternative 4 would result in less disturbance to biological resources, specifically for peregrine falcons and bighorn sheep lamb rearing, due to the time-of-day and seasonal restrictions, and by reducing the number of tours to 639 per year and eight per day within the ATMP planning area. On days when air tours occur, noise above 35 dBA would occur for less than 45 minutes a day across the ATMP planning area, which represents a reduction of 60 minutes a day compared to the No Action Alternative and would be 45 minutes less than Alternative 3. Alternative 4 could result in indirect effects to wildlife due to air tour displacement outside the ATMP planning area. Alternative 4 would result in less cumulative noise and wildlife disturbance in the ATMP planning area than the No Action Alternative, given the reduced number of flights, 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.

e. <u>Biological Resources Significance Determination</u>

While all alternatives were presented for review to the USFWS, the FAA has determined that the Preferred Alternative would have No Effect on federally listed or candidate species within the action area, which includes the black-footed ferret (*Mustela nigripes*), northern longeared bat (*Myotis septentrionalis*), tricolored bat (*Perimyotis subflavus*), red knot (*Calidris canutus rufa*), whooping crane (*Grus americana*), monarch butterfly (*Danaus plexippus*), and western prairie fringed orchid (*Platanthera praeclara*). Further, the FAA determined that the alternatives would have no impacts to species protected under the Migratory Bird Treaty Act (MBTA), including bald eagles (*Haliaeetus leucocephalus*) and peregrine falcons (*Falco peregrinus*). 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 effects (APE) would continue to be impacted by air tours, as noise and visual effects would impact the feeling and setting of those resources. Tribes and individual tribal members have consistently noted that persistent air tours over the Park unreasonably interfere with their connections to the sacred landscape of the Badlands. 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 for less than 105 minutes a day across the ATMP planning area. The maximum 12-hour equivalent sound level would be less than 60 dBA within the ATMP planning area near the privately owned and operated heliport, and across the modeled location points, the highest 12-hour equivalent sound level would be 50.7 dBA. These noise effects would continue to occur under the No Action Alternative, including those that interrupt tribal practices and connections to the landscape of the Black Hills Traditional Cultural Property. The No Action Alternative would not be expected to result in indirect impacts to cultural resources, although it would result in the greatest level of cumulative impacts to cultural resources across the four alternatives evaluated in the EA.

b. <u>Alternative 2 (Preferred Alternative)</u>

Under Alternative 2, commercial air tours would not be conducted within the ATMP planning area which would reduce the direct 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 Alternative 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. Under Section 106 of the National Historic Preservation Act, the FAA made a finding that the ATMP will not adversely affect historic properties and received concurrence from the South Dakota State Historic Preservation Office, Lower Brule Sioux Tribe, Three Affiliated Tribes (Mandan, Hidatsa and Arikara Nation), and Eagle Aviation, Inc.

c. Alternative 3

Because Alternative 3 would authorize a limited 16 air tours per day, eliminate the Expedition Tour, and increase minimum altitudes on the route flown by Eagle Aviation compared to the No Action Alternative, direct impacts to the feeling and setting of cultural resources throughout the APE would decrease as compared to the No Action Alternative as a result of fewer noise and visual impacts from air tours. The daily limits on the number of air tours within the ATMP planning area would also reduce the likelihood that an air tour would interrupt tribal ceremonies or the sanctity of tribal sites. On days when air tours occur, portions of the APE would experience noise above 35 dBA for less than 90 minutes a day. The 12-hour equivalent sound level would be less than 60 dBA within the ATMP planning area

near the privately owned and operated heliport, and across the modeled location points, the highest 12-hour equivalent sound level would be 50.7 dBA. The time above 52 dBA under Alternative 3 is up to 12.5 minutes less compared to the No Action Alternative.

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.

d. <u>Alternative 4</u>

Alternative 4 would further restrict air tour operations within the ATMP planning area compared to Alternative 3. Alternative 4 would establish annual (639) and daily (8) limits on air tours and seasonal restrictions (air tours permitted July 1 – Sept. 30), eliminate the Expedition Tour, and increase the minimum altitude of Eagle Aviation route (2,600 ft. AGL), which would reduce the likelihood that an air tour would interrupt tribal ceremonies or the sanctity of tribal sites. Compared to Alternative 3, Alternative 4 would result in approximately 85% fewer air tours conducted within the ATMP planning area as compared to the No Action Alternative, so it would reduce the intensity and duration of direct noise and visual impacts within the APE to a greater degree than Alternative 3.

On days when air tours occur, the 12-hour equivalent sound level would be less than 60 dBA near the privately owned and operated heliport, and not exceed 47.8 dBA across the modeled location points, which represents a reduction of 2.9 dBA as compared to the No Action Alternative. Time above 35 dBA would be less than 45 minutes a day, which represents a reduction of 60 minutes a day compared to the No Action Alternative and 45 minutes less than Alternative 3. The time above 35 dBA under Alternative 4 would stay the same or be less at all the identified cultural resources. The time above 52 dBA under Alternative 4 is up to 4.2 minutes less compared to the No Action Alternative.

Indirect noise impacts would have the potential to occur under Alternative 4 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 4 which would limit the number air tours and 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.

e. 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 National Historic Preservation Act 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. <u>Alternative 1 (No Action Alternative)</u>

The No Action Alternative would not result in disproportionately high and adverse impacts 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 60 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 55.2 MT CO2. Impacts would continue to occur to visual resources under the No Action Alternative as commercial air tours would continue to 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 were conducted within the ATMP planning area 17 times per day in a peak month, average 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. Although under the No Action Alternative flight numbers could increase, it 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.

Although flight numbers could increase, no indirect impacts would be expected to occur under this alternative.

b. Alternative 2 (Preferred Alternative)

Alternative 2 would result in a reduction in noise, air quality, and visual impacts compared to those currently occurring under the No Action Alternative. 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 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. Cumulative effects would be greatest under the No Action Alternative and fewest under Alternative 2 based on the number of flights authorized per year and authorized routes.

c. Alternative 3

Alternate 3 would reduce impacts by including daily (16) limits on air tours, eliminating the Expedition Tour, and increasing the minimum altitude of Eagle Aviation route (2,600 ft. AGL) within the ATMP planning area. Compared to the No Action Alternative, Alternative 3 would result in fewer direct noise, air quality, and visual impacts. The DNL analysis indicates that Alternative 3 would not result in noise impacts that would exceed DNL 65 dB; the resultant DNL is expected to be below 60 dB under Alternative 3. 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 amount of annual GHG emissions resulting from existing commercial air tours within the ATMP planning area would be 42.6 MT CO2. Some impacts to visual resources would occur under Alternative 3 as commercial air tours would contrast the scenic vistas and natural areas in the Park, but impacts would be fewer than those under the No Action Alternative. The alternative 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. Cumulative effects for Alternative 3 would be less than the No Action Alternative but greater than Alternative 2 based on the number of flights authorized per year and authorized routes.

d. Alternative 4

Alternative 4 would reduce impacts through annual (639) and daily (8) limits on air tours, seasonal restrictions (air tours permitted July 1 – Sept. 30), elimination of Expedition Tour, restriction on the time-of-day air tours may be conducted (three hours after sunrise and three hours before sunset), and increased minimum altitude of Eagle Aviation route (2,600 ft. AGL) within the ATMP planning area. Compared to the No Action Alternative, Alternative 4 would result in fewer direct noise, air quality, and visual impacts. The DNL analysis indicates that Alternative 4 would not result in noise impacts that would exceed DNL 65 dB; the resultant DNL is expected to be below 45 dB under Alternative 4. Alternative 4 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 4 as compared to the No Action Alternative is modeled to be a reduction of 40.5 MT CO2 within the ATMP planning area. Some impacts to visual resources would occur under Alternative 4 as commercial air tours would contrast the scenic vistas and natural areas in the Park, but impacts would be fewer than those under the No Action Alternative. The alternative 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 4, 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. Socioeconomic effects under Alternative 4 would be expected to be greater than those under Alternative 3 because it would limit the number of air tours conducted within the ATMP planning area to fewer tours per year. Alternative 4 would not induce substantial economic growth, disrupt or divide physicality of community, cause extensive relocation, or disrupt traffic patterns.

Under Alternative 4, 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. Cumulative effects for Alternative 4 would be less than the No Action Alternative but greater than Alternative 2 based on the number of flights authorized per year and authorized routes.

e. Environmental Justice and Socioeconomic 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. <u>Visual Effects</u>

a. Alternative 1 (No Action Alternative)

Under the No Action Alternative, air tours would continue to impact viewsheds primarily along Loop Road and Sage Creek Rim Road. Reporting data from 2017-2019 indicates that on a peak month average day, air tours fly over the ATMP planning area approximately 17 times per day. The unique 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 17 times per day during a peak month average day). However, the greater Badlands region provides opportunities to view similar natural landscape features and viewsheds as those found within the visual effects study area, and 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. <u>Alternative 2 (Preferred Alternative)</u>

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

Under Alternative 3, daily (16) limits on air tours, elimination of Expedition Tour, and increased minimum altitude of Eagle Aviation route (2,600 ft. AGL) within the visual effects study area would reduce the likelihood of visual impacts and provide improved protection to viewsheds within the ATMP planning area as compared to the No Action Alternative. 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 Alternatives 2 and 4.

d. Alternative 4

Under Alternative 4, annual (639) and daily (8) limits on air tours, seasonal restrictions (air tours permitted July 1 – Sept. 30, for 92 total days each year), elimination of Expedition Tour, the time-of-day air tours may be conducted (three hours after sunrise to three hours before sunset), and increased minimum altitude of Eagle Aviation route (2,600 ft. AGL) would reduce the likelihood of visual impacts. Because of these conditions, Alternative 4 would provide increased protection to visual resources within the visual effects study area as compared to both the No Action Alternative and Alternative 3. 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 4 due to the reduced number air tours per year and the reduced number of routes on which tours could be conducted, but the cumulative impacts would be greater than Alternatives 2 and 3.

e. <u>Visual Effects Significance Determination</u>

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

a. <u>Alternative 1 (No Action Alternative)</u>

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 the Park's natural and cultural resources and visitor experience. 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. <u>Alternative 2 (Preferred Alternative)</u>

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 2. Alternative 2 would have the potential to result in some displacement of air tours outside the ATMP planning area, resulting in the most potential for indirect impacts across the alternatives, but it is highly unlikely that the air tours that are displaced to outside the ATMP planning area would generate a noise exposure level at or above DNL 65 dB in a single location. Visual impacts could occur when displaced air tours conducted takeoff and landing operations at the privately owned and operated heliport that is within the ½ mile buffer of the Park's boundary if those air tours were visible from Section 4(f) resources in this area, or 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 2 would result in less cumulative noise and visual effects to Section 4(f) properties than Alternatives 3 and 4, as air tours would not be authorized within the ATMP planning area.

c. Alternative 3

Under Alternative 3, daily (16) limits on air tours, time-of-day restrictions (one hour after sunrise until one hour before sunset), the elimination of Expedition Tour, and increased minimum altitude of Eagle Aviation route (2,600 ft. AGL) within the ATMP planning would reduce the likelihood of impacts compared to the No Action Alternative.

On days when commercial air tours would occur, noise levels above 35 dBA would occur for less than 15 minutes in 36% of the ATMP planning area, between 15 and 75 minutes in 13% of the ATMP planning area, and up to 90 minutes in a small region (less than 1%) in the far east portion of the ATMP planning area. Noise levels above 52 dBA are not anticipated to exceed 21.2 minutes in the ATMP planning area at the location points modeled. The resultant DNL due to Alternative 3 is expected to be less than 60 dB.

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 of Section 4(f) resources in the Section 4(f) study area 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 when displaced air tours conducted takeoff and landing operations at the privately owned and operated heliport that is within the ½ mile buffer of the Park's boundary if those air tours were visible from Section 4(f) resources in this area, or 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 Alternatives 2 and 4.

d. <u>Alternative 4</u>

Under Alternative 4, annual (639) and daily (8) limits on air tours, time-of-day restrictions (three hours after sunrise until three hours before sunset), seasonal restrictions (air tours permitted July 1 – Sept. 30), elimination of Expedition Tour, and increased minimum altitude of Eagle Aviation route (2,600 ft. AGL) within the ATMP planning area would reduce the likelihood of impacts compared to the No Action Alternative. The resultant DNL due to Alternative 4 is expected to be less than 45 dB.

On days when commercial air tours would occur, noise levels above 35 dBA would occur for less than 15 minutes in 36% of the ATMP planning area, between 15 and 30 minutes in 3% of the ATMP planning area, and up to 45 minutes in a small region (less than 1%) in the far east portion of the ATMP planning area. Noise levels above 52 dBA are not anticipated to exceed 8.6 minutes in the ATMP planning area at the location points modeled.

Alternative 4 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 of Section 4(f) resources in the Section 4(f) study area under Alternative 4. This conclusion supports the FAA's determination that Alternative 4 would not constitute constructive use of Section 4(f) resources in the Section 4(f) study area.

Alternative 4 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 4 would generate a noise exposure level at or above DNL 65 dB in a single location. Visual impacts could occur when displaced air tours conducted takeoff and landing operations at the privately owned and operated heliport that is within the ½ mile buffer of the Park's boundary if those air tours were visible from Section 4(f) resources in this area, or 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 4 would result in less cumulative noise and visual effects to Section 4(f) properties than the No Action Alterative and Alternative 3, but more than Alternatives 2.

e. <u>DOT Act Section 4(f) Resources Significance Determination</u>

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, 3, and 4 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 the ATMP will prohibit air tours within the ATMP planning area and the NPS found that the selected alternative will not have significant impacts.

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, and emails 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 a public meeting for the draft ATMP and draft EA for the Park on May 24, 2023 and accepted public comments between May 18, 2023 and June 20, 2023.

In total, the agencies received 2,594 correspondences, of which 2,570 were form letters. 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 EA and Draft ATMP 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 on February 7, 2023 during which all four alternatives were reviewed. The agencies determined the ATMP would have no effect on federally listed threatened or endangered species or their critical habitat. See Appendix H of the EA, Section 7 No Effect Memo, for additional analysis.

Species Protected under the MBTA

The agencies analyzed potential impacts to non-Endangered Species Act listed species that are protected under the MBTA, including bald eagles (*Haliaeetus leucocephalus*) and peregrine falcons (*Falco peregrinus*). Because the Preferred Alternative would prohibit commercial air tours within the action area, it is reasonably foreseeable that current air tour operators could offer air tours outside of the action area, as the areas beyond the action area would not be regulated by the ATMP. It is difficult to predict with specificity if, where, and to what extent any air tours would be displaced to areas outside the action area, including at altitudes at or above 5,000 ft. AGL. However, air tours outside of the action area are outside the jurisdiction of the ATMP and not subject to the Act. 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 2, as the Preferred Alternative, on historic properties. A letter was sent on March 14, 2023, to the South Dakota State Historic Preservation Office (SHPO) and all consulting parties, including tribes, 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 of effects to historic properties within the APE. Based on this consultation, the FAA made a finding of no adverse effect to historic properties (36 CFR § 800.5(b)) for the ATMP undertaking The South Dakota SHPO, Lower Brule Sioux Tribe, Three Affiliated Tribes (Mandan, Hidatsa and Arikara Nation), and Eagle Aviation, Inc. concurred with the finding of no adverse effect to historic properties. The Winnebago Tribe provided a response but did not concur or object. No consulting party objected to the finding and Section 106 consultation was completed on April 14, 2023. See Appendix G for 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, 3, and 4 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. Forest Service describing the proposed action and FAA's preliminary determination and requested a response within a 14-day review period. A follow-up email was sent on May 23, 2023. Additionally, the FAA notified the National Park Service of the determination via email. The 14-day response period for both review requests closed on May 30, 2023. No responses were received. 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

Consistent with the NPS Organic Act and the NPS 2006 Management Policies, the NPS has prepared a non-impairment determination, and found that the selected action/final ATMP, which was Alternative 2/the Preferred Alternative, will not result in impairment of Park resources. Please see the attached NPS Non-Impairment Determination.

XIV. Changes from the Draft ATMP

The agencies considered and responded to public comments received on the draft ATMP and draft EA. There were no substantive changes to the ATMP, but additional explanation regarding the NPS's obligations for the conservation of cultural resources under its Organic Act was added. Administrative changes included adding the word "FINAL" to the title of the ATMP and adding the names of the signatories. Minor, non-substantive changes were made to improve clarity.

XV. Basis and Justification for the Decision

This section, together with the final EA and all appendices, including Appendix K, *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 2 (the Preferred Alternative in the final EA) and to prohibit commercial air tours within the ATMP boundary no later than 180 days after the ATMP is signed by all required signatories from both agencies (the ATMP's establishment and effective date). Except when necessary for takeoff or landing from the privately owned and operated heliport on the ATMP boundary, or as 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 boundary.

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 rescinded or amended to incorporate the ATMP's operating parameters, which will occur no later than 180 days after the effective date of the ATMP. All IOA for the Park will terminate by operation of law 180 days after the establishment (effective date) of the ATMP, 49 U.S.C. § 40128(c)(2)(E), after which time no operator may continue to rely on any OpSpecs issued under IOA as authority to conduct commercial air tours within the ATMP boundary. *See* Final Air Tour Management Plan for Badlands National Park, Attachment C to this FONSIs/ROD.

The provisions and conditions included in the ATMP are designed to protect the Park's natural and cultural resources, tribal sacred sites and ceremonial areas, and visitor experience, as well as Wilderness character within the ATMP planning area from the effects of commercial air tours, and to support NPS management objectives for the Park. The cultural resources that the NPS preserves under its Organic Act are broader than "historic properties" under the National Historic Preservation Act. As defined in NPS 2006 Management Policies, a cultural resource is "an aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about the culture." This may be a tangible resource or may be an intangible cultural practice or place of cultural importance. Tangible cultural resources in the Park include archaeological sites, sacred sites, ancestral sites, cultural landscapes, and traditional cultural properties, all of which include the natural resources within them.

The NPS is charged by its Organic Act with conserving National Park System resources "in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 54 U.S.C. § 100101(a). This mandate "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.

The agencies considered but eliminated alternatives that would allow air tour operations at existing reported numbers with current operating parameters or above existing reported numbers. 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, tribal sacred sites and ceremonial areas, Wilderness character, and visitor enjoyment (NPS Management Policies § 1.4.7.1, 2006), and do not meet the purpose and need for the ATMP.

The Park's ambient acoustic environment is very quiet, typically ranging between 22-27 dBA, which makes aircraft noise intrusions very noticeable and difficult to mitigate. Under existing levels of air tours, air tour noise is audible more than two hours a day in many locations of the Park, and noise above 35 dBA can occur for up to 1.5 hours in the Park. The NPS uses the amount of time that noise is above 35 dBA to assess impacts to wildlife and Wilderness character.

The existing air tours routes are concentrated over the northeast corner of the Park, which impact visitor experience in the area of the Park with the highest visitation, including the Cedar Pass Area. Raising the altitudes of flights to mitigate noise impacts is not feasible because the location of the private heliport near the Park boundary and existing route configurations would not allow an operator to reach an altitude that would be protective of Park resources before beginning the decent back to the private heliport. Furthermore, due to the proximity of the private heliport near the Park boundary, requiring an operator to take off from the private heliport away from the Park in order to reach a sufficient altitude before entering the Park could result in noise greater than or equal to the noise from the existing operations due to the amount of noise in the Park from takeoff and again during the fly over.

Moving the routes to mitigate noise is not feasible because this would result in the air tours flying over the Badlands Wilderness, which would create new impacts to Wilderness character or would increase the flight time and distances of air tours over more areas of the park which would also increase the amount of noise from air tours. Eliminating air tour noise over designated Wilderness areas will help preserve Wilderness character and values associated with natural soundscapes such as solitude or primitive and unconfined recreation, including remoteness from sights and sounds; untrammeled or wildness; and naturalness.

The existing routes also impact primary species of concern at the Park, which includes bighorn sheep. The air tours pass over a prime area for bighorn sheep lambing, and bighorn sheep are very noise sensitive. National level guidance suggests prohibiting low level flights during the lambing season, which is May through June. Approximately 70 percent of the bighorn sheep population at the Park were lost to disease in 2021. Considering this decline, additional stressors such as air tour noise could impact recovery of this struggling population. Peregrine falcons are a state threatened species. A minimum altitude of 2,600 ft. AGL is necessary for their protection. However, due to location of the private heliport and existing routes, increasing altitude or changing routes is impracticable for the reasons described above.

Although Alternatives 3 and 4 would reduce impacts to the Park's acoustic environment compared to Alternative 1 (No Action Alternative), these impacts would occur in lambing habitat and the primary area of the Park for visitor use, including four overlooks, the Ben Reifel Visitor Center, Cedar Pass Campground, numerous trail heads, and many miles of trails. Further, Alternative 4 would still result in up to 45 minutes of noise above 35 dBA.

Noise from air tours negatively impacts the cultural landscape that Northern Plains Tribal Nations hold sacred. In extensive consultation with Northern Plains Tribes, Tribes have expressed strong opposition to air tours over the Park because of their effects to the cultural landscape, wildlife, and plants, and their concerns about disruptions during traditional cultural practices and ceremonies within the ATMP boundary. Due to the large number of tribes with traditional connections to the Park, establishment of "no fly days" cannot mitigate impacts for several reasons. First, many of the Tribes consider the location, timing, and identification of participants involved in traditional use of sacred sites to be sensitive and culturally guarded information. Further, there are almost 30 tribes with connections to the Park, and some of the tribes indicated that it is not always possible to identify no fly days in advance. Finally, the Tribes informed the agencies that no fly days prohibiting air tours over this area are not sufficient to protect traditional cultural practices and ceremonies from disruption. Based on Tribal consultation, allowing even a reduced level of air tours would not sufficiently mitigate the impacts to tribal use and tribal connection to the Park.

The South Unit of the Park is on the Pine Ridge Reservation, home to the Oglala Sioux Tribe. No air tours are currently conducted over this area. Prohibiting air tours over this area is needed to protect Tribal privacy during traditional cultural practices and ceremonies and is consistent with the Tribes' opposition to air tours over the Park.

The selected action/ATMP is consistent with NPS Management Policies § 4.9 since the ATMP eliminates some noise and moves the Park closer to natural ambient conditions, by prohibiting commercial air tours. The ATMP complies with NPS Management Policies § 8.4 by avoiding unacceptable impacts from air tours over the Park, including potential impacts to cultural resources. The ATMP will not result in excessive noise as prohibited under NPS Management Policies § 5.3.1.7, 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. *See* NPS's Non-Impairment Determination, Attachment B.

The Act authorizes the agencies to prohibit air tours within the ATMP boundary. The NPS determined that prohibiting air tours within the ATMP boundary is necessary to protect Park resources and values, meet Park management objectives, and is responsive to the concerns of the Northern Plains Tribes.

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.

Because the agencies have selected an alternative that will prohibit air tours within the ATMP boundary and found that the ATMP will not have significant impacts, additional mitigation is not required.

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/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 tribal lands, 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 Badlands 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.

Date

Date

Digitally signed by HERBERT FROST Date: 2023.11.15 08:20:48

Digitally signed by

Herbert C. Frost, Ph.D. **Regional Director** Interior Regions 3, 4, & 5

National Park Service

RAYMOND RAYMOND SAUVAJOT Date: 2023.11.15 10:06:17 SAUVAJOT -05'00' Raymond M. Sauvajot

Associate Director Natural Resource Stewardship and Science Directorate National Park Service

Digitally signed by ERIK AMEND ERIK AMEND Date: 2023.11.15 14:34:28 -06'00'

Erik Amend Regional Administrator Great Lakes Region Federal Aviation Administration

JULIE ANN MARKS

Digitally signed by JULIE ANN MARKS Date: 2023.11.15 16:14:33 -05'00'

Date

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 No Effect Memo

Appendix I: Section 4(f) Analysis

Appendix J: Public Scoping Materials

Appendix K: Draft ATMP and Draft EA Public Involvement Materials

B. National Park Service - Non-Impairment Determination

C. Final Air Tour Management Plan for Badlands National Park