

**U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION, AND
U.S. DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE**

RECORD OF DECISION

Air Tour Management Plan for Mount Rainier National Park

INTRODUCTION

This Record of Decision (ROD) provides the Federal Aviation Administration's (FAA's) and the National Park Service's (NPS's) (together, the agencies) final determination to implement the Air Tour Management Plan (ATMP) for Mount Rainier National Park (Park), in accordance with the National Parks Air Tour Management Act (NPATMA), as amended, its implementing regulations (36 CFR Part 136), and all other applicable laws and policies. This ROD includes a summary of the applicable background, the objective of the action taken, a description of the action taken, a summary of consultation/compliance processes for the ATMP, an identification of substantive changes from the draft ATMP to the final ATMP, and an explanation of the basis and justification for measures taken in the ATMP.

BACKGROUND

Mount Rainier National Park, located in west-central Washington on the western slope of the Cascade Range and encompassing over 236,381 acres, was established as the nation's fifth national park in 1899. Congress recognized the wilderness values of the Park and, in 1988, designated approximately 97% of the Park as the Mount Rainier Wilderness. The focal point of the Park is a towering, snow- and ice-covered volcano, which is a prominent landmark in the Pacific Northwest. The elevations of the Park extend from about 1,700 feet (ft.) above sea level to 14,410 ft. above sea level at the summit of Mount Rainier.

The 2002 Mount Rainier National Park General Management Plan (GMP), together with a subsequent record of decision, set management direction for the Park and established objectives for the preservation of the natural soundscape. It provides that the Park will offer "both a variety of natural sounds and a quietness not found in most urban or suburban environments." GMP at 78. The GMP also contemplated that Park staff would work with the appropriate FAA offices, air tour operators, commercial businesses, and general aviation to encourage aircraft to fly outside the Park to help ensure that natural sounds predominate in the Park. *Id.* The Park's Foundation Document explains that it currently has clean air, scenic vistas, viewsheds and high-quality acoustic resources and that natural sounds predominate in many areas of the Park, supporting a healthy, naturally functioning ecosystem and providing remarkable wilderness experiences. 2015 Foundation Document at 48 and 54. A Foundation document is a type of planning document used by the NPS to identify a park's fundamental resources and values, meaning those features, systems, processes, experiences, stories, scenes, sounds, smells or other attributes determined to merit primary consideration during planning and management processes because they are essential to achieving the purpose of that park and maintaining its significance.

The ATMP, Appendix A to this ROD, provides further background regarding the Park, its resources, and applicable management objectives.

The National Parks Air Tour Management Act

NPATMA 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). NPATMA, as amended, further requires the FAA, in cooperation with the NPS, to establish an ATMP or voluntary agreement for each park for which 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 national park in whole or in part, or “may establish” conditions for the conduct of commercial air tour operations over a national 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 within 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 NPATMA’s requirements. 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).

Because Congress understood that developing ATMPs that meet NPATMA’s requirements could take some time, NPATMA 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 NPATMA or the average number of commercial air tour flights within the 36-month period prior to the enactment of NPATMA. 49 U.S.C. § 40128(c)(2). Under NPATMA, IOA terminates 180 days after an ATMP is established. *Id.* § 40128(c)(2)(E)

NPATMA 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 parks. *Id.* § 40128(d). In addition, the amendments exempted parks with 50 or fewer commercial air tours from the requirement to prepare an ATMP or voluntary agreement, unless this exemption was withdrawn by the NPS. *Id.* § 40128(a)(5).

Past Efforts to Complete an ATMP for the Park

The FAA and the NPS published a notice of intent to complete an ATMP for the Park, and an associated environmental assessment in April 2010. Notice of Intent to Prepare an Environmental Assessment and Request for Public Scoping Comments for the Air Tour Management Plan Program at Mount Rainier National Park, 75 Fed. Reg. 16,899 (Apr. 2, 2010); Supplemental Notice of Intent to Prepare an Environmental Assessment and Request for Public Scoping Comments for the Air Tour Management Plan Program at Mount Rainier National Park, 75 Fed. Reg. 18,568-69 (Apr. 12, 2010). The agencies held public scoping and initiated tribal consultation, consultation under Section 106 of the National Historic Preservation Act, and consultation under Section 7 of the Endangered Species Act. Based on the limited available data on air tour operations at that time, there were approximately 55 air tour operations being flown in 2010 (at that time six operators held IOA for a total 114 commercial air tours each year). Alternatives were developed and made available for public review in 2011. Notice of Public Meeting, Request for Comments, and Availability of Preliminary Alternatives, 76 Fed. Reg. 17,471 (Mar. 29, 2011).

However, work on this planning process was ultimately paused due to the passage of the 2012 amendments to NPATMA 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 agencies implemented the reporting requirement in 2013 and, based on the first two years of reporting data, determined that the Park qualified for the exemption. Consistent with management direction in the Park's 2002 GMP's that an air tour management plan should be completed to govern any commercial air tours over the Park, GMP at 78, the NPS withdrew the Park's exemption in 2015. In the letter withdrawing the Park's exemption, then NPS found that an ATMP was necessary to protect Park resources and values, or visitor use and enjoyment. Adverse impacts of air tours on natural and cultural resources, including significant areas of designated wilderness within the Park, were identified as issues during internal and public scoping conducted by the agencies in support of the ATMP and were cited by the NPS as reasons for withdrawing the exemption. In 2017, the FAA revoked IOA for a total of 80 commercial air tours per year from four operators without operating certificates, leaving only two operators with IOA for the Park for a total of 34 commercial air tours per year.

The Court Approved 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 agencies to establish an ATMP or voluntary agreements under NPATMA 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 the agencies had a mandatory duty to establish ATMPs or voluntary agreements for eligible parks under NPATMA 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 NPATMA, 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, the agencies submitted a proposed plan and schedule (Plan). In general, the Plan contemplated initiating and moving forward with a process to implement ATMPs for all eligible parks concurrently as part of a coordinated, omnibus effort. Because Mount Rainier National Park was one of the 23 parks identified as requiring an ATMP or voluntary agreement under NPATMA, it was included in the Plan which was subsequently approved by the D.C. Circuit.

The Planning Process and Public Engagement

As no ATMP had previously been implemented for any park at the time the agencies submitted their 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 NPATMA. Together, they developed a 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 the Park. Given the amount of time that had elapsed since the initiation of the prior ATMP process for the Park, the agencies terminated that ATMP process, via a September 3, 2020 Federal Register notice, to start the development of ATMPs and associated environmental documents consistent with the court-approved Plan. Termination of Previously Initiated Processes for the Development of Air Tour Management Plans and Environmental Assessments/Environmental Impact Statements for Various National Park Units and Notice of Intent to Complete Air Tour Management Plans at 23 National Park Units, 85 Fed. Reg. 55,060 (Sept. 3, 2020). However, work done and public input received during the previous ATMP planning effort, including baseline ambient acoustic data collected during that effort, was used to inform the current ATMP planning effort.

In the current planning process, the agencies worked to identify the existing condition of commercial air tours over the Park or outside the Park but within ½ mile of its boundary, i.e., the average number of commercial air tours conducted per year and the general operating parameters of those tours. Currently, two air tour operators, Rite Bros Aviation, Inc. (Rite Bros Aviation), and Classic Helicopter Corp. (Classic Helicopter), hold IOA for the Park. Rite Bros Aviation holds IOA for 2 flights per year and Classic Helicopter holds IOA for 32 flights per year, for a combined upper limit of 34 flights each year. 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, or altitude(s) of 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, and excluded 2020 which was atypical due to the COVID-19 pandemic. The agencies also decided against using 2021 data due to continued abnormalities associated with the COVID-19 pandemic and the unavailability of reporting data for 2021 during most of the planning effort. Table 1 depicts available reporting information regarding the number of commercial air tours conducted on an annual basis.

Table 1. Reported Commercial Air Tours over the Park from 2013-2020

	2013	2014	2015	2016	2017	2018	2019	2020 ¹
Rite Bros Aviation	0	0	0	0	0	1	2	2
Classic Helicopter	0	0	0	0	0	0	0	1

Based on the three-year average of reporting data from 2017 to 2019, Rite Bros Aviation conducts an average of one commercial air tour over the Park each year. Classic Helicopter did not report any flights from 2013 - 2019. In order to identify the general operating parameters of the air tour conducted by Rite Bros Aviation, the FAA reached out to this operator to identify current air tour routes and other operating conditions. Rite Bros Aviation conducts its commercial air tour on one route over the Park, which circumnavigates Mount Rainier either clockwise or counterclockwise, entering and exiting at the northwest corner of the Park. The route is flown using a Cessna 172, 206, or 207 fixed-wing aircraft, at an altitude of 3,000 ft. above ground level (AGL). Altitude expressed in AGL units is a measurement of the distance between the ground surface and the aircraft. The commercial air tour has been conducted between the hours of 10:00 AM and 3:00 PM and may occur any day of the week.

The air tour route provided by the operator in 2020 was then modeled to predict noise effects using the FAA's Aviation Environmental Design Tool, a software system that models aircraft performance in space and time to estimate fuel consumption, emissions, noise, and air quality. This information was then considered, in addition to acoustic monitoring information, and analyzed by subject matter experts from the NPS's Natural Sounds and Night Skies Division and the Park. The interdisciplinary team, which included biologists, the Park's chief of interpretation, the Park's wilderness coordinator, the Park's chief of cultural resources, Park planning and National Environmental Policy Act (NEPA) specialists, and natural resource specialists, conducted a series of meetings to identify a proposed action. In these meetings the subject matter experts considered the operator's route and operations, the Park's noise sensitive resources, and the Park's existing and natural acoustic environment, visitor experience, and

¹ Based on unpublished reporting data.

potential mitigation or protective measures that could be included in an ATMP. The NPS's Environmental Quality Division was consulted on the proposed action and proposed mitigations.

The proposed action identified by the NPS and justifications for restrictions on air tours were further reviewed by the FAA, including the FAA's local Flight Standards District Office, for any aviation safety concerns. During this time, the agencies conducted a preliminary environmental analysis to identify the appropriate NEPA pathway for a draft ATMP implementing the proposed action; initiated consultation pursuant to Section 106 of the National Historic Preservation Act, including tribal consultation; and began preliminary analysis for potential effects on listed species and critical habitat consistent with Section 7 of the Endangered Species Act.

NPATMA requires that the agencies publish notification of the availability of a draft ATMP in the Federal Register for public comment and hold at least one public meeting for each draft ATMP. The FAA published a notice of availability of the draft ATMP for Mount Rainier National Park in the Federal Register on July 29, 2021. Public Meeting/Notice of Availability for Proposed Air Tour Management Plans at Mount Rainier National Park; Death Valley National Park; Everglades National Park; and Olympic National Park, 86 Fed. Reg. 40,897 (July 29, 2021). The agencies held the public meeting for the ATMP for Mount Rainier National Park on August 16, 2021, and accepted public comments on this ATMP between July 29 and August 28, 2021. The agencies received 3,990 comment letters on the draft ATMP for the Park, 3,167 of which were form letters and 823 of which were unique individual letters. The agencies' review and analysis of the public comments, including comments regarding draft ATMPs for other parks that were generally applicable to the Mount Rainier ATMP, were used to inform this ROD, the final ATMP, and the attached environmental compliance documentation.

OBJECTIVE

The objective of the ATMP is to implement "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." 49 U.S.C. § 40128(b)(1)(B).

The ATMP is necessary for the following reasons:

- Because the NPS withdrew Mount Rainier National Park's exemption from NPATMA's requirement to prepare an ATMP or voluntary agreement for the Park, an ATMP or voluntary agreement for the Park is required by NPATMA. The agencies have chosen to satisfy this requirement by implementing an ATMP.
- Currently, commercial air tours are operating under IOA which does not include mitigation measures that the NPS believes are necessary to protect Park resources and values consistent with the NPS's obligations under the National Park Service Organic Act, the 2006 NPS Management Policies, and Park management objectives.

DESCRIPTION OF ACTION

The agencies will implement the ATMP for Mount Rainier National Park, and the FAA will update the operations specifications (OpSpecs)² for all air tour operators that currently hold IOA for the Park to incorporate the terms and conditions of the ATMP. The ATMP authorizes the existing commercial air tour operations with measures designed to mitigate impacts to Park resources, visitor experience, and tribal use as a result of commercial air tour operations. It also includes additional measures required by NPATMA. In general, the ATMP:

- Authorizes a single commercial air tour per year on a single designated route that may be flown either clockwise or counterclockwise.
- Requires the commercial air tour to maintain a minimum altitude of 3,000 ft. AGL, with limited exceptions for takeoff, landing and emergency situations.
- Provides that the air tour may operate between 10:00 AM and 3:00 PM any day of the year, unless it is flown using an aircraft that has been approved by the agencies for the quiet technology incentive, in which case the air tour may operate beginning one hour after sunrise or ending one hour before sunset from October 1 through March 14.
- Authorizes specific types of aircraft to be used on the commercial air tour and specifies that any new or replacement aircraft must not be noisier than the authorized aircraft.
- Provides for operator training and education, as well as annual meetings between the FAA Flight Standards District Office, Park staff and the operator.
- Requires the operator to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted.
- Includes safety requirements relating to in-flight communications.
- Allows for minor modifications to the ATMP through adaptive management, so long as the impacts of such changes have already been analyzed in previous environmental compliance.
- Outlines a process for amending the ATMP.
- Sets forth a general process for conducting competitive bidding for air tour allocations, where appropriate.
- Explains that compliance with terms of the ATMP will be mandatory, and IOA for the Park will be terminated, as of the effective date of the ATMP (the date that revised or updated OpSpecs are issued to implement the ATMP) which will be on or before 90 days from the date the ATMP is signed.

CONSULTATION AND COMPLIANCE

- **National Environmental Policy Act:** The NPS applied a documented categorical exclusion to the ATMP. The categorical exclusion that the NPS applied is set forth in the Department of the Interior, Departmental Manual at 516 DM 12.5 A(1), and is

² OpSpecs are issued by the FAA to each operator and prescribe the authorizations, limitations, and procedures under which air tour operations must be conducted and require certain other procedures under which each class and size of aircraft is to be operated.

reproduced in the NPS NEPA Handbook at categorical exclusion 3.3.A.1. It applies to “[c]hanges or amendments to an approved action when such changes would cause no or only minimal environmental impacts.” Here, the “approved action” is the IOA issued by the FAA consistent with NPATMA, which was a non-discretionary action directed by Congress. The agencies used the NPS environmental screening form to document that there are no or minimal impacts from the ATMP. The NPS evaluated the extraordinary circumstances in 43 CFR § 46.215 and determined that no extraordinary circumstances apply and the ATMP will not result in significant impacts. The FAA performed its own extraordinary circumstances analysis and analysis under section 4(f) of the Department of Transportation Act, codified at 49 U.S.C. § 303(c), and adopted the NPS’s categorical exclusion determination pursuant to 40 CFR § 1506.3(d). *See* Appendices B, C, and D.

- **Endangered Species Act:** The agencies analyzed potential impacts for all threatened or endangered species with suitable habitat within the Park with a focus on marbled murrelet (*Brachyramphus marmoratus*) and northern spotted owl (*Strix occidentalis caurina*), which are both noise sensitive listed species found in the Park. The NPS contacted the U.S. Fish and Wildlife Service for technical assistance on the impacts to threatened and endangered species from the ATMP. Northern spotted owls and marbled murrelets are likely to be disrupted by loud noises that occur in close proximity to an active nest or when the activity occurs within the line-of-sight of the nesting birds. Sound generating activities located within close proximity of occupied nest sites or unsurveyed suitable habitat during the early breeding and nesting season have the potential to adversely affect marbled murrelets and northern spotted owls. However, the mitigations in the ATMP, including the minimum altitude of 3,000 ft. AGL and the time-of-day limitations, applied to the single annual flight authorized under the ATMP, will result in the single authorized air tour having no effect on these species or on other listed species that may be present in the project area. Thus, in accordance with Section 7 of the Endangered Species Act, the agencies determined that the ATMP would have no effect on threatened and endangered species or their critical habitats. *See* No Effect Determination Memorandum, Appendix E.
- **National Historic Preservation Act:** The agencies complied with Section 106 of the National Historic Preservation Act and completed the Section 106 consultation process with respect to this undertaking—implementing an ATMP for Mount Rainier National Park. Via letter dated March 26, 2021, the FAA, acting as lead agency for the Section 106 process, initiated consultation under Section 106 with nine federally recognized tribes (Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Chehalis Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Cowlitz Indian Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Puyallup Tribe of Indians, Squaxin Island Tribe of the Squaxin Island Reservation, and Suquamish Indian Tribe of the Port Madison Reservation). In the same letter, the agencies also invited these tribes to engage in government-to-government consultation under Executive Order 13175.³ The FAA then initiated consultation via letter to the Washington State

³ None of the tribes indicated an interest to consult on a government-to-government level so tribal consultation for the undertaking occurred under the Section 106 framework.

Historic Preservation Officer (SHPO) and all other identified Section 106 consulting parties on March 29, 2021.

Via the same and/or subsequent letters the FAA identified the area potentially affected by the undertaking, requested information regarding historic properties within the area of potential effects and proposed a finding of no adverse effect to historic properties as a result of the undertaking. The undertaking was defined consistent with the proposed action in the Categorical Exclusion Form, Appendix C, and is discussed above. Unless a tribe affirmatively opted out of consultation (as did the Confederated Tribes of the Chehalis Reservation) the identified tribes were copied on all correspondence with the SHPO regarding Section 106 consultation.

During the consultation process, the agencies conducted additional outreach to consulting parties for this undertaking and for other ATMPs included in the current planning process via webinar. The agencies conducted webinars on April 28, May 4, and May 6, 2021, for SHPOs, tribes, and other identified consulting parties to introduce key agency participants and the air tour management planning process, and to discuss next steps in the Section 106 process. The FAA also held a webinar for commercial air tour operators currently conducting air tours over any of the parks included in the planning process on November 19, 2021, to introduce them to the Section 106 consultation process. In addition, the FAA conducted further outreach efforts to the tribes identified as consulting parties for this ATMP, which is detailed in Appendix F.

Public involvement for this undertaking was integrated with the public involvement required under NPATMA, discussed above. During the public comment period for the draft ATMP, the agencies did not receive any comments related to historic properties or the undertaking's potential effect on them.

Via letter dated April 11, 2022, the FAA proposed a finding of no adverse effect to the SHPO. On May 4, 2022, the SHPO concurred with this finding. *See* No Adverse Effect Letter and SHPO Concurrence, Appendix F. The U.S. Forest Service, Okanogan-Wenatchee National Forest also concurred with the FAA's proposed finding. No consulting party objected.

- **Aviation Safety:** The draft ATMP, in particular the route and altitude included in the draft ATMP, was reviewed by the FAA's Flight Standards District Office (FSDO),⁴ to identify and address any safety concerns associated with the draft ATMP. The FSDO also reviewed all public comments received on the draft ATMP that raised safety concerns. Because there were no substantive changes from the draft to final ATMP that would affect safety considerations additional FSDO review of the ATMP was not necessary.

⁴ A FSDO is a local FAA field office that deals with various aviation issues including airmen and aircraft certifications, accident investigations, and enforcement and investigation issues.

CHANGES FROM THE DRAFT ATMP

In addition to minor, editorial changes made for clarity, the final ATMP includes the following substantive changes from the draft ATMP made in response to public comments on this or other draft ATMPs,⁵ or based on further agency review, as follows:

- **Section 2.1 Park Overview**

This section was revised to clearly state the Park's purpose according to the Park's Foundation Document. Additional language was added to emphasize that American Indians have used the area for thousands of years. Additional language was also added to provide more information about the Park's ecosystem and its biological diversity. A list of Park management objectives that relate to the development of the ATMP, that had inadvertently not been included in the draft ATMP, was added at the end of Section 2.1, and is similar to language included in Section 2.1 of other draft ATMPs released for public review.

- **Section 3.6D Non-transferability of Allocations**

In response to comments questioning the transferability of air tour operations allocated under ATMPs, the agencies included language to make clear that allocations of annual air tour operations are not transferable between operators. But a successor purchaser may assume an operator's air tour allocation by acquiring the entity holding that allocation under this ATMP in its entirety. In order to avoid a break in service and to afford the agencies the necessary time to consult regarding modifications to the operator's OpSpecs, the ATMP requires that the prospective purchaser notify the agencies as early as possible of its intention to purchase the entity holding the allocation and to certify that it will comply with the terms of the ATMP.

- **Section 3.7 Quiet Technology Incentives**

Subsection 3.5 in the draft ATMP, Restrictions for Particular Events, was deleted as there are no such restrictions under the ATMP, due to the low level of air tours authorized (one commercial air tour per year), which resulted in a renumbering of subsequent subsections. The agencies revised the language in Section 3.7 (Section 3.8 in the draft ATMP) regarding the quiet technology incentive required by NPTMA in response to comments on this and other draft ATMPs requesting a definition of the term "quiet technology" or suggesting a definition for such term. The agencies have not included a definition of quiet technology in the ATMP. Instead, the ATMP provides for a consultation with the operator regarding which aircraft qualify for the incentive at the time this ATMP is implemented. Subsequently, should the operator wish to purchase new aircraft or make appropriate modifications to existing aircraft, the operator is encouraged to consult with the agencies prior to making such investment to determine whether the aircraft would qualify for the incentive. In response to comments regarding whether the incentive should or should not be applied retroactively to aircraft that may already qualify for the incentives, the agencies revised the language in the ATMP to make clear that the incentive may apply where operators have already converted to quiet technology aircraft, if the agencies determine that the aircraft qualify for the incentive. To do otherwise, would unfairly penalize early adopters of quiet technology. The language in this section was also modified to make clear

⁵ In September and October of 2021, the agencies released an additional eight draft ATMPs covering eleven other parks for public review and comment.

that not only will the effectiveness of the quiet technology incentive be monitored, but the effects of this incentive on Park resources and visitor experience will be monitored by the NPS. If unanticipated effects are observed, the agencies may need to amend the ATMP to modify this or other sections. The quiet technology incentive itself—allowing aircraft that have converted to quiet technology to operate a commercial air tour during the period from October 1 through March 14 beginning one hour after sunrise or ending one hour before sunset—did not change from the draft ATMP to the final ATMP.

- **Section 5.0 Justification for Measures Taken**

This section was Section 4.0 in the draft ATMP. It was moved as a result of comments expressing the opinion that the monitoring and compliance measures included in the draft ATMP were not justified or explained. In order to include a justification for these requirements in the same section as the explanations for the other requirements included in the ATMP, the agencies thought it made more logical sense to move Section 5.0, *Compliance*, as well as Section 5.1, *Aircraft Monitoring Technology* forward in the ATMP, and they are Sections 4.0 and 4.1, respectively, in the final ATMP. Additional changes to this section better align the justification for the annual operator training with purpose of the training and the justification for the annual meeting with the purpose of this meeting. Though these requirements may be combined, they are separate requirements with slightly different justifications. The sentence referencing noise from a fixed wing aircraft at 2,000 ft. AGL was changed to reference noise from a fixed wing aircraft at 3,000 ft. AGL since the minimum altitude of the route is 3,000 ft. AGL. The updated noise level is still below the sound-only injury level for northern spotted owls.

- **Section 6.0 New Entrants**

In response to comments received on Section 6.0 regarding new entrants, the agencies revised the language in this section, which was included in the draft ATMPs that were released for public comment after the draft ATMP for the Park was released, and has been included in the final ATMP for the Park. The language was revised to make clear that although new entrants may be considered, all new entrant applications must be reviewed and approved by both agencies before a prospective new entrant may be allowed to conduct operations over the Park or outside the Park but within ½ mile of its boundary. Though one commenter advocated that Section 6.0 be eliminated altogether, the agencies declined to do so because the ATMP's existing processes for approval of new entrants are sufficient to protect Park resources and visitor experience.

- **Section 4.0 Compliance, Section 10.0 Conformance with Operations Specifications, and Section 11.0 Effective Date**

These sections were revised to make clear that the effective date of the ATMP is the date on which the operators' updated OpSpecs are issued by the FSDO with jurisdiction. Because OpSpecs are used to inform the operators of the conditions under which they must operate and will be relied on by the FAA to enforce the terms and conditions of the ATMP, if necessary, it made sense for the effective date of the ATMP to be tied to the date that OpSpecs are modified and reissued to the operator and not to some other date. Section 4.0 of the ATMP (Section 5.0 in the draft ATMP) was revised to delete language that incorrectly assumed that there would be a difference between the effective date of the ATMP and modification of OpSpecs. Section 10.0 of the ATMP was revised to make clear that the FAA will issue new OpSpecs that incorporate the ATMP's operating parameters within 90 days of the date the ATMP is signed. Section 11.0 of

the ATMP was revised to make clear that the effective date is the date new OpSpecs are issued, not some other date. In response to public comments, Section 4.0 Compliance was also revised to make clear that the public may report allegations of noncompliance and that the appropriate FSDO will investigate written reports of noncompliance consistent with FAA policy.

- **Additional changes**

In addition to the above changes, the draft ATMP was edited to clarify that the restrictions imposed by the ATMP apply not only when the operator is flying over lands or waters within the Park boundary but also when the operator is flying over lands or waters outside of the Park boundary that are within ½ mile of the boundary. Further edits were made to make clear that there are no tribal lands as defined by NPATMA within or abutting the Park, though the measures in the ATMP are protective of tribal use of the Park. The in-flight communication frequency was changed from 122.8 to 122.75 in response to a comment that frequency 122.750 would be more appropriate for approved fixed-wing air to air communication. On review, the FAA found that although either frequency would be acceptable, 122.75 would be more appropriate since it is designated as the air-to-air frequency.

Appendix A to the ATMP was revised to expressly state that IOA for the Park terminates on the effective date of the ATMP. Given that the operators will be required to fly consistent with the reissued OpSpecs, it would be inconsistent with the ATMP for IOA to remain after the ATMP is implemented. Though NPATMA provides that IOA “shall terminate 180 days” after the establishment of an ATMP, the agencies do not interpret this provision as precluding an earlier termination consistent with the terms and conditions of an ATMP. *See* 49 U.S.C. § 40128(c)(2)(E).

BASIS AND JUSTIFICATION FOR DECISION

- **Annual limit of commercial air tours**

The ATMP implements the existing condition, based on operator reported data, which is a single commercial air tour per year. The agencies decided to implement the existing condition because the NPS determined that the impacts associated with the existing condition, together with the reasonable mitigation measures included in the ATMP, would not result in significant adverse impacts of commercial air tour operations upon the Park’s natural and cultural resources or visitor experience. As explained in the NPS’s 2015 letter withdrawing the Park’s exemption from NPATMA’s requirement to prepare an ATMP or voluntary agreement, protecting the Park’s wilderness was of “paramount concern to NPS.” The authorization of a single flight is consistent with the protection of these values and with Park management objectives.

The agencies did not use IOA as the number of air tour operations authorized under the ATMP because IOA was based on numbers reported by operators more than 20 years ago, does not represent the most current or reliable operational data, and is not verifiable by the agencies. As demonstrated by available reporting data, actual tours flown have been extremely low. In most years for which reporting data is available no air tours were flown. In both the previous planning effort and the current planning effort, the clear majority of public comments received supported restricting or prohibiting commercial air tours over the Park.

Although some commentors suggested that the ATMP should include a permanent cap on the number of air tours, the agencies declined to do so because they found the terms of the ATMP, which provide that any increase in the number of air tours authorized per year would require a plan amendment, to be sufficiently protective of Park resources. A plan amendment would require additional public involvement and further environmental compliance, both of which also provide opportunities for further protection of Park resources and visitor experience. A plan amendment could also provide for a reduction in air tour authorizations.

Some commenters advocated for the elimination of air tours or consideration of a no air tours alternative. While NPATMA does state that an ATMP may ban air tours, it also contemplates that air tours may be an appropriate use over parks subject to restrictions that reduce significant impacts on park resources and visitor experience. The agencies believe that the operating parameters and other conditions in the ATMP provide appropriate restrictions and that there are no significant impacts to the Park's resources and visitor experience. The vast majority of Park visitors are unlikely to experience any impacts as a result of commercial air tours.

Other comments opposed the ATMP's annual limit on air tours, criticizing it as too low, and expressed support for an increase in the number of flights authorized per year. Specifically, in their comments on the ATMP, Classic Helicopter, which had not flown any air tours over the Park from 2013-2019, and thus was not allocated any air tours, opposed the limitation.⁶ In their comments on Olympic National Park's ATMP, Rite Bros Aviation requested annual limit of air tours at Mount Rainier National Park be raised to 5 per year, reasoning that an increase in air tours from 1 to 5 flights per year would not have a measurable impact on Park resources or visitor experience but it would have "tremendous impact on business viability." As explained above, the agencies decided to implement the existing condition; this allowed them to examine the effects of flights actually flown, rather than to speculate as to the effects from some hypothetical future increase in flights.

- **Designated routes and minimum altitude**

The ATMP includes a single designated route reported by Rite Bros Aviation as currently being flown and which may be flown in either direction (clockwise or counterclockwise). It further sets a minimum altitude of 3,000 ft. AGL when the air tour flies over the Park or outside the Park but within ½ mile of its boundary, which is also consistent with operator reporting. Some commenters expressed that the minimum altitude should be lowered to 2,000 ft. AGL or suggested that the minimum altitude of 3,000 ft. AGL was unsupported, while others advocated for higher minimum altitudes than those included in the draft ATMP, including minimum altitudes higher than 5,000 ft. AGL.⁷ The NPS found that a minimum altitude of 3,000 ft. AGL was sufficient to protect Park resources given that the ATMP only authorizes a single flight each year by certain fixed-wing aircraft, on a designed route, and that any new or replacement aircraft

⁶ Based on preliminary reporting data Classic Helicopter did report a single commercial air tour over the Park in 2020, though this data has not yet been publicly reported by the agencies.

⁷ Because the term commercial air tour over a national park is defined by regulation as a flight below 5,000 ft. AGL, 14 CFR § 136.33(d)(i), raising the altitude to more than 5,000 ft. AGL would be tantamount to a ban on commercial air tours over the Park and outside the Park but within ½ mile of its boundary.

must not exceed the noise level of the aircraft currently authorized. As to comments that the minimum altitude should be lower than 3,000 ft. AGL, agencies may adopt more protective minimum altitudes than recommended by FAA Advisory Circular No. 91-36D and any applicable biological opinions. Because the operator reported that it was already flying at 3,000 ft. AGL, and that altitude is protective of Park resources, including wildlife and wilderness resources, the NPS interdisciplinary team determined that no change in the minimum altitude was required.

Commenters questioned the qualifications that aircraft are required to maintain the minimum altitudes set by the ATMP except in emergencies or as necessary for safe operations of the aircraft, in Sections 2.0 and 3.2 of the ATMP, positing that these exceptions could be exploited by the operator to circumvent the restrictions in the ATMP. Safety is a priority for both agencies and they believe the inclusion of language in the ATMP allowing for deviations in emergencies or to avoid unsafe conditions is necessary to ensure safe operation of aircraft. There is no basis to assume that the operator intends to improperly circumvent the ATMP's restrictions and, given that the minimum altitude included in the ATMP are consistent with the operator's current operations, it also seems unlikely. Further, the ATMP's requirement that the operator install and use flight following technology, together with the ATMP's reporting requirements, will allow the agencies to ensure the operator's compliance with the ATMP's terms, including the altitude restrictions.

Some commenters requested a horizontal set-back from Mount Rainier, which is circumnavigated by the single designated air tour route included in the ATMP. However, since the ATMP designates a single route that ranges from approximately 3.6 to over 12 miles from the summit of Mount Rainier, the NPS found that a further horizontal set back was not necessary. Other commenters suggested route changes to avoid the Paradise area and the Sunset Visitor Center. However, modifications to the designated route were determined not to be necessary because it does not fly directly over either the Paradise area (it passes south of the area) or the Sunrise Visitor Center (it passes north of the visitor center). The minimum altitude and limit of only one air tour per year are sufficient to prevent impacts to visitor use or experience in these areas.

Classic Helicopter, expressed a safety concern regarding designated routes in general, commenting that dictating specific routes that are to be flown subject to Visual Flight Rules, limits a pilot's ability to plan a route based on safety and weather concerns, in particular because not all aircraft share the same characteristics. The designated route and all operating parameters included in the ATMP were reviewed by the FAA and the FSDO with jurisdiction to ensure safety, and this comment was specifically reviewed. Given the limits in the ATMP and in order to ensure the protection of Park resources, the agencies decided to use the existing route already flown by the fixed-wing operator. The set route allows the agencies to determine the impacts of the route and ensure that no potential significant impacts exist. Further, the ATMP includes a provision that allows the operator to respond to emergency situations and weather conditions.

- **Hours of operation**

The ATMP authorizes the air tour to operate between 10:00 AM and 3:00 PM local time any day of the year, unless it is flown using an aircraft that qualifies for the quiet technology

incentive, a mitigation measure that offers resource protection during these times of day which are important to wildlife and visitor experience.

Some commenters recommended seasonal restrictions, such as limiting tours between October and December, limiting tours between January and March, allowing flights only October to March, or limiting tours to exclude mating season, hibernation season or other times that could adversely affect wildlife. Given that the ATMP authorizes only a single commercial air tour per year, the agencies found these additional restrictions to be unnecessary to protect Park resources. Commenters also requested changes to the hours during which commercial air tours are permitted to operate. The agencies declined to make a change to the operating hours based on these suggestions because the NPS found them sufficiently protective of Park resources and visitor experience.

- **Annual meetings/training**

The ATMP provides for, but does not require, interpretive training for the operator. Because only a single commercial air tour is permitted each year, interpretive training is encouraged rather than required so that administration of the ATMP is commensurate with the level of air tour activity allowed. The ATMP also requires the operator to attend an annual meeting when such meeting is requested by either the NPS or the FAA. Commenters requested changes to these provisions including making the meetings public and requiring that the operator distribute certain materials to passengers. The agencies declined to change these provisions of the ATMP. It is important to allow Park staff the flexibility to tailor educational meetings to meet Park needs and incorporate new information as Park management needs change. It is not necessary, at this point, to prescribe the format for information to be provided to the operator, especially given that the ATMP authorizes only a single commercial air tour per year, and would be burdensome on the operator and Park staff to require operators to provide specific printed material to air tour patrons. The agencies also declined to make operator meetings public as it would not serve the communication and coordination purposes of such meetings. The NPS needs to be able to meet with the operator as it does with other commercial service providers that operate within Park boundaries. However, other avenues remain available for other stakeholders to provide the agencies with their input regarding commercial air tour operations. For example, the National Parks Overflights Advisory Group meets every year to discuss various aspects of air tour management throughout the National Park System and those meetings are open to the public.

- **Monitoring and Compliance**

In order to successfully implement the ATMP, the agencies determined that it should include provisions to allow the agencies to adequately monitor and ensure compliance with its conditions. To this end, Section 4.1 of the final ATMP requires that the operator equip the aircraft used for the commercial air tour with flight monitoring technology, to use such technology when conducting the air tour, and to include flight monitoring data in their semi-annual reports. The agencies consulted with the National Parks Overflights Advisory Group regarding the cost of various flight following technologies and found that there are relatively inexpensive off the shelf options that could meet the requirements of the ATMP. Though the agencies received comments suggesting alternative monitoring methodologies, including requiring equipping and using automatic dependent surveillance-broadcast (ADS-B) systems (which is a system that periodically transmits location data information in real-time) or providing

for monitoring by the public, the agencies declined to include such options in the ATMP. Though ADS-B technology would meet the requirements of the ATMP, other technologies are available that also meet those requirements, and thus the agencies did not find it necessary to require operators to install and use ADS-B. As to public monitoring, the agencies do not have the resources to stand up and staff a complaint response line and, given the monitoring measures included in the ATMP, such a line would be unnecessary. Further, given that commercial air tours are not the only flights conducted over Park, information from a public tip line would likely be less reliable as the public would likely have difficulty distinguishing between, for example, a commercial air tour flight and a general aviation flight.

- **Adaptive Management**

The provisions in Section 8.0 of the ATMP are included to allow minor modifications to the authorized operating parameters (for example, slight deviations in routes) to avoid adverse impacts to Park resources, values, or visitor experience; address safety concerns; or address new information or changed circumstances. Such modifications could only be made through adaptive management if the impacts to Park resources are within the scope of impacts already analyzed under NEPA, the Endangered Species Act, and Section 106 of the National Historic Preservation Act. This process was designed to ensure that actions that are potentially more impactful to resources would only be made through the amendment process, which requires public participation, and further environmental compliance. At least one commenter expressed concern that adaptive management would be used to remove, or lessen, measures designed to mitigate impacts on Park resources and visitor experience or increase the number of commercial air tours allowed, but the agencies believe that the provisions of Section 8.0 are clear that adaptive management could not be used in this way. Authorization of additional air tours, beyond the single commercial air tour authorized per year in the ATMP, would require an amendment to the ATMP, which requires public notice and comment as well as environmental compliance prior to such authorization.

- **Competitive bidding**

NPATMA requires that where an ATMP limits the number of authorized commercial air tours within a specific time frame, the agencies must develop an open and competitive process for evaluating competing proposals to conduct commercial air tours. 49 U.S.C. § 40128(a)(2)(B). Given that the ATMP only authorizes a single commercial air tour per year, the agencies, at present, do not currently plan to conduct a competitive bidding process for the Park. However, should circumstances change, the ATMP includes provisions related to undertaking such a process when appropriate.

- **Quiet Technology Incentive**

The ATMP includes a quiet technology incentive that would allow an aircraft utilizing quiet technology to conduct the authorized commercial air tour from October 1 through March 14 beginning one hour after sunrise or ending one hour before sunset. However, an aircraft not utilizing quiet technology would be required to operate between 10:00 AM and 3:00PM. This incentive is not available from March 15 through September 30 to protect northern spotted owl and marbled murrelet during their nesting seasons. Though commenters on this and other draft ATMPs requested a definition for quiet technology, the agencies found that creating a definition for quiet technology in this ATMP was not practicable because aviation technology continues to

evolve and advance and because the FAA periodically updates its noise certification standards. An aircraft that may qualify as quiet technology today may be out of date 10 years from now.

The agencies also declined to extend the definition of quiet technology established for commercial air tours over Grand Canyon National Park to the ATMPs developed under NPATMA. The standard for Grand Canyon National Park was developed pursuant to legislation specific to that park through a rulemaking process that was completed in 2005. That standard applies only to Grand Canyon National Park and was based on narrow site-specific noise requirements. In addition, quiet aircraft technology has advanced substantially since that time. The aircraft used to conduct air tours over Grand Canyon National Park are much larger and heavier than the aircraft used to conduct tours over Mount Rainier National Park, and since noise certification standards are based on the size and weight of the aircraft, the noise standards used to support the Grand Canyon quiet technology definition would not be appropriate for aircraft conducting tours over Mount Rainier National Park.

As noted above, the ATMP provides for a consultation with the operator regarding which aircraft qualify for the incentive at the time this ATMP is implemented. Though some commenters requested that the incentive only apply to future aircraft purchases, the agencies included current aircraft in the incentive so as not to penalize early adoption of quiet technology. In the future, should the operator wish to purchase new aircraft, the ATMP allows for consultation with the agencies before the operator makes the investment in a new aircraft to determine whether such aircraft would qualify for the incentive.

Some commenters questioned the effectiveness of the quiet technology incentive itself and its inclusion in the ATMP while others suggested different or stricter quiet technology requirements. A quiet technology incentive is required to be included in the ATMP by NPATMA. 49 U.S.C. § 40128(b)(3)(D). The agencies believe this incentive should be strong enough to encourage the adoption of quiet technology by operators balanced with the fact that quiet technology equip aircraft still produce noise. The agencies believe the quiet technology incentive in the ATMP strikes the appropriate balance.

- **Analysis of impacts**

Many commenters noted the lack of impact analysis in the ATMP. However, impact analysis is not required content in an ATMP. The impacts of the ATMP were evaluated using an Environmental Screening Form, Appendix B, to determine the applicability of a categorical exclusion and whether any extraordinary circumstances were present that would preclude the application of a categorical exclusion, consistent with NPS practice. Likewise, the FAA conducted an analysis of potential effects under Section 4(f) of the Department of Transportation Act and analyzed whether there were any extraordinary circumstances under FAA Order 1050.1F, Paragraph 5-2 and subsequently adopted the NPS's categorical exclusion determination under 40 CFR § 1506.3(d). The agencies acknowledge that no previous NEPA analysis of IOA occurred because the issuance of IOA for commercial air tours over the Park was a nondiscretionary action directed by Congress. Because of this, the agencies considered the impacts of the authorized single air tour on the Park resources and visitor experience. There are numerous ways to measure the potential impacts of noise from a commercial air tour on the acoustic environment of a park including intensity, duration, and spatial footprint of the noise.

Several metrics were modeled and considered. The NPS considered maximum sound level, the amount of time that aircraft from the commercial air tour operation would be above specific sound levels that relate to different Park management objectives (e.g., 35 and 52 decibels), and the average sound level. The FAA considered their standard noise metric of Day-Night Average Sound Level (DNL). The agencies used the modeling results of the metrics they applied to compare the acoustic environment at the Park with existing air tour operations to the predicted changes due to the mitigation measures under the ATMP.

The impact analysis provided in the Environmental Screening Form for this ATMP demonstrates that the ATMP does not result in significant impacts when considering the change from existing conditions. One air tour does not have the potential to significantly affect Park resources. The analysis also discloses the impacts associated with the use itself—a single commercial air tour over the Park per year on a single designated route. The impacts of the action, whether evaluating the change from existing condition or the impacts from a single commercial air tour per year, are minimal. The single noise event and duration of the flight are important characteristics when evaluating sounds and the frequency, duration, and intensity of noise exposure at any location in the Park is extremely limited under the ATMP. While the agencies acknowledge that some noise will be present once a year, the intrusion is limited. The integrity of all resources remains intact, including the opportunity for visitor enjoyment of natural quiet and solitude. Park resources and values susceptible to impacts from air tours, including the acoustic environment, will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoy them. *See* NPS 2006 Management Policies § 1.4.4.

As to specific concerns regarding acoustic environment impacts noted by commenters, many of those referenced helicopter noise. However, the ATMP does not authorize commercial air tours using helicopters over the Park. The operator is authorized to conduct a single commercial air tour per year using the fixed-wing aircraft currently used for such tours. Section 3.3 of the ATMP specifically provides that “any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced.” A plan amendment, supported by further environmental analysis, would be required to authorize operation of an aircraft that exceeds the noise level of the currently authorized aircraft.

The single commercial air tour authorized, the single designated route, and other operating parameters provided for in the ATMP are substantially the same as that which the operator currently conducts and, therefore, the agencies did not find that a study of economic impacts was warranted. Further, the agencies considered the economic effects of the ATMP in the Environmental Screening Form. Because the number of air tours authorized under the ATMP is the same as the average number of flights from the most recent three years (2017-2019) not affected by the COVID-19 pandemic, the agencies do not expect the ATMP to impact visitor spending on air tours or economic activity in the local communities.

Some commenters questioned the cumulative effect of the single commercial air tour authorized by the ATMP when combined with other overflights, including military overflights. While there is no military special use airspace over the Park, the NPS does partner with the military to conduct search and rescue trainings flights, which the NPS considers to be

administrative overflights. The Environmental Screening Form includes a qualitative analysis of cumulative impacts from overflights, including cumulative noise from other noise sources, including administrative overflights. The cumulative impacts of the ATMP are not significant since the ATMP does not contribute new noise to the soundscape and the noise from air tours does not meaningfully contribute to overall noise in the Park. *See* Appendix B.

- **Wildlife**

As noted above, the agencies analyzed potential impacts for all threatened or endangered species with suitable habitat within the Park and determined that the ATMP would have no effect on federally listed species or their critical habitat. *See* No Effect Determination Memorandum, Appendix E. Many commenters focused on potential effects to threatened and endangered species. As discussed above, the agencies determined that the ATMP would have no effect on any threatened or endangered species. Many commenters also expressed general concerns about the potential effects of commercial air tours or low flying aircraft on wildlife. The ATMP would not allow low-flying commercial air tours, allowing only a single air tour at a minimum altitude of 3,000 ft. AGL. Because only one flight is authorized per year, the duration of any potential noise exposure is limited. Additionally, the route, the limited noise duration and intensity associated with the authorized commercial air tour and the protections included in the ATMP, demonstrate that there will not be any adverse effects to wildlife.

- **Wilderness**

Many commenters noted concerns related to the protection of the Mount Rainier Wilderness. Some commented that the Wilderness Act prohibits commercial air tours. However, the Wilderness Act does not prohibit overflights and no commercial air tours are permitted to land in the Park. Though NPATMA does not require the ATMP to include analysis of impacts to wilderness, consistent with the requirements of NEPA, the agencies evaluated the impacts of the commercial air tours authorized by the ATMP on the qualities of wilderness character in the development of the ATMP, including impacts on the opportunity for solitude, impacts to the natural quality of wilderness, and impacts to other features of value which is documented in the Environmental Screening Form, Appendix B. The analysis acknowledges that noise from the air tour may temporarily disrupt the opportunity for solitude for some visitors in wilderness on the day of the air tour while the tour is in operation. However, the single flight and the limited duration of potential exposure of noise from one air tour make it unlikely that most visitors on that day will encounter noise from an air tour within wilderness. If a wilderness visitor does hear noise from the single authorized air tour, the visitor will experience the noise for a very short duration of time. Ample opportunities for solitude and refuge from sights and sounds of civilization remain available in the Park's designated wilderness. The ATMP includes an altitude restriction and route restriction that further protect the wilderness character of the Mount Rainier Wilderness. The route authorized by the ATMP does not fly over wilderness areas adjacent to the Park that are managed by U.S. Forest Service. Accordingly, the NPS found that the ATMP is protective of wilderness character and to be consistent with the Park's enabling legislation, Section 4.9 of the NPS Management Policies, and the requirements of NPATMA.

As to comments received that the ATMP should have tiered off of a wilderness stewardship plan for the Park, under NPATMA an ATMP can stand alone and need not tier to an overarching wilderness stewardship plan.

- **Interim Operating Authority**

Operators applied for, and the FAA granted, IOA for 173 commercial air tours over Mount Rainier National Park per year as follows: Classic Helicopter Corp. (32 IOA); Island Air, Inc. (2 IOA); Natures Designs, Inc., d/b/a/ Vashon Island Air (74 IOA); Pavco, Inc. (60 IOA); Rite Bros Aviation (2 IOA); and Wings of Wenatchee, Inc. (3 IOA). *See* Notice of Interim Operating Authority Granted to Commercial Air Tour Operators Over National Parks and Tribal Lands Within or Abutting National Parks, 70 Fed. Reg. 36,456 (June 23, 2005). In 2017, FAA revoked IOA from four operators that no longer held operating certificates (Island Air, Inc., Nature Designs, Inc., Pavco, Inc., and Wings of Wenatchee, Inc.). The ATMP provides that the FAA, through the FSDO with geographic oversight of the airspace over the Park, will update the OpSpecs of all operators that currently hold IOA for the Park to incorporate the terms of the ATMP within 90 days of the date on which the ATMP is fully signed (meaning 90 days from the date on which the ATMP and this ROD have been signed by all required signatories). Once the OpSpecs are modified, only the operator that holds the allocation of the single commercial air tour operation authorized under the ATMP will be permitted to conduct the commercial air tour over the Park, or within ½ mile of its boundary. This commercial air tour will be required to comply with the ATMP in all respects. All remaining IOA for the Park will terminate when the operators' OpSpecs are modified, which will be the effective date of the ATMP.

Classic Helicopter (which currently holds IOA for 32 flights per year) commented on the draft ATMP and stated that lack of recent air tours does not constitute sufficient cause for removing its authorization to conduct commercial air tours over the Park. However, as noted above, IOA was intended as a stopgap measure pending implementation of an ATMP and was based on outdated reporting that was not verifiable by the agencies. The ATMP implements the current condition based on recent, reliable reporting data. The termination of IOA is a requirement of NPATMA, which provides that IOA terminates after the establishment of an ATMP for the Park. 49 U.S.C. § 40128(c)(2)(E).

- **Providing access for individuals with disabilities**

Some commenters requested expanded air tours in order to accommodate or expand access to individuals with disabilities, older persons, or those with mobility issues. However, air tours are not the only way for a disabled person or a person with mobility issues to experience a national park. Most of the Park's built environment is included in the Mount Rainier National Historic Landmark District, considered the most complete and best-preserved example of park planning and design from the early years of the NPS. The Mount Rainier National Historic Landmark District encompasses almost all of the roads, historic trails, historic developed areas, and backcountry structures in the Park. The design of these features was intended to highlight the natural beauty and resources of the Park and provides views across multiple different settings and habitat types, many of which may be viewed from the Park's road-accessible areas. Additionally, given the prominent nature of the Mount Rainier volcano as an iconic landscape feature, ample opportunities for the public to view Mount Rainier remain available outside the Park, both from the ground and via air tours more than ½ mile from the Park's boundary.

In addition, the NPS works to ensure that people with disabilities can participate in the same programs and activities available to those without disabilities in the most integrated setting possible. The NPS has a full team dedicated to breaking physical and programmatic barriers to

make parks more inclusive for people with sensory, physical, and cognitive disabilities including a full accessibility program with accessibility coordinators in all 12 regions system wide who work to make sure that NPS staff have the tools and training necessary to provide accessible and inclusive outdoor recreation and interpretation opportunities for park visitors and employees alike. Information regarding accessibility at Mount Rainier National Park is available at: <https://www.nps.gov/mora/planyourvisit/accessibility.htm>

- **NEPA compliance**

Commenters in general noted concerns that an environmental analysis was not released for public review and comment and either advocated for the consideration of various alternatives or criticized that consideration and analysis of alternatives was required under NEPA. Consistent with the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, agencies may but are not required to develop a range of alternatives to the proposed action when using a categorical exclusion to comply with NEPA. *See* 40 CFR §§ 1501.4, 1502.14. Actions covered by categorical exclusions by definition do not have significant impacts and therefore are not subject to the requirement to develop alternatives to reduce significant impacts. In this case, the agencies evaluated the potential impacts of the proposed action (ATMP) and determined that the proposed ATMP would not result in significant impacts to Park resources and that no significant impacts from air tours have been observed in the past. The agencies considered actions to reduce impacts to Park resources and included those in the ATMP, e.g., altitude and route restrictions. Public review of categorical exclusions is not required. Though NPATMA provides that both agencies must “sign the environmental decision document required by section 102 of [NEPA] which may include a finding of no significant impact, an environmental assessment, or an environmental impact statement and the record of decision” the agencies do not interpret NPATMA to preclude the application of a categorical exclusion for an ATMP. *See* 49 U.S.C. § 40128(b)(2). The fact that the agencies previously worked towards preparing an environmental assessment as part of their past efforts to complete an ATMP for the Park does not undermine their decision regarding the NEPA compliance pathway for this ATMP. Agencies may voluntarily choose to prepare an environmental assessment, even if a categorical exclusion applies. Moreover, the agencies’ previous efforts to prepare an ATMP were undertaken without the benefit of reporting data relied on to define the existing condition of air tours over the Park used in the Environmental Screening Form and categorical exclusion documentation in support of the application of categorical exclusion 3.3.A.1 in the NPS NEPA Handbook (516 DM 12.5 A(1)) here.

One commenter requested that the agencies make available a summary of comments from the previous ATMP planning process for the Park which, as noted above, has been terminated. *See* 85 Fed. Reg. 55,060. The agencies do not believe that releasing a summary of comments from the terminated planning process would be useful to the current ATMP planning process because those comments relate to a previous process to develop preliminary alternatives and not to the draft ATMP. However, those comments did inform the current planning process, particularly with respect to tribal and public interests and concerns. The agencies have complied with all the requirements for public disclosure under NPATMA and NEPA for this planning effort and used existing soundscape information in the noise analysis for the single air tour authorized by the ATMP. Appendix H to this ROD is a summary of comments received on the draft ATMP. As noted above, the agencies acknowledge that the majority of comments in both

the prior and current planning process opposed air tours, but the agencies did not rely on specific public comments from 2010 and 2011 since, in that planning process, the public was requested to provide comments regarding draft alternatives and potential operating parameters, whereas in the planning process for the ATMP the public was requested to provide comments on a draft ATMP with a proposed annual limit of air tours and operating parameters. In addition, substantial time has passed since comments were solicited in the previous planning process.

- **Compliance with NPS-specific laws and policies**

In managing National Park System units, the NPS is bound by the Organic Act of 1916, 54 U.S.C. §§ 100101 et seq., which requires the NPS to manage parks to “conserve the scenery, natural and historic objects, and wildlife in the System units and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” In addition, NPS management of System units is guided by the 2006 NPS Management Policies and other policy and guidance documents that do not apply to the FAA. The Statement of Compliance appended to this ROD as Appendix G details the NPS’s compliance with its Organic Act, as well as NPS policy documents.

DECISION

The undersigned have carefully considered the agencies' common and respective goals in relation to the issuance of an Air Tour Management Plan for Mount Rainier National Park including the environmental impacts of their decision, the mitigation measures available to preserve Park resources, visitor experience and tribal lands, and aviation safety. Based on the record of this proposed Federal action, and under the authority delegated to the undersigned by the Administrator of the FAA and the Director of the NPS, the undersigned find that the issuance of the Air Tour Management Plan for Mount Rainier National Park is reasonably supported. The undersigned hereby direct that action be taken, together with the necessary related and collateral actions, to carry out the agency decisions as detailed in this ROD including the issuance of an Air Tour Management Plan for Mount Rainier National Park and issuance or modification of applicable operations specifications.

Approved by:



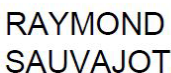
FRANK LANDS
2022.07.18 12:13:19
-07'00'

Frank W. Lands
Regional Director
Interior Regions 8, 9, 10 and 12
National Park Service



Digitally signed by GRADY B
STONE
Date: 2022.07.15 13:58:00 -07'00'

Grady Stone
Regional Administrator
Northwest Mountain Region
Federal Aviation Administration



Digitally signed by RAYMOND
SAUVAJOT
Date: 2022.07.19 08:11:47 -04'00'

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



Digitally signed by KEVIN W.
WELSH
Date: 2022.07.15 15:19:08 -04'00'

Kevin Welsh
Executive Director
Office of Environment & Energy
Federal Aviation Administration

RIGHT OF APPEAL

This Record of Decision constitutes a final order of the FAA Administrator and is subject to 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.

Appendices

- A. Air Tour Management Plan for Mount Rainier National Park
- B. Environmental Screening Form
- C. Categorical Exclusion Documentation Form
- D. FAA Categorical Exclusion Adoption
- E. Mount Rainier National Park Air Tour Management Plan Section 7 Endangered Species Act No Effect Determination (No Effect Determination Memorandum)
- F. National Historic Preservation Act Section 106 Compliance Documentation
- G. NPS Statement of Compliance
- H. Summary of Public Comments and Comment Analysis on the Draft Air Tour Management Plan for Mount Rainier National Park

APPENDIX A

Final Air Tour Management Plan for Mount Rainier National Park

FINAL AIR TOUR MANAGEMENT PLAN MOUNT RAINIER NATIONAL PARK

SUMMARY

This Air Tour Management Plan (ATMP) provides the terms and conditions for commercial air tours conducted over Mount Rainier National Park (Park) pursuant to the National Parks Air Tour Management Act (Act) of 2000.

1.0 INTRODUCTION

The Act requires that commercial air tour operators conducting or intending to conduct commercial air tours over a unit of the National Park System apply to the Federal Aviation Administration (FAA) for authority before engaging in that activity. The Act further requires that the FAA in cooperation with the National Park Service (NPS) establish an ATMP for each National Park System unit for which one or more applications has been submitted, unless that unit is exempt from this requirement.¹ On September 15, 2015, the NPS notified the FAA that an air tour management plan was necessary to protect Park resources and values and withdrew the exemption for the Park.

The objective of this ATMP is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tours on natural and cultural resources, visitor experiences, and tribal lands.

2.0 APPLICABILITY

This ATMP applies to all commercial air tours over the Park and commercial air tours within ½ mile outside the boundary of the Park, as depicted in Figure 1 below. A commercial air tour subject to this ATMP is any flight, conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, or within ½ mile of the Park boundary, during which the aircraft flies:

- (1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½-mile outside the Park boundary).

See 14 CFR § 136.33(d).

¹ The Act provides an exemption to the ATMP requirement for parks with 50 or fewer commercial air tour operations each year unless the exemption is withdrawn by the Director of the NPS. *See* 49 U.S.C. § 40128(a)(5). As an alternative to an ATMP, the agencies also have the option to execute voluntary agreements with all operators operating at any of the parks.

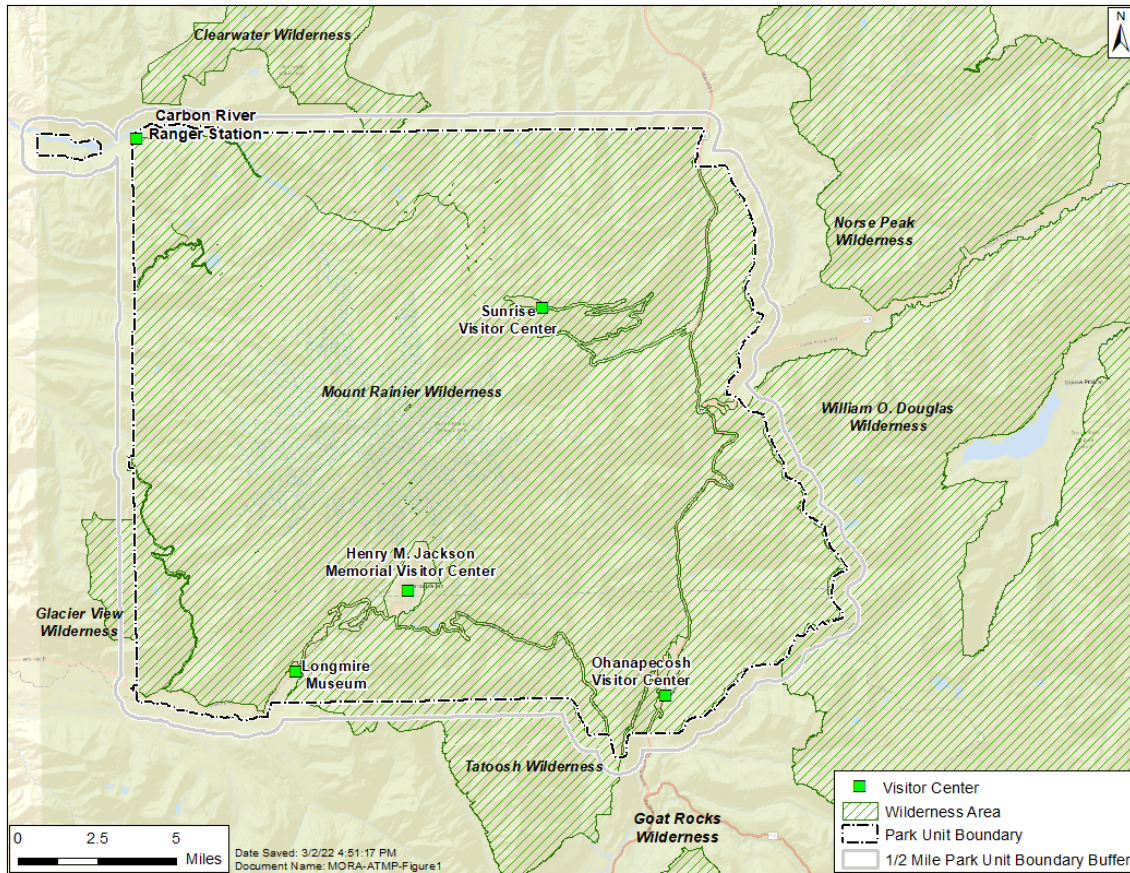


Figure 1. Map of area subject to the ATMP for Mount Rainier National Park

2.1 Park Overview

The Park encompasses 236,381 acres in west-central Washington, on the western slope of the Cascade Range. The focal point of the Park is a towering, snow- and ice-covered volcano, which is a prominent landmark in the Pacific Northwest. It protects Mount Rainier and its associated geologic and glacial features that evidence the dynamic landscape-scale processes that shaped the Park. Approximately 97% of the Park is designated wilderness. Majestic mountain scenery and spectacular vistas are abundant within and outside the park. The Park offers both a variety of natural sounds and a quietness not found in most urban or suburban environments.

Most developed areas in the Park, including roads and trails, are of national significance and are included in the comprehensive Mount Rainier National Historic Landmark District, designated in 1997.

The archeological record documents more than 9,000 years of human connection with the land within the Park. The area was used by American Indians for hunting and gathering, as well as for spiritual and ceremonial purposes. Areas within the Park hold spiritual and cultural significance for Tribes. Although there are no tribal lands as defined by the Act within or abutting the Park, many traditional uses of these areas by tribes continue today.

The biological diversity of the Park contributes to the integrity of the entire Cascade ecosystem. Spanning three major ecological zones, the Park is home to a diverse assemblage of native flora and fauna. The Park contains habitat for numerous federally-listed threatened and endangered species including the threatened marbled murrelet (*Brachyramphus marmoratus*) and the threatened northern spotted owl (*Strix occidentalis caurina*). Northern spotted owls and marbled murrelets are likely to be disrupted by loud noises that occur in close proximity to an active nest or when the activity occurs within the line-of-sight of the nesting birds. Sound generating activities located within close proximity of occupied nest sites or unsurveyed suitable habitat during the early breeding and nesting season have the potential to adversely affect marbled murrelets and northern spotted owls.

The nesting season for northern spotted owls is from March 15 to September 30. Marbled murrelet nesting season occurs from April 1 to September 23. The Park has high priority habitat and a record of northern spotted owl and marbled murrelet presence and nesting indicators. The Park contains approximately 80,000 acres of suitable spotted owl habitat, which extends up to an elevation of about 4,800 feet. Marbled murrelet habitat includes suitable forested areas within 55 miles of coastal waters. There are approximately 26,500 acres of potential murrelet nesting habitat in the Park extending up to an elevation of about 3,800 feet. During the nesting season, murrelets make daily flights from coastal waters to their inland nests to feed nestlings. The period during dawn and dusk is a peak activity time for feeding exchanges between murrelets and their nesting young (including approximately two hours after sunrise and two hours before sunset).

The purpose of the Park is to protect and preserve unimpaired the majestic icon of Mount Rainier, a glaciated volcano, along with its natural and cultural resources, values, and dynamic processes. The Park provides opportunities for people to experience, understand, and care for its environment. It also provides for wilderness experiences and sustains wilderness values.

The following Park management objectives relate to the development of this ATMP:

- Park acoustic resources (i.e., sounds within the Park) are in a natural condition and support an outstanding visitor experience and opportunities to hear and enjoy natural sounds.
- Park wilderness is managed to preserve its wilderness character including outstanding opportunities for solitude where the opportunity to connect with the natural world is not disrupted by non-natural sights and sounds.
- Individuals and populations of native wildlife species known to be sensitive to the effect of aircraft overflights, including the federally listed northern spotted owl and marbled murrelet, are protected.
- Cultural resources and related cultural landscapes and ethnographic resources that are important to Native American Tribes associated with the Park are protected.

3.0 CONDITIONS FOR THE MANAGEMENT OF COMMERCIAL AIR TOUR OPERATIONS

3.1 Commercial Air Tours Authorized

Under this ATMP, one commercial air tour is authorized per year. Appendix A identifies the operator authorized to conduct the commercial air tour and the annual flight allocation.

3.2 Commercial Air Tour Routes and Altitudes

The commercial air tour authorized under this ATMP shall be conducted on the route in Figure 2 below.² Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft. Air tours will fly no lower than 3,000 feet (ft.) AGL when over the Park or within ½ mile of the Park boundary. Except in an emergency or to avoid unsafe conditions, or unless otherwise authorized for a specified purpose, the operator may not deviate from this route and altitude.

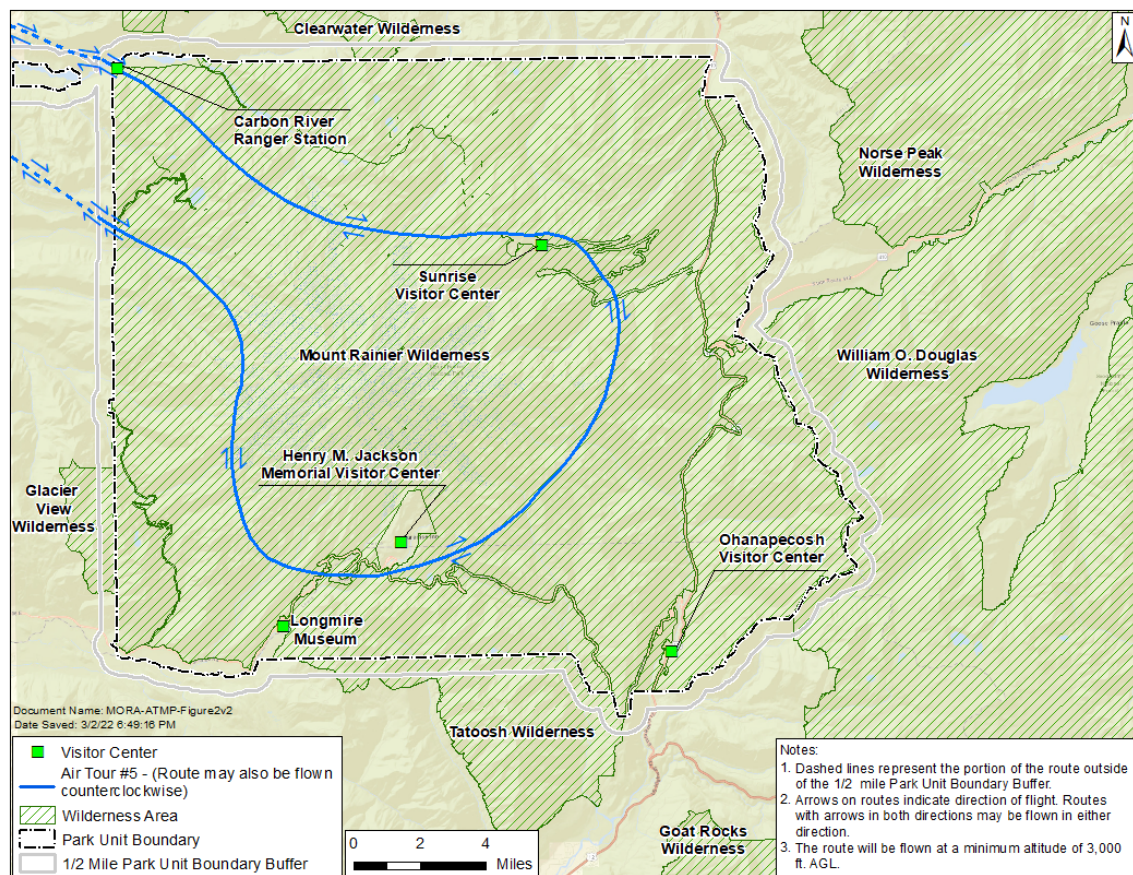


Figure 2. Commercial air tour route over Mount Rainier National Park

² Appendix B contains an enlarged Figure 2.

3.3 Aircraft Type

The aircraft types authorized to be used for the commercial air tour are identified in Appendix A. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced. In addition to any other applicable notification requirements, the operator will notify the FAA and the NPS in writing of any prospective new or replacement aircraft and obtain concurrence before initiating air tours with the new or replacement aircraft.

3.4 Day/Time

Except as provided in Section 3.7 below, “Quiet Technology Incentives,” the air tour may operate between 10:00 AM and 3:00 PM local time any day of the year.

3.5 Required Reporting

The operator will submit to the FAA and the NPS semi-annual reports regarding the number of commercial air tours over the Park or within ½ mile of its boundary that are conducted by the operator. These reports will also include the flight monitoring data required under Section 4.1, “Aircraft Monitoring Technology”, of this ATMP and such other information as the FAA and the NPS may request. Reports are due to both the FAA and the NPS no later than 30 days after the close of each reporting period. Reporting periods are January 1 through June 30 and July 1 through December 31. The operator shall adhere to the requirements of any reporting template provided by the agencies.

3.6 Additional Requirements

3.6A Operator Training and Education: When made available by Park staff, the operator/pilot may take at least one training course per year conducted by the NPS. The training will include the Park information that the operator can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients.

3.6B Annual Meeting: At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO) with jurisdiction, and the operator may meet once per year to discuss the implementation of this ATMP and any amendments or other changes to the ATMP. This annual meeting could be conducted in conjunction with any annual training.

3.6C In-Flight Communication: For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.75 and report when they enter and depart the route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

3.6D Non-transferability of Allocations: Annual operations under this ATMP are non-transferable. An allocation of annual operations may be assumed by a successor purchaser that acquires an entity holding allocations under this ATMP in its entirety. In such case, the prospective purchaser shall notify the FAA and

NPS of its intention to purchase the operator at the earliest possible opportunity to avoid any potential interruption in the authority to conduct commercial air tours under this ATMP. This notification must include a certification that the prospective purchaser has read and will comply with the terms and conditions in the ATMP. The FAA will consult with the NPS before issuing new or modified operations specifications (OpSpecs) or taking other formal steps to memorialize the change in ownership.

3.7 Quiet Technology Incentives

This ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours from October 1 through March 14 beginning one hour after sunrise until one hour before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA)³, on all days that flights are authorized. From March 15 through September 30 this incentive will not be available due to protections necessary for northern spotted owl and marbled murrelet during the nesting season. Because aviation technology continues to evolve and advance and the FAA updates its noise certification standards periodically, the aircraft eligible for this incentive will be analyzed on a case-by-case basis at the time of the operator's request to be considered for this incentive. The NPS will periodically monitor Park conditions and coordinate with the FAA to assess the effectiveness of this incentive. If implementation of this incentive results in unanticipated effects on Park resources or visitor experience, further agency action may be required to ensure the protection of Park resources and visitor experience.

4.0 COMPLIANCE

On the effective date of this ATMP, all commercial air tours over the Park or within ½ mile of the Park boundary must comply with the terms of this ATMP in all respects, except as provided in Section 4.1 below. The NPS and the FAA are both responsible for the monitoring and oversight of the ATMP. If the NPS identifies instances of non-compliance, the NPS will report such findings to the FAA's FSDO with geographic oversight of the Park. The public may also report allegations of non-compliance with this ATMP to the FSDO. The FSDO will investigate and respond to all written reports consistent with applicable FAA guidance.

Investigative determination of non-compliance may result in partial or total loss of authorization to conduct commercial air tours authorized by this ATMP. Any violation of OpSpecs shall be treated in accordance with FAA Order 2150.3, *FAA Compliance and Enforcement Program*.

³ Sunrise and sunset data is available from the NOAA Solar Calculator, <https://www.esrl.noaa.gov/gmd/grad/solcalc/>

4.1 Aircraft Monitoring Technology

Operators are required to equip all aircraft used for air tours with flight monitoring technology, use flight monitoring technology during all air tours under this ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports. The required flight monitoring data shall be provided in a file format approved by the agencies, such as a .csv or .xlsx format. Data must include the following information for each row of data (i.e., each ping):

- Unique flight identifier
- Latitude
- Longitude
- Geometric altitude
- Tail number
- Date
- Time stamp
- Operator and Doing Business As (DBA), if different
- Aircraft type
- Aircraft model

The ping rate should be set to a maximum of 15 seconds. Operators already using aircraft equipped with flight monitoring technology shall ensure it meets the performance standards listed above or acquire and install acceptable flight monitoring technology within 180 days of the effective date of this ATMP. For aircraft not already equipped with flight monitoring technology, within 180 days of the effective date of this ATMP, operators shall equip those aircraft with suitable flight monitoring technology.

5.0 JUSTIFICATION FOR MEASURES TAKEN

The provisions and conditions in this ATMP are designed to protect Park resources and visitor experience from the effects of commercial air tours, and to support NPS management objectives for the Park.

Under the Act, the FAA was required to grant Interim Operating Authority (IOA) for commercial air tours over the Park or within ½ mile of the Park's boundary. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than an annual limit.

The total number of air tours authorized under this ATMP is consistent with the existing air tours reported over the Park. The flight limit of one commercial air tour per year is intended to protect Park soundscapes, visitor experience, wilderness character, tribal use, and wildlife by limiting the number of potential disturbances caused by commercial air tours.

The condition that commercial air tours may fly no lower than 3,000 ft. AGL is consistent with avoidance recommendations for marbled murrelets and northern spotted owls. Based on a noise analysis conducted by the agencies, the maximum noise levels would not exceed 55 dB at 3,000 ft. AGL at any given point along the route when the air

tour occurs, which is below the sound-only injury threshold of 92 dB for northern spotted owls.⁴ The time-of-day restrictions included in this ATMP are intended to avoid potential disruption to marbled murrelets during peak activity periods for feeding and incubation exchanges during the marbled murrelet nesting season. Additionally, this provision will improve preservation of wilderness character and visitor experiences on the ground by reducing the intensity of air tour noise to visitors on the ground.

Sunrise and sunset are important times of the day for wildlife and visitor use and experience. Biologically important behaviors for many species occur during this time, such as the dawn chorus for songbirds, foraging, and communication. Wildlife viewing is often conducted during this time of day as well. Day/time restrictions have been included in this ATMP to create quiet periods of the day during which noise from commercial air tours would not impede these critical wildlife behaviors. These restrictions also allow for opportunities for visitors to enjoy natural sounds and aligns with objectives for areas throughout the Park that are managed as wilderness.

Operator training and education may provide opportunities to enhance the interpretive narrative for air tour clients and increase understanding of parks by the air tour company and their clients. If necessary, an annual meeting will be held to facilitate effective implementation of the ATMP because it will be used to review and discuss implementation of this ATMP between Park staff, the local FAA FSDO, and the operator. It will thus serve to ensure the air tour operator remains informed regarding the terms and conditions of this ATMP, including any adaptive management measures or amendments, and is made aware of new or reoccurring concerns regarding Park resources.

The requirements to equip aircraft with flight monitoring technology, use flight monitoring technology during all air tours under this ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports are necessary to enable the agencies to appropriately monitor operations and ensure compliance with this ATMP.

6.0 NEW ENTRANTS

For the purposes of this ATMP, a "new entrant" is a commercial air tour operator that has not been granted any operations under this ATMP or that no longer holds operations under this ATMP at the time of the application. New entrants must apply for and be granted operating authority before conducting commercial air tours over the lands and waters covered by this ATMP.

The FAA and the NPS will publish additional information for interested parties about the form and required content of a new entrant application. The FAA and the NPS will jointly consider new entrant applications and determine whether to approve such applications. Review of applications submitted prior to the effective date of this ATMP will commence within six months of the effective date. Applications submitted after that

⁴U.S. Fish and Wildlife Service (2020). Biological Opinion for Programmatic Forest Management Activities on the Olympic National Forest, 2020-2030. USFWS Reference: 13410-2009-F-0388-R001.

time will be considered no less frequently than every three years from the effective date of this ATMP.

If any new entrant is granted operating authority under this ATMP, the FAA will issue OpSpecs (and, if necessary, will revise OpSpecs to operators whose allocation of operating authority changes due to accommodation of a new entrant) within 90 days of the publication of an amended ATMP or of the effective date of ATMP changes implemented through the adaptive management process.

7.0 COMPETITIVE BIDDING

When appropriate, the FAA and the NPS will conduct a competitive bidding process pursuant to the criteria set forth in 49 U.S.C. § 40128(a)(2)(B) and other criteria developed by the agencies. Competitive bidding may be appropriate to address: a new entrant application; a request by an existing operator for additional operating authority; consideration by the agencies of Park-specific resources, impacts, or safety concerns; or for other reasons.

The agencies will request information necessary for them to undertake the competitive bidding process from operators. Operators who do not provide information in a timely manner may be disqualified from further consideration in the competitive bidding process.

Competitive bidding may necessitate an amendment to this ATMP, additional environmental review, and/or the issuance of new or revised OpSpecs. If updated OpSpecs are required, they will be issued within 90 days.

8.0 ADAPTIVE MANAGEMENT

Adaptive management allows for minor modifications to this ATMP without a formal ATMP amendment if the impacts of such changes are within the impacts already analyzed by the agencies under the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act. In general, adjustments to the number of commercial air tours allocated to individual operators as a result of the competitive bidding process and minor changes to routes, altitudes, or other operating parameters are examples of adaptive management measures that may not require a formal ATMP Amendment. Such modifications may be made if: 1) the NPS determines that they are necessary to avoid adverse impacts to Park resources, values, or visitor experiences; 2) the FAA determines the need for such changes due to safety concerns; or 3) the agencies determine that appropriate, minor changes to this ATMP are necessary to address new information (including information received through tribal input and/or consultation) or changed circumstances.

9.0 AMENDMENT

This ATMP may be amended at any time: if the NPS, by notification to the FAA and the operator, determines that the ATMP is not adequately protecting Park resources and/or

visitor enjoyment; if the FAA, by notification to the NPS and the operator, determines that the ATMP is adversely affecting aviation safety and/or the national aviation system; or, if the agencies determine that appropriate changes to this ATMP are necessary to address new information or changed circumstances that cannot be addressed through adaptive management.

The FAA and the NPS will jointly consider requests to amend this ATMP from interested parties. Requests must be made in writing and submitted to both the FAA and the NPS. Requests must also include justification that includes information regarding how the requested amendment: is consistent with the objectives of this ATMP with respect to protecting Park resources, or visitor use and enjoyment; and would not adversely affect aviation safety or the national aviation system. The FAA and the NPS will publish additional information for interested parties about the form and manner for submitting a request.

Increases to the total number of air tours authorized per year under this ATMP resulting from accommodation of a new entrant application or a request by an existing operator will require an amendment to this ATMP and additional environmental review. Notice of all amendments to this ATMP will be published in the Federal Register for notice and comment.

10.0 CONFORMANCE OF OPERATIONS SPECIFICATIONS

New OpSpecs that incorporate the operating parameters set forth in this ATMP will be issued within 90 days of the date of signature on this ATMP.

11.0 EFFECTIVE DATE

This ATMP is effective on the date new OpSpecs incorporating its operating parameters are issued.

Greg Dudgeon
Superintendent
Mount Rainier National Park
National Park Service

Grady Stone
Regional Administrator
Northwest Mountain Region
Federal Aviation Administration

Frank W. Lands
Regional Director
Interior Regions 8, 9, 10 and 12
National Park Service

Kevin Welsh
Executive Director
Office of Environment & Energy
Federal Aviation Administration

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

APPENDIX A

1.0 COMMERCIAL AIR TOUR ALLOCATIONS

Table 1 provides allocations of the operations authorized per year along with authorized aircraft type by operator. IOA previously issued for the Park terminates on the effective date of this ATMP.

Table 1. Air Tour Operations and Aircraft Type by Operator

Air Tour Operator	Annual Operations	Daily Operations	Aircraft Type
Rite Bros Aviation, Inc.	1	1	CE-172-K, CE-172-N, CE-206-TU206F, CE-206-U206A

2.0 DAY/TIME RESTRICTIONS

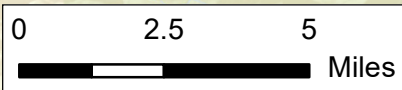
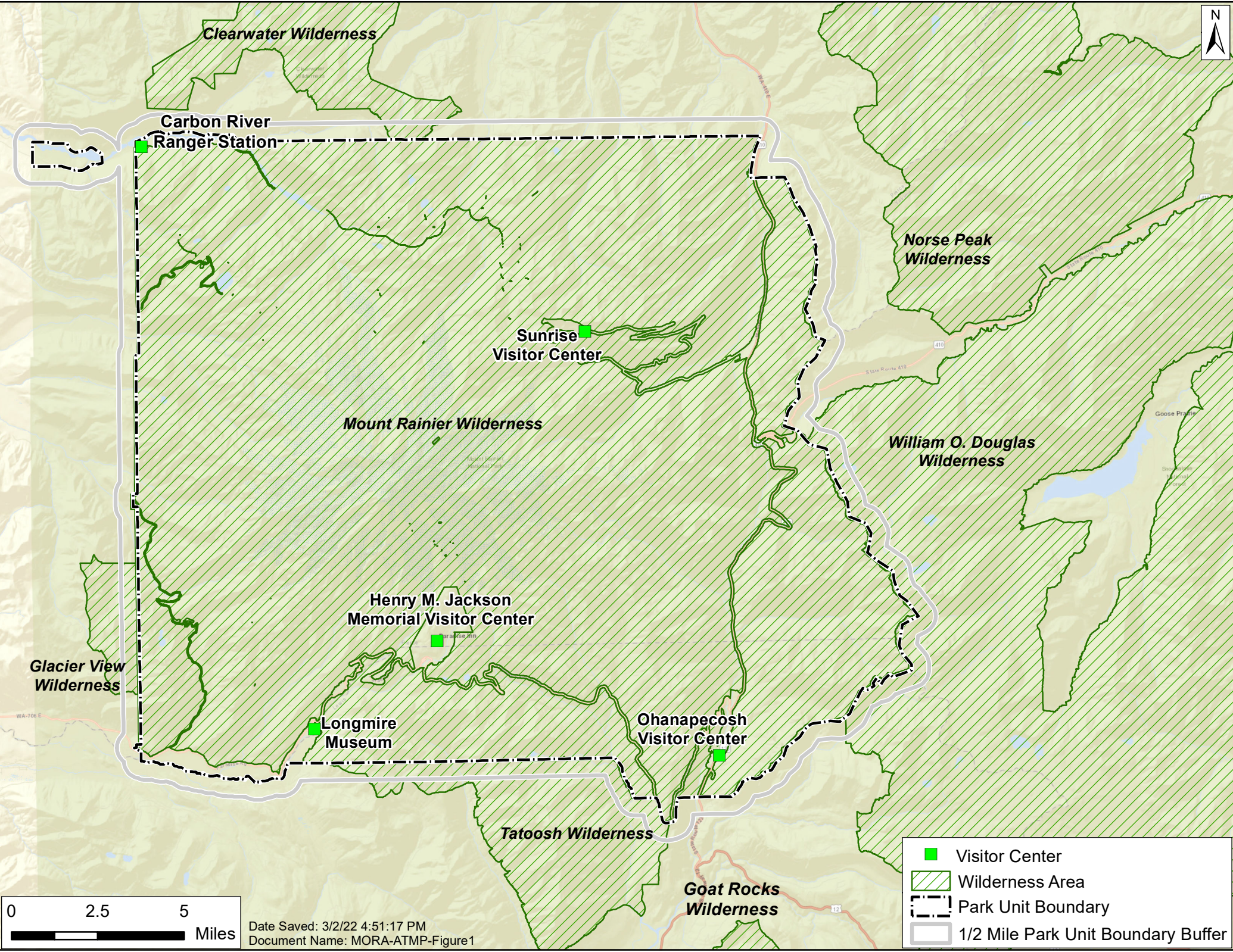
Table 2 lists the time-of-day and day-of-week operating parameters.

Table 2. Air Tour Time-of-Day and Day-of-Week Restrictions by Operator

Air Tour Operator	Time-of-Day	Day-of-Week
Rite Bros Aviation, Inc.	10:00 AM to 3:00 PM local time	No restrictions.

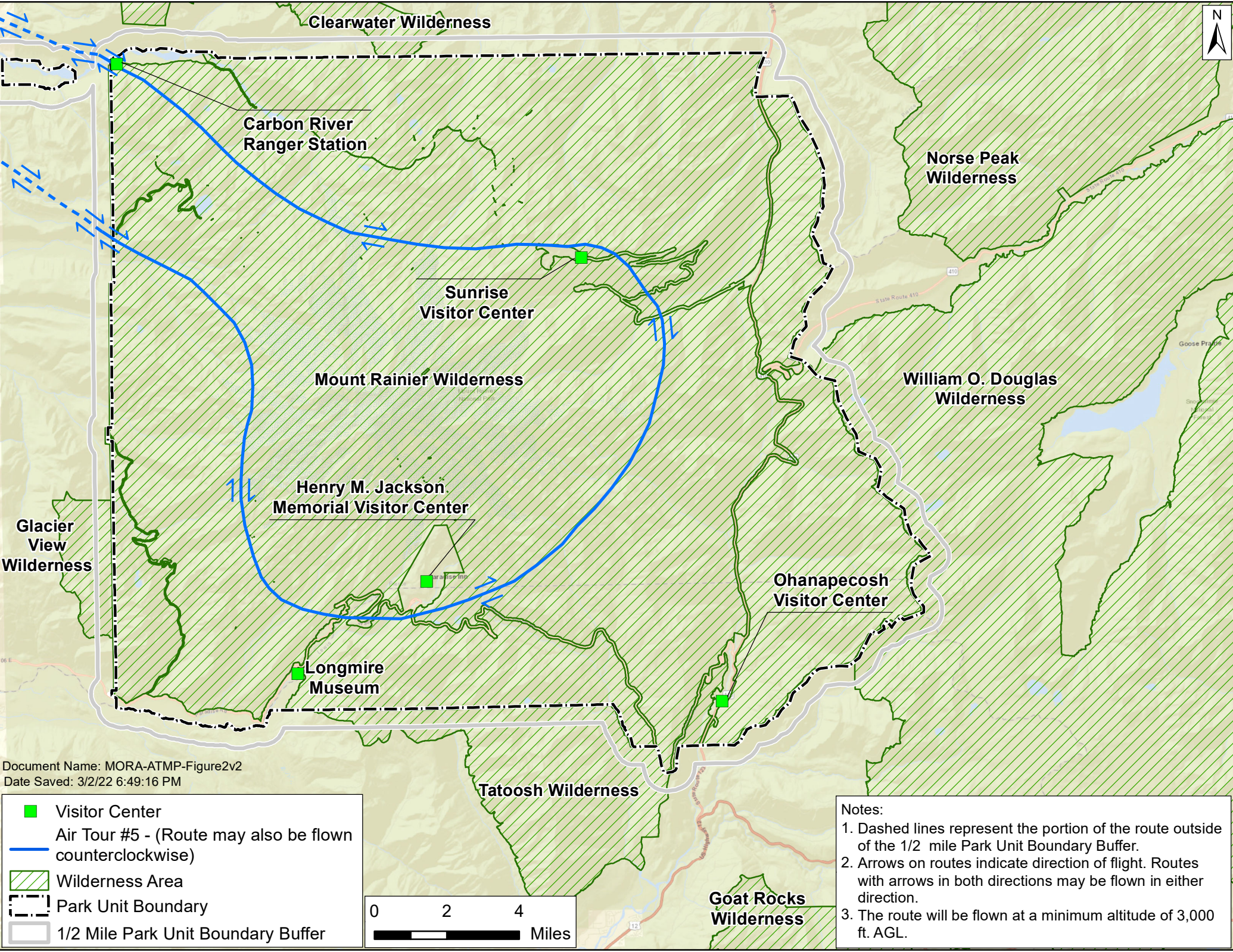
APPENDIX B

Enlarged Figures 1 and 2



Date Saved: 3/2/22 4:51:17 PM
Document Name: MORA-ATMP-Figure1

- Visitor Center
- Wilderness Area
- Park Unit Boundary
- 1/2 Mile Park Unit Boundary Buffer



Document Name: MORA-ATMP-Figure2v2
Date Saved: 3/2/22 6:49:16 PM

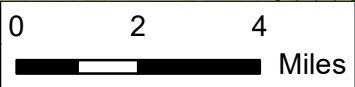
Visitor Center

Air Tour #5 - (Route may also be flown counterclockwise)

Wilderness Area

Park Unit Boundary

1/2 Mile Park Unit Boundary Buffer



- Notes:
1. Dashed lines represent the portion of the route outside of the 1/2 mile Park Unit Boundary Buffer.
 2. Arrows on routes indicate direction of flight. Routes with arrows in both directions may be flown in either direction.
 3. The route will be flown at a minimum altitude of 3,000 ft. AGL.

APPENDIX B

Environmental Screening Form



ENVIRONMENTAL SCREENING FORM (ESF)

PROJECT INFORMATION

Project Title: Mount Rainier National Park Air Tour Management Plan

PEPC Project Number: 102920

Project Type: Categorical Exclusion

Project Location: Pierce County, Washington

PROJECT DESCRIPTION

The proposed action is to implement an Air Tour Management Plan (ATMP) for Mount Rainier National Park (the Park). The “Project Description” section of the Categorical Exclusion (CE) Form for the ATMP sets out the elements of the ATMP and is incorporated herein by reference.

RESOURCE IMPACTS TO CONSIDER

Definition of Effects or Impacts (40 C.F.R. § 1508.1(g))

Effects or impacts means changes to the human environment from the proposed action¹ or alternatives that are reasonably foreseeable and include direct effects, indirect effects, and cumulative effects. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial.

For the purposes of considering environmental impacts, the National Park Service (NPS) evaluated the change to the human environment resulting from implementation of the ATMP. Consistent with Council on Environmental Quality regulations, the baseline from which to measure environmental impacts of the ATMP is the current condition of the human environment. In this case, the baseline is the current condition of Park resources and values, as impacted by one commercial air tour per year (existing three-year average of tours conducted on an annual basis from 2017-2019) along with other planned actions and trends. The baseline also includes the route and altitude information of commercial air tours provided by the operators, as well as the timing and daily commercial air tour information from commercial air tour reports provided by the operators from 2017-2019.

¹ The ATMP is the proposed action for this CE.

Existing Conditions of Commercial Air Tours over the Park

Two commercial air tour operators, Classic Helicopter Corp. and Rite Bros Aviation, Inc., hold Interim Operating Authority (IOA) to conduct a combined total of 34 commercial air tours over the Park each year.² Based on the three-year average of reporting data from 2017 to 2019, an average of one commercial air tour is conducted over the Park each year. Classic Helicopter Corp. conducts an average of zero commercial air tours over the Park each year, and Rite Bros Aviation, Inc. conducts an average of one commercial air tour over the Park each year. Rite Bros Aviation, Inc., conducts commercial air tours on one route over the Park which circumnavigates Mount Rainier either clockwise or counterclockwise, entering and exiting over the northwest corner of the Park, using Cessna 172, 206, and 207 aircraft (fixed-wing) at a minimum altitude of 3,000 feet (ft.) above ground level (AGL). This tour is typically conducted between the hours of 10:00 AM and 3:00 PM local time.

Summary of the ATMP

The ATMP limits the number of commercial air tours authorized over the Park or within ½ mile of its boundary to the existing three-year average of tours conducted on an annual basis from 2017-2019 (one tour per year) and allocates that tour to Rite Bros Aviation, Inc. The operator will be allowed to conduct one commercial air tour per year on the existing route that the operator currently reports flying over the Park. The ATMP results in no change to the minimum altitude that the commercial air tour may fly over the Park (minimum 3,000 ft AGL). The ATMP restricts the hours during which the commercial air tour may be conducted over the Park, between 10:00 AM and 3:00 PM local time, except as provided for quiet technology incentives.

EVALUATION OF THE ATMP

Table 1. Potential Issues and Impacts to Resources

Resource	Potential Issues & Impacts
Air Air Quality	The findings from the screening analysis demonstrate that implementing the ATMP will not meaningfully impact (meaning that it will have no or minimal impact) local air quality and will not have regional impacts. See <i>Air Quality Technical Analysis</i> below.
Biological Species of Special Concern or Their Habitat	<u>Federally Listed Threatened and Endangered Species</u> The Park has a number of Federally designated threatened and endangered species, including listed mammals, birds, and fish. The Section 7 analysis conducted by the agencies considered the potential effects of the ATMP on listed species and/or designated critical habitat without the consequences to those listed species by the existing commercial air tours, in accordance with 50 CFR § 402.02. The agencies analyzed potential impacts for all listed species with suitable habitat within the Park with a focus on two species, marbled murrelet (<i>Brachyramphus marmoratus</i>) and northern spotted owl (<i>Strix occidentalis caurina</i>). The agencies have determined that the ATMP would have <i>No Effect</i> on threatened and endangered species or their critical habitats. Refer to the Section 7 documentation for additional information, which includes the agencies' analysis. The ATMP is expected to have negligible or only beneficial impacts on listed species when compared to current conditions because the number of authorized

² The National Parks Air Tour Management Act (NPATMA) states that a national park that has 50 or fewer commercial air tour operations over the park each year is exempt from the requirement to develop an ATMP. 49 USC § 40128 (a)(5)(A). However, NPATMA also states that if the NPS determines that an ATMP or voluntary agreement is necessary to protect park resources and values or park visitor use and enjoyment, the NPS may withdraw the exemption for that park. *Id.* § 40128 (a)(5)(B). The NPS withdrew the exemption for the Park.

	<p>flights under the ATMP will be the same as the average number of flights from 2017-2019, the route and altitude will remain the same as those currently flown under existing conditions, and the ATMP requires additional conservation measures to protect listed species including northern spotted owl and marbled murrelets.</p> <p><u>Special Status Species and Migratory Birds</u></p> <p>Bald eagles (<i>Haliaeetus leucocephalus</i>) and golden eagles (<i>Aquila chrysaetos</i>) are protected raptor species that are present at the Park.³ These species are especially sensitive to low flying aircraft and their associated noise. Nesting eagles that are repeatedly disturbed by noise will abandon their nests. Additionally, raptors may collide with aircraft because of the altitude at which raptors fly. Scientific and national level guidance recommends aircraft standoff of 1,000 ft. for bald eagles (U. S. Fish and Wildlife Service, 2007) and golden eagles to reduce noise impacts (Richardson and Miller 1997). The ATMP authorizes one flight per year on the same route flown under existing conditions and sets the minimum altitude at 3,000 ft. AGL for commercial air tours, which is consistent with existing operating conditions. Therefore, the ATMP is expected to have limited to no impacts on these species when compared to current conditions.</p> <p>A number of other migratory birds⁴ and other avian species use the Park. Information related to migratory birds are summarized more generally below under “Wildlife and/or Wildlife Habitat including terrestrial and aquatic species”. Migratory birds will be exposed to noise at a similar or decreased level compared to what is currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019. Therefore, the ATMP is expected to have negligible or only beneficial impacts on these species when compared to current conditions.</p>
<p>Biological Wildlife and/or Wildlife Habitat including terrestrial and aquatic species</p>	<p>The Park and its surroundings are home to a wide variety of wildlife. Noise from commercial air tours may impact wildlife in a number of ways: altered vocal behavior, breeding relocation, changes in vigilance and foraging behavior, and impacts on individual fitness and the structure of ecological communities to name a few (Shannon et al., 2016; Kunc et al., 2016; Kunc and Schmidt, 2019). Understanding the relationships between commercial air tour noise attributes (e.g., timing, intensity, duration, and location) and ecosystem responses is essential for understanding impacts to these species and developing management actions to address them (Gutzwiller et al., 2017).</p> <p>Since the ATMP authorizes a maximum number of commercial air tours per year equivalent to the existing three-year average (one flight per year), it is anticipated that there will be little to no change to existing operating conditions and the resultant disturbances to wildlife. Furthermore, the ATMP requires the operator to continue to fly on the existing designated route at the same altitude flown under existing conditions (3,000 ft. AGL). This limits noise exposure to wildlife in the Park and will result in a beneficial impact compared to current conditions. Many species of wildlife move, making daily maximum exposure less likely.</p>

³ Bald eagles and golden eagles are protected under the Bald and Golden Eagle Protection Act.

⁴ Migratory bird species are protected under the Migratory Bird Treaty Act.

	<p>Sunrise and sunset are important times of the day for wildlife. Biologically important behaviors for many species occur during these times, such as the dawn chorus for songbirds, foraging, and communication. The day/time restrictions and quiet technology incentives included in the ATMP provide protection to wildlife that are active during sunrise and sunset, which represents an improvement to current conditions. In the event that operators request and are authorized to use the quiet technology incentive, those tours would result in the possibility of noise during the sunrise/sunset time periods. The impacts from these flights would be less than the noise modeled in the <i>Noise Technical Analysis</i> but could be more than when there are no flights during this time of day.</p> <p>In conclusion, while wildlife will continue to be exposed to noise, effects are expected to be insignificant and will not be widespread throughout the Park. Any disturbances will likely be temporary in nature and limited on the one day per year the air tour occurs. Noise from the commercial air tour will be experienced by only those wildlife under or near the designated route when it is being conducted (once per year), leaving most wildlife in the Park unaffected. The level of noise exposure will be similar or decrease compared to current conditions because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019 on the same route and altitude. Therefore, impacts to wildlife are not significant. See also the discussion above for special status species.</p>
Cultural Cultural Landscapes	<p>The NPS defines a Cultural Landscape as: a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. There are four general kinds of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes (National Park Service, 2002).</p> <p>An impact to a cultural landscape will occur if the project alters any of the characteristics that help make the cultural landscape eligible for listing on the National Register of Historic Places (NRHP). This includes any diminishment of the cultural landscape's integrity of location, design, setting, materials, workmanship, feeling, or association. The potential impacts to cultural landscapes from the ATMP are limited to the continuation of visual and audible elements that diminish the integrity of the landscape setting and/or feeling.</p> <p>There are many cultural landscapes in the Park that contribute to the Park's National Historic Landmark District (NHL) that have been identified and evaluated within the context of cultural landscapes and are considered eligible for listing on the NRHP. The number of authorized flights under the ATMP will be the same as the average number of flights reported over the Park from 2017-2019 (one flight per year) and the same route will be used. The <i>Noise Technical Analysis</i> shows that aircraft noise related to commercial air tours is predicted to be greater than 35 dBA for less than five minutes a day in areas directly beneath and adjacent to the route. Therefore, impacts to cultural landscapes will be similar or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019. The ATMP would not likely diminish the integrity of the NHL or contributing elements due to the very low number of commercial air tours permitted over the Park (one per year), as well as the route and altitude as proposed.</p>

	<p>The Federal Aviation Administration (FAA) and the NPS consulted with the Washington State Historic Preservation Office, Native American tribes, and other consulting parties on the potential impacts of the ATMP on Historic Properties, including cultural landscapes as part of Section 106 consultation. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties.</p>
<p>Cultural Ethnographic Resources</p>	<p>The NPS defines Ethnographic Resources as: a site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it (National Park Service, 2002). Ethnographic resources include Traditional Cultural Properties (TCPs) (National Park Service, 1992).</p> <p>An impact to an Ethnographic Resource will occur if the project affects those elements of the resources that make it significant to the group traditionally associated with the resource, or if the project interferes with the use of the resource by the associated groups.</p> <p>Nine Native American tribes attach religious or cultural significance to areas within and adjacent to the Park. These include the: Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Chehalis Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Cowlitz Indian Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Puyallup Tribe of Indians, Squaxin Island Tribe, Confederated Tribes of the Warm Springs Reservation of Oregon, and the Suquamish Indian Tribe. Tribes have informed Park staff that there are sites within the Park that are significant to the Tribes. The number of authorized flights under the ATMP will be the same as the average number of flights reported over the Park from 2017-2019, amounting to a single flight per year, and the same route will be used. Furthermore, commercial air tours have no effect on Tribal access. Therefore, no impacts to ethnographic resources are anticipated.</p> <p>The FAA and the NPS consulted with the tribes listed above on the potential impacts of the ATMP on Ethnographic Resources, through compliance with Section 106 of the National Historic Preservation Act. That consultation led to a finding that the ATMP will have no adverse effect on historic properties, which includes Ethnographic Resources.</p>
<p>Cultural Prehistoric/historic structures</p>	<p>Cultural resources within the Park include a number of archaeological sites and historic structures. As noted above, impacts to these resources will occur if the ATMP alters the characteristics of an archaeological site or historic structure that make it eligible for NRHP listing. Commercial air tours, by their nature, have the potential to impact resources for which only feeling and setting are the contributing elements. Feeling and setting have been identified as contributing elements for 37 cultural resources at the Park. Refer to the Section 106 documentation for a complete list.</p> <p>The commercial air tour will result in the continuation of visual and audible elements that are inconsistent with the feeling and setting for these resources. This intrusion will be limited to a maximum of one instance per year, and of limited duration. The <i>Noise Technical Analysis</i> shows that aircraft noise related to commercial air tours is predicted to be greater than 35 dBA for less than five minutes a day in areas beneath and adjacent to the route. These impacts will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019 (one tour per year) and the same route</p>

	<p>will be used. Therefore, the ATMP is expected to have negligible or only beneficial impacts on cultural resources when compared to current conditions.</p> <p>The FAA and the NPS consulted with the Washington State Historic Preservation Office, Native American tribes, and other consulting parties on the potential impacts of the ATMP on Historic Properties, including Cultural; prehistoric/historic structures as part of Section 106 consultation. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties.</p>
Lightscares Lightscares	Under the ATMP, unless they qualify for the quiet technology incentive, the commercial air tour is not permitted before 10:00 AM or after 3:00 PM. Any lights from commercial air tour aircraft are not likely to be noticeable and any impacts will be similar to or decrease compared to current conditions because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019 and the same route will be used. Therefore, impacts to lightscares will not be significant.
Other Human Health and Safety	Commercial air tours are subject to the FAA regulations for protecting individuals and property on the ground, and preventing collisions between aircraft, land or water vehicles, and airborne objects. The operator must continue to meet the FAA safety regulations.
Socioeconomic Minority and low-income populations, size, migration patterns, etc.	U.S. Census data (United States Census Bureau, 2021) for census blocks surrounding the Park was reviewed to determine the presence of minority or low-income populations immediately outside and within ½-mile of the Park boundary. Based on this review, minority populations were identified in Pierce County. However, commercial air tours will not have a disproportionate impact on low-income or minority populations, since the noise associated with commercial air tours will occur in areas directly beneath and adjacent to the route within the Park and will not be concentrated over low-income or minority populations. On days when commercial air tours will occur, noise levels above 52 dBA are anticipated to occur for less than five minutes in a few areas directly beneath and adjacent to the route (see Figure 2). See <i>Noise Technical Analysis</i> below. Therefore, the ATMP will not have a disproportionate impact on low-income or minority populations.
Socioeconomic Socioeconomic	Commercial air tours generate income for operators and potentially generate income for other ancillary visitor industry businesses. Visitors from outside the immediate area contribute to this income. Because the number of commercial air tours authorized under the ATMP is the same as the average number of flights from 2017-2019, the Park does not expect visitor spending on commercial air tours or economic activity in the local communities to change. The competitive bidding process may redistribute the number of flights and income between individual operators in the future but is not anticipated to affect the overall average number of flights or local business activity generated by these flights.
Soundscapes Acoustic Environment	Baseline acoustic conditions in the Park were measured in 2006, 2007 and 2009 (National Park Service, 2011). The existing ambient daytime sound level was reported to be 21-50 decibels, while the natural ambient daytime sound level was reported to be 21-49 decibels. The existing ambient condition includes all sound associated with a given environment, i.e., natural, human, and mechanical sounds, such as automobiles and aircraft. Aircraft sound measured at a sampling location may include general aviation, commercial jets, military, and air tours. The natural ambient is the sound conditions found in a study area, including all sounds of nature (i.e., wind, water, wildlife, etc.) and excluding all human and mechanical sounds. Both the existing and natural ambient conditions were considered in the resource impacts analysis.

	<p>Depending on a receiver's location on the ground in relation to an aircraft flying overheard, aircraft sound can range from faint and infrequent to loud and intrusive. Impacts of aircraft noise range from masking quieter sounds of nature such as bird vocalizations to noise loud enough to interrupt conversational speech between visitors. To capture how noise may affect quieter natural sounds or conversations, the resource impacts analysis below examines the time above 35 decibels (for quieter natural sounds and impacts to natural resources) and time above 52 decibels for conversational speech disturbance and impacts to visitor experience.</p> <p>Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes the same number of flights per year as the average number of flights from 2017-2019 (one flight per year) and requires commercial air tours to maintain the same route and altitudes flown under existing conditions. Refer to the <i>Noise Technical Analysis</i> below.</p> <p>For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the FAA noise evaluation is based on Yearly⁵ Day Night Average Sound Level (DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the ATMP would not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for NEPA.</p>
Viewsheds Viewsheds	<p>While studies indicate that aircraft noise in national parks can impact human perceptions of aesthetic quality of viewsheds (Weinzimmer et al., 2014; Benfield et al., 2018), because the level of commercial air tour activity under the ATMP will remain the same, there will be no change in the effect to visitors in this regard. Other literature for studies on impacts from commercial air tours or overflights generally on viewsheds conclude that the visual impacts of overflights are difficult to identify because visitors primarily notice aircraft because of the accompanying noise. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights (along with the position in the scene as viewed from most locations) make it unlikely the typical visitor will notice or be visually distracted by aircraft. The viewer's eye is often drawn to the horizon to take in a park view and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography.</p> <p>Under existing operations, commercial air tours over the Park are flown on one route. The ATMP limits the number of commercial air tours per year to one tour and maintains the same route as is currently flown under existing operations. Therefore, impacts to viewsheds will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and the route will remain the same as compared to existing conditions. They would therefore not be considered significant.</p>

⁵ As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

<p>Visitor Use and Experience Recreation Resources</p>	<p>Commercial air tours offer a recreational experience for those who wish to view the Park from a different vantage point. Because the number of commercial air tours under the ATMP is consistent with the average number of flights from 2017-2019, there are no or minimal changes anticipated to the number of commercial air tours offered per year compared to current conditions.</p> <p>Currently, customers on commercial air tours are not required to pay an entrance fee to the Park, nor are the commercial air tour operators required to pay a fee to the Park.</p>
<p>Visitor Use and Experience Visitor Use and Experience</p>	<p>The NPS allows visitor uses that are appropriate to the purpose for which the Park was established and can be sustained without causing unacceptable impacts to Park resources or values. Unacceptable impacts are impacts that, individually or cumulatively, will unreasonably interfere with Park programs or activities including interpretive programs, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the Park (National Park Service, 2006).</p> <p>Effects of commercial air tours on Park visitor experience have been well documented over many years. See <i>Report on the Effects of Aircraft Overflights on the National Park System</i> (Department of Interior/National Park Service, 1995). The primary effect of commercial air tours is the introduction of noise into the acoustic environment. Numerous studies have identified the value and importance of soundscapes as one of the motivations for visiting parks (Haas and Wakefield, 1998; McDonald et al., 1995; Merchan et al., 2014; Miller et al., 2018), including in a cross-cultural context (Miller et al., 2018). Other studies have focused specifically on the effects of aircraft on the visitor experience both in parks and protected areas, and a laboratory setting, indicating that aircraft noise negatively impacts the visitor experience (Anderson et al., 2011; Ferguson, 2018; Mace et al., 2013; Rapoza et al., 2015).</p> <p>Currently, some Park visitors may hear noise from commercial air tours, which may disrupt visitors or degrade the visitor experience at the Park by disturbing verbal communications and masking the sounds of nature. For example, noise from commercial air tours may disrupt visitors during interpretive and educational programs at historical sites or while hiking, camping, or participating in other activities. Visitors respond differently to noise from commercial air tour overflights – noise may be more acceptable to some visitors than others. Visitors in backcountry and wilderness areas often find commercial air tours more intrusive than visitors in developed and frontcountry areas where noise from commercial air tours may not be as audible (Rapoza et al., 2015; Anderson et al., 2011).</p> <p>Visitor points of interest include campgrounds, visitor centers, and trails. Ranger-led education and interpretative programs occur across the Park. Noise disturbances to visitors from commercial air tours are not expected to measurably change under the ATMP because the ATMP authorizes the same number of commercial air tours as the average number of flights from 2017-2019 and requires commercial air tours to fly on the same route and altitude reported by the operator. On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in a few areas directly beneath and adjacent to the route (see Figure 2). See <i>Noise Technical Analysis</i> below. Finally, limiting the operation of commercial air tours from 10:00 AM until 3:00 PM, or beginning one hour after sunrise until one hour before sunset for operators that have converted to quiet technology aircraft, provides times when visitors seeking solitude may explore the Park</p>

	without disruptions from commercial air tours. Collectively, these changes from existing operations and their effect on the current condition of visitor experience will result in beneficial impacts to the visitor experience at the Park.
Wilderness Wilderness	Noise from air tours has the potential to disrupt the opportunity for solitude in designated wilderness areas. However, because the authorized number of flights authorized by the ATMP is limited to a single flight per year and is consistent with the average number of flights that has occurred during the years 2017-19 and the same route will be used, there is no change anticipated to the noise condition in the Park's Wilderness areas, and the effects are insignificant. The limited duration of potential exposure to commercial air tours makes it unlikely that most visitors will experience noise related to commercial air tours within the Park's wilderness areas.
Cumulative Effects	<p>The cumulative impact analysis for the ATMP focuses on noise and viewshed impacts. Impacts to other resources, i.e., wildlife, visitor experience, ethnographic resources, wilderness, etc. all result from noise or viewshed impacts.</p> <p>Many activities may contribute noise to the Park's acoustic environment. Aviation activities such as commercial air tours above 5,000 ft. AGL and overflights by high altitude jets, military flights, or private aviation regardless of altitude are not subject to regulation under NPATMA. These flights may detract from the viewshed of the Park as well.</p> <p>The Park's developed areas and roadways also contribute to ambient noise. Maintenance and other administrative activities, such as search and rescue efforts, etc. may also contribute noise to the acoustic environment, but are generally temporary, irregular, and do not last more than a few hours. Intermittent construction activities may add noise to the Park's acoustic environment, though generally those occur in already developed areas where noise is generally more acceptable and expected.</p> <p>The agencies have qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities generally described above. In some cases, the noise contribution from other sources may be substantial, such as military overflights, high altitude jets, or roadway traffic. In those cases, the addition of commercial air tour noise is such a small contribution of noise overall that it is unlikely they would result in noticeable or meaningful change in the overall acoustic environment, particularly when considering that the ATMP permits only one commercial air tour per year over the Park. Commercial air tours over roadways or heavily used motorized waterways are likely to be masked by existing noise and therefore the impacts would be de minimis. Finally, the ATMP does not add new noise to the existing acoustic environment. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP and the single flight authorized per year, the continuation of one commercial air tour will not result in a meaningful change to the current condition of the visual or auditory landscape at the Park.</p> <p>As noted above under viewsheds, visual or viewshed impacts associated with aircraft are most noticeable because of noise. As described above, the ATMP will not result in significant impacts to the acoustic environment. Additionally, there should not be significant cumulative changes to the viewshed since the number of air tours are not increasing but is consistent with the 3-year average, and the ATMP authorizes a single commercial air tour per year over the Park.</p>

	<p>The NPS recently completed an environmental assessment (EA) process to consider the authorization of a Lahar Detection and Monitoring System, much of which will be located within the Park's wilderness. The EA discloses impacts to wilderness character, including short term impacts to the opportunity for solitude from the installation of the system as well as periodic maintenance. The noise associated with that project is not a significant impact on the opportunity for solitude since it will be sporadic (see the EA for a full analysis). The continuation of one commercial air tour per year on top of the noise from this project is not significant. It is highly unlikely the commercial air tour will occur on the same day over the same areas impacted by the Lahar project, and even if it does occur on the same day, for reasons discussed above, the impacts are not cumulatively significant to wilderness character and would not impair wilderness character.</p> <p>Therefore, no significant cumulative environmental impacts are likely to result from the ATMP.</p>
Indirect Effects	<p>The ATMP applies to all commercial air tours over the Park or within ½ mile outside the boundary of the Park, including any tribal lands within that area, that are flown below 5,000 ft. AGL. These flights takeoff and land from the William R. Fairchild International Airport, which is approximately 100 miles from the nearest point of the Park's ½-mile boundary buffer and is outside of the area regulated by the ATMP. Land uses between the airport and the Park's ½-mile boundary buffer include agricultural and undeveloped land uses, as well as heavily developed areas within the Seattle-Tacoma metro area. The single commercial air tour authorized by the ATMP could result in some temporary noise disturbances in these areas when traveling to and from the Park. A commercial air tour flown over residential areas may result in temporary noise disturbance to homeowners. Undeveloped lands will likely experience similar impacts to those described in other sections of this ESF, i.e., temporary disturbances to wildlife, etc. although flight altitudes may be different outside the Park boundary resulting in potentially more adverse impacts than those occurring within the ATMP boundary. Because of the low number of flights authorized by the ATMP (no more than one tour per year), these effects are expected to be insignificant.</p> <p>Since the ATMP authorizes the same number of commercial air tours per year as existing conditions (one per year) on the same route, it is unlikely that the frequency and nature of this disturbance more than ½ mile outside the Park would result in a change from current condition. Therefore, the agencies consider indirect effects of the ATMP to be negligible. However, since the ATMP cannot regulate the flight path, altitude, duration, etc. of the flight more than ½ mile outside the Park's boundary (the operator must comply with relevant FAA regulations), the agencies are unable to require the operator to continue to fly more than ½ mile outside the Park's boundary in the manner in which they currently fly under existing conditions or to require the operator to change any operational parameters (e.g., altitude or routes). However, the agencies are unaware of any reason the operator would deviate from their current flight paths outside the ATMP boundary since the route has not changed.</p>

ADDITIONAL TECHNICAL ANALYSIS

Air Quality Technical Analysis

Potential air quality impacts from proposed commercial air tour operations were estimated using an emissions inventory approach. Annual flight miles by aircraft type were calculated for the parks for which ATMPs are currently being developed and Badlands National Park (BADL) was found to have the highest annual flight miles

(58,163 flight miles vs. 46 flight miles in Mount Rainier National Park). BADL was thus considered the highest anticipated flight activity for parks which meet the National Ambient Air Quality Standards (i.e., attainment parks). The most common aircraft that fly commercial air tours in BADL are the Cessna 206 (fixed-wing) and Robinson R44 (helicopter) and can be considered representative of the types of fixed-wing and helicopter aircraft used for commercial air tours.

The FAA’s Aviation Environmental Design Tool (AEDT) version 3d was used to develop emission factors (pounds of emissions per mile flown) for these aircraft, which were derived from the Environmental Protection Agency’s (EPA) AP-42: Compilation of Emission Factors (United States Environmental Protection Agency, Office of Noise Abatement and Control, 1974). Although the AP-42 emission factors represent the best available data, they have not been updated since the 1990s and most aircraft engines in use today are likely to be cleaner due to less-polluting fuels and improvements in engine emissions controls. Therefore, these emission rates are considered a conservative estimate of emission rates for aircraft used in commercial air tours.

The maximum emissions (tons per year) were calculated for BADL by multiplying the total number of operations (by aircraft type), the longest route flown by each aircraft type within BADL and the ½-mile boundary outside of BADL, and the aircraft-specific emission factor. The sum of total emissions by aircraft type represent the maximum emissions conditions for BADL. BADL emissions results were compared with the EPA’s General Conformity *de minimis* thresholds for the most stringent⁶ nonattainment areas. Although BADL and other attainment parks are not subject to General Conformity Requirements, EPA’s General Conformity *de minimis* thresholds represent a surrogate for impacts to ambient air quality.

The NPS must also consider impacts to resources that are sensitive to air pollution under the NPS Organic Act mandates and the Clean Air Act (CAA). Such resources include (but are not limited to) sensitive vegetation, streams and lakes, aquatic biota and visibility. These resources are typically referred to as Air Quality Related Values (AQRVs). Parks designated Class I areas under the CAA also receive an additional measure of protection under the CAA provisions. The CAA gives the NPS an “affirmative responsibility to protect the air quality related values (including visibility) of any such lands within a Class I area.”

Since emissions estimates for all pollutants in BADL are well below the *de minimis* levels (Table 2), and the Park will have a lower combination of proposed annual operations and route distances using similar fixed-wing aircraft, emissions in the Park will also not exceed *de minimis*. The most stringent *de minimis* emission thresholds for federal conformity determinations are sufficiently low relative to emission thresholds the NPS will use to determine whether additional air quality analysis is necessary under a NEPA analysis. Given this, and the fact that the maximum projected emissions from overflights in the Park are well below these *de minimis* levels (< 1 TPY for nitrogen oxides, particulate matter, and sulfur dioxide – criteria pollutants that have the most significant impact on AQRVs), it is expected that emissions from overflights in the Park under the ATMP will not meaningfully impact AQRVs, or local air quality, and will not have regional impacts from implementation of the ATMP in the Park.

Table 2. Comparison of the emissions inventory for proposed commercial air tours in BADL with *de minimis* thresholds for the most stringent non-attainment areas.

Pollutant	<i>de minimis</i> threshold (Tons per Year)	Emissions Inventory for BADL (Tons per Year)
Carbon Monoxide	100	73.11
Volatile Organic Compounds	10	0.61

⁶ The most stringent non-attainment areas (i.e., lowest *de minimis* thresholds) are categorized as “extreme” for ozone (VOCs or NOx) and “serious” for particulate matter and sulfur dioxide.

Nitrogen Oxides	10	0.01
Particulate Matter, diam. < 2.5 µm	70	0.04
Particulate Matter, diam. < 10 µm	70	0.04
Lead	25	0.04
Sulfur Oxides	70	0.06
Carbon Dioxide	n/a	156.43

Noise Technical Analysis

Indicators of acoustic conditions

There are numerous ways to measure the potential impacts of noise from commercial air tours on the acoustic environment of a park, including intensity, duration, and spatial footprint of the noise. The metrics and acoustical terminology used for the ATMP are shown in Table 3.

Table 3. Primary metrics used for the noise analysis.

Metric	Relevance and citation
Time Above 35 dBA ⁷	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (American National Standards Institute/Acoustical Society of America S12.60/Part 1-2010).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility (United States Environmental Protection Agency, Office of Noise Abatement and Control, 1974).</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 am – 7 pm to represent typical daytime commercial air tour operating hours.</p>
Day-night average sound level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>Note: Both $L_{Aeq, 12\text{hr}}$ and L_{dn} characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events

⁷ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 µPa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. Sound levels are reported in units of decibels (dB) (ANSI S1.1-1994, American National Standard Acoustical Terminology). A-weighting is applied to sound levels in order to account for the sensitivity of the human ear (ANSI S1.42-2001, Design Response of Weighting Networks for Acoustical Measurements). To approximate human hearing sensitivity, A-weighting discounts sounds below 1 kHz and above 6 kHz.

	<ul style="list-style-type: none"> The number of noise events during specific time period (12 hours for $L_{Aeq, 12hr}$ and 24-hours for L_{dn}) <p>If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than L_{dn}.</p> <p>The FAA's (2015 Exhibit 4-1) indicators of significant impacts are for an action that would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.</p>
Maximum sound level, L_{max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{max} does not provide any context of frequency, duration, or timing of exposure.

ATMP as related to indicators

In order to provide a conservative evaluation of potential noise effects produced by commercial air tours under the ATMP, the CE analysis is based on a representation of a peak day⁸ of commercial air tour activity. For the busiest year of commercial air tour activity from 2017-2019 based on the total number of commercial air tour operations and total flight miles over the Park, the 90th percentile day was identified for representation of a peak day in terms of number of operations, and then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air tour activity at the Park. For the Park, the 90th percentile day was identified as a single (one) flight on the ATMP route (Air Tour #5).

Noise contours for the following acoustic indicators were developed using the FAA's AEDT version 3d and are provided below. A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise.

- Time above 35 dBA (minutes) – see Figure 1
- Time above 52 dBA (minutes) – see Figure 2
- Equivalent sound level, $L_{Aeq, 12hr}$
 - Note 1: Contours are not presented for L_{Aeq} as the average sound levels were below 35 dBA for the ATMP modeled for the Park.
 - Note 2: Contours are not presented for L_{dn} (or DNL) as it is arithmetically three dBA lower than $L_{Aeq, 12hr}$ if there are no nighttime events, which is the case for the ATMP modeled for the Park.
- Maximum sound level or L_{max} – see Figure 3

⁸ As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

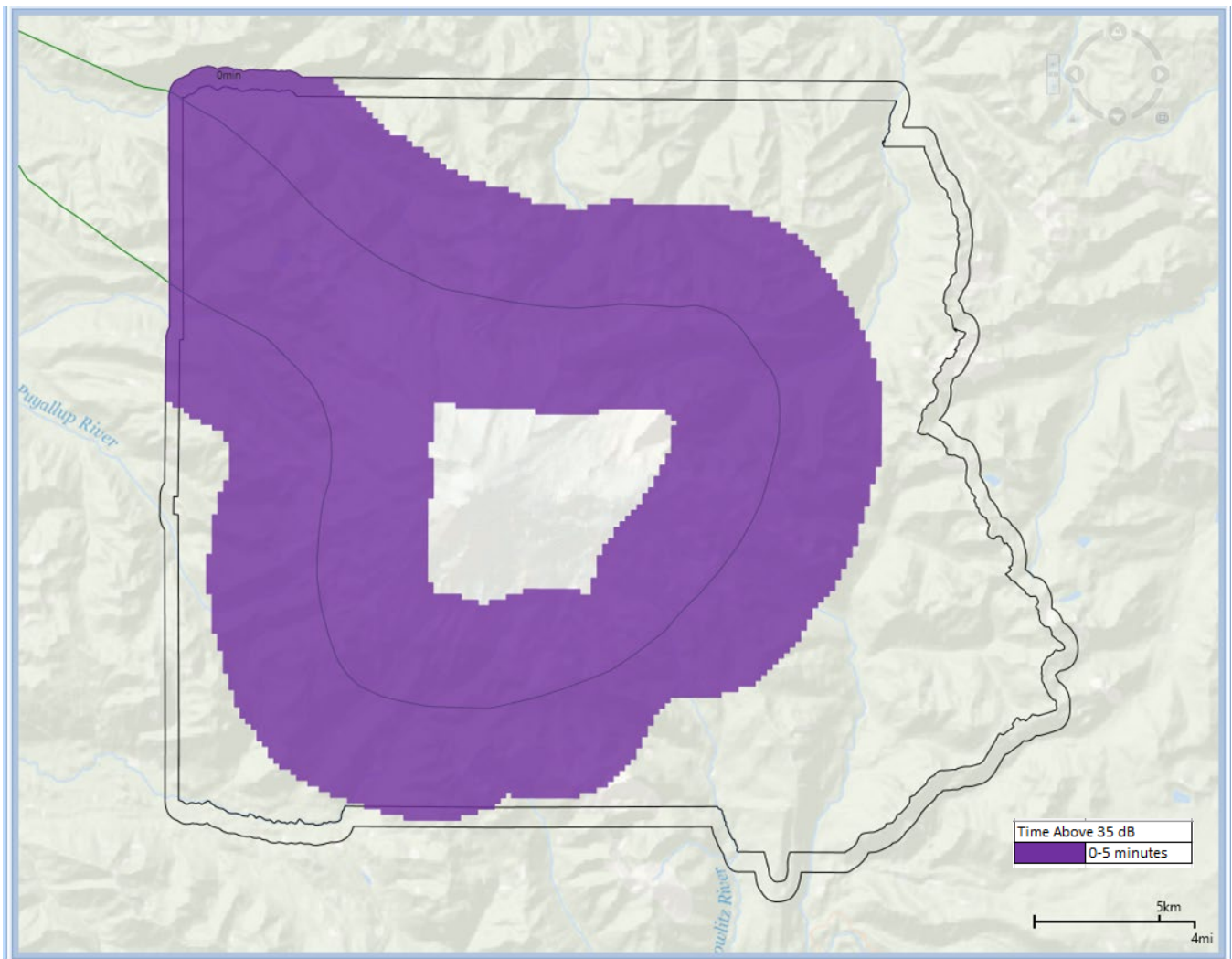


Figure 1. Noise contour results for Time Above 35 dBA

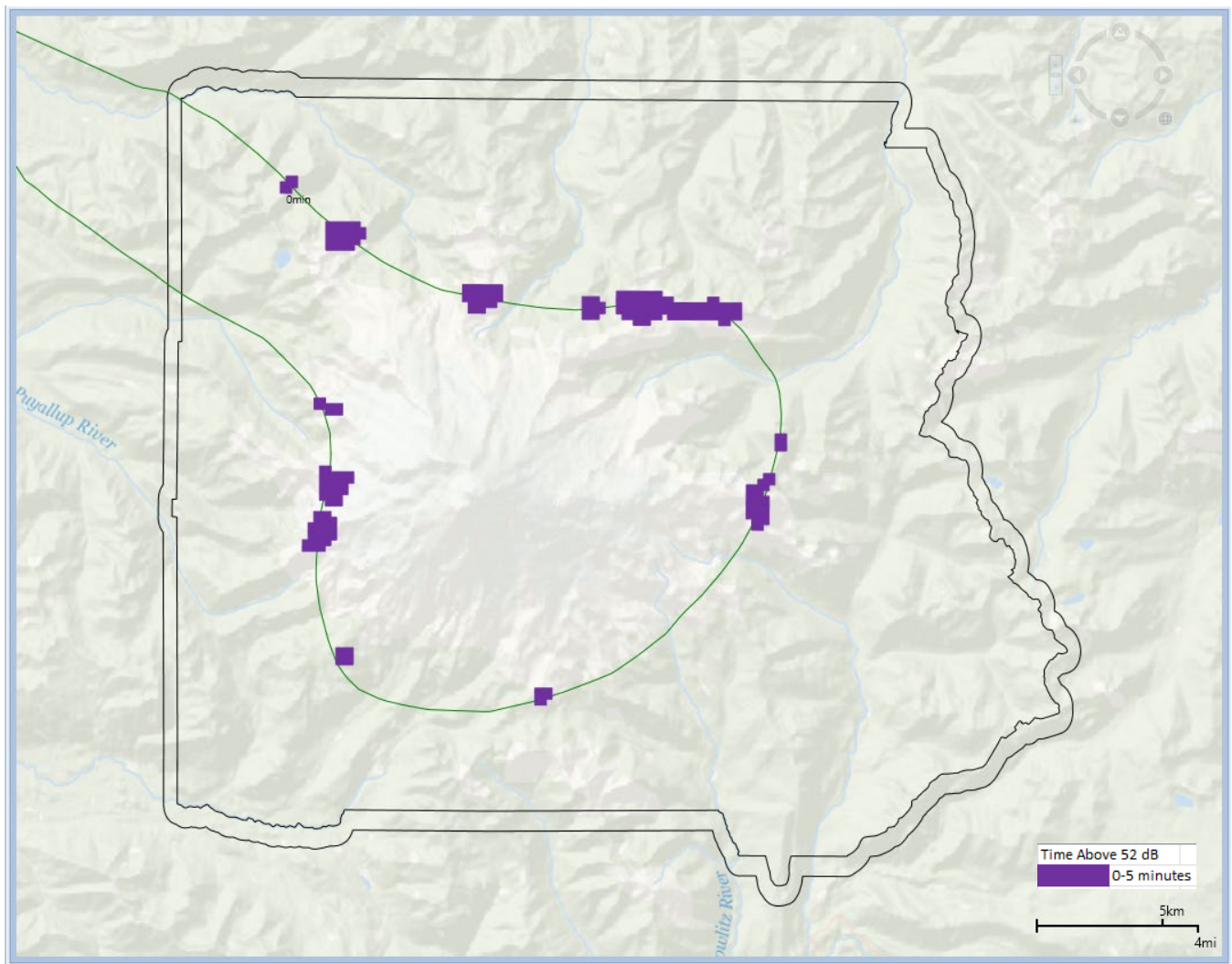


Figure 2. Noise contour results for Time Above 52 dBA

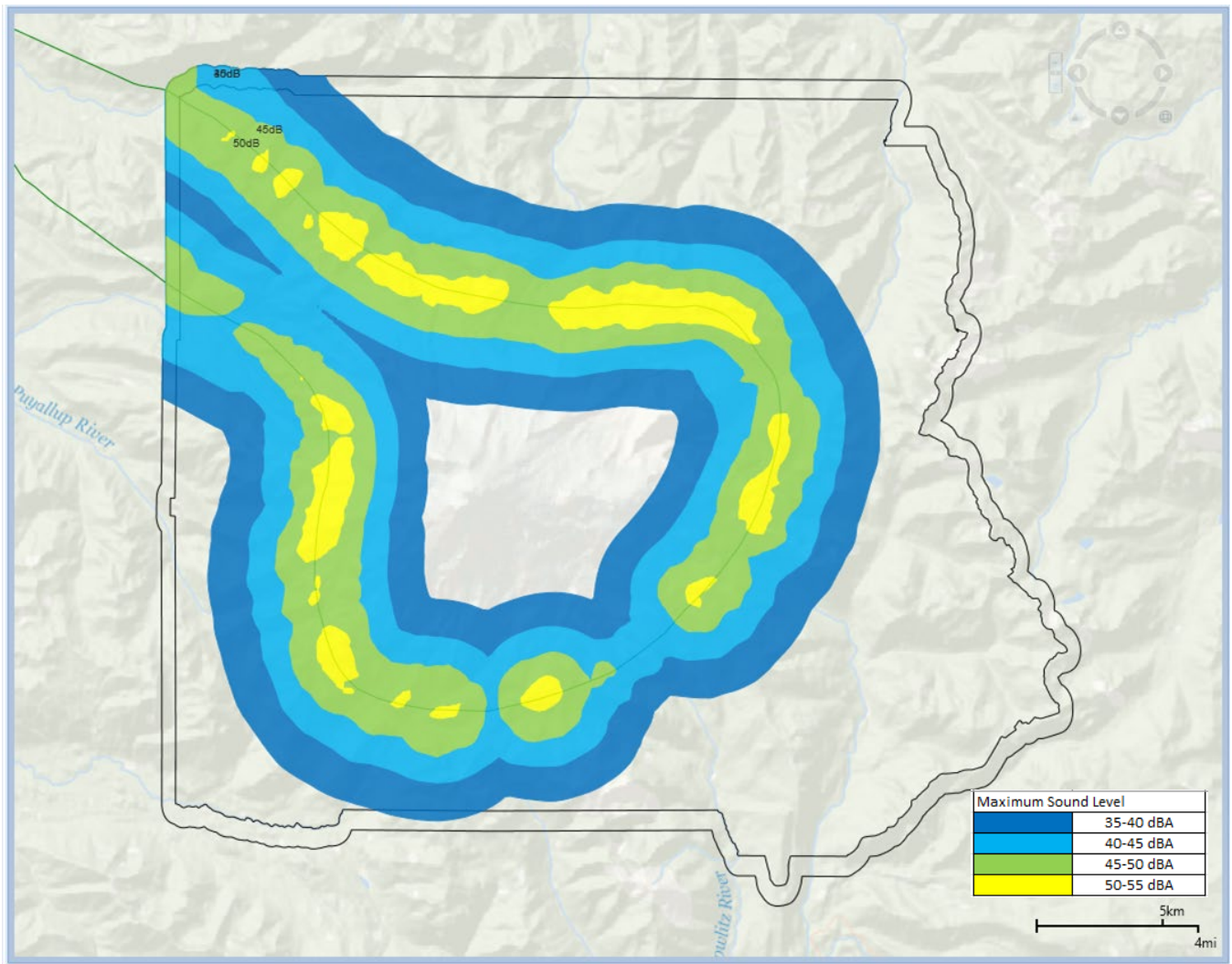


Figure 3. Noise contour results for L_{\max}

LIST OF REFERENCES

- American National Standards Institute, Inc. (2001). Design response of weighting networks for acoustical measurements. *Acoustical Society of America*, ANSI S1.42-2001, i-1. [https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S1.42-2001+\(R2011\).pdf](https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S1.42-2001+(R2011).pdf)
- American National Standards Institute, Inc. (2002). Acoustical performance criteria, design requirements, and guidelines for schools, Part 1: Permanent schools. *Acoustical Society of America*, ANSI/ASA S12.60-2002/Part 1. [https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S12.60+Part+1-2010+\(R2020\).pdf](https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S12.60+Part+1-2010+(R2020).pdf)
- American National Standards Institute, Inc. (2004). Acoustical terminology. *Acoustical Society of America*, ANSI S1.1-1994 (R2004). <https://webstore.ansi.org/Standards/ASA/ANSIS11994R2004>
- American National Standards Institute, Inc. (2007). Quantities and procedures for description and measurement of environmental sound — Part 5: Sound level descriptors for determination of compatible land use. *Acoustical Society of America*, ASA S12.9-2007/PART 5 (R2020), 1-20. https://www.techstreet.com/standards/asa-s12-9-2007-part-5-r2020?product_id=1534045
- Anderson, G., Rapoza, A., Fleming, G., & Miller, N. (2011). Aircraft noise dose-response relations for national parks. *Noise Control Engineering Journal*, 59, 519. <https://doi.org/10.3397/1.3622636>
- Benfield, J., Taff, B. D., Weinzimmer, D., & Newman, P. (2018). Motorized recreation sounds influence nature scene evaluations: The Role of attitude moderators. *Frontiers in Psychology*, 9:495. <https://doi.org/10.3389/fpsyg.2018.00495>
- Department of Interior, National Park Service (1995). Report on effects of aircraft overflights on the National Park System. *Report to Congress*, 1.1-10.23. <https://www.nonoise.org/library/npreport/intro.htm>
- Federal Aviation Administration (2015). FAA Order 1050.1F, Environmental impacts: Policies and procedures. *U.S. Department of Transportation*, 1.1-11.4. https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050_1F.pdf
- Ferguson, L.A. (2018). Strategies for managing natural sounds for human experience and ecosystem services (Dissertation). *The Pennsylvania State University The Graduate School College of Health and Human Development*, 1-176. https://etda.libraries.psu.edu/files/final_submissions/17621
- Gutzwiller, K. J., D'Antonio, A. L., & Monz, C. A. (2017). Wildland recreation disturbance: Broad-scale spatial analysis and management. *Frontiers in Ecology and the Environment*, 15(9), 517–524. <https://doi.org/10.1002/fee.1631>
- Haas, G. E. & Timothy J. W. (1998). National parks and the American public: a national public opinion survey on the National Park System: A summary report. *The Association*, 1-32.
- Haralabidis A.S., Dimakopoulou, K., Vigna-Taglianti, F., Giampaolo, M., Borgini, A., Dudley, M., ... & Jarup, L. (2008). Acute effects of night-time noise exposure on blood pressure in populations living near airports. *European Heart Journal*, 29, 658–664. doi:10.1093/eurheartj/ehn013 <https://academic.oup.com/eurheartj/article/29/5/658/440015>
- Kunc, H. P., McLaughlin, K. E., & Schmidt, R. (2016). Aquatic noise pollution: implications for individuals, populations, and ecosystems. *Proceedings of the Royal Society B: Biological Sciences*, 283(1836), 20160839. <https://doi.org/10.1098/rspb.2016.0839>

- Kunc, H. P., & Schmidt, R. (2019). The effects of anthropogenic noise on animals: A meta-analysis. *Biology Letters*, 15(11), 20190649. <https://doi.org/10.1098/rsbl.2019.0649>
- Mace, B. L., Corser, G. C., Zitting, L., & Denison, J. (2013). Effects of overflights on the national park experience. *Journal of Environmental Psychology*, 35, 30–39. <https://doi.org/10.1016/j.jenvp.2013.04.001>
- McDonald, C. D., Baumgarten, R. M., & Iachan, R. (1995). Aircraft management studies: National Park Service visitors survey. *National Park Service, U.S. Department of the Interior*, HMMH Report No. 290940.12; NPOA Report No. 94-2. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB95196002.xhtml>
- Merchan, C. I., Diaz-Balteiro, L., & Soliño, M. (2014). Noise pollution in national parks: Soundscape and economic valuation. *Landscape and Urban Planning*, 123, 1–9. <https://doi.org/10.1016/j.landurbplan.2013.11.006>
- Miller, Z., Taff, B.D., & Newman, P. (2018). Visitor experiences of wilderness soundscapes in Denali National Park and Preserve. *International Journal of Wilderness*, 24(2). <https://ijw.org/2018-visitor-experiences-of-wilderness-soundscapes/>
- National Park Service (1992). National Register Bulletin 38. <https://www.nps.gov/subjects/nationalregister/upload/NRB38-Compleweb.pdf>
- National Park Service (2002). NPS-28: Cultural resource management guideline. *National Park Service*, introduction, A-F. https://www.nps.gov/parkhistory/online_books/nps28/28appena.htm
- National Park Service (2006). Management Policies, 2006. https://www.nps.gov/subjects/policy/upload/MP_2006.pdf
- National Park Service (2011). Mount Rainier National Park: Acoustical monitoring report 2009. Natural Resource Technical Report NPS/NRSS/NRTR—2011/495. National Park Service, Fort Collins, Colorado. https://www.nps.gov/mora/learn/nature/upload/MORA_AcousticalMonitoringReport_December2011_nrss_access.pdf
- Rapoza, A., Sudderth, E., & Lewis, K. (2015). The relationship between aircraft noise exposure and day-use visitor survey responses in backcountry areas of national parks. *The Journal of the Acoustical Society of America*, 138(4), 2090–2105. <https://doi.org/10.1121/1.4929934>
- Richardson, C. T., & Miller, C. K. (1997). Recommendations for protecting raptors from human disturbance: A review. *Wildlife Society Bulletin (1973-2006)*, 25(3), 634–638. <http://www.jstor.org/stable/3783512>
- Shannon, G., McKenna, M.F., Angeloni, L.M., Crooks, K.R., Fristrup, K.M., Brown, E., Warner, K.A., Nelson, M.D., White, C., Briggs, G., McFarland, S., & Wittemyer, G. (2015). A synthesis of two decades of research documenting the effects of noise on wildlife. *Biological Reviews*, 91(4) 982-1005. <https://doi.org/10.1111/brv.12207>
- United States Census Bureau (2021). Explore census data. *United States Census Bureau*. <https://data.census.gov/cedsci/>
- United States Environmental Protection Agency, Office of Noise Abatement and Control (1974). Information on levels of environmental noise requisite to protect public health and welfare with an adequate margin of safety. NPC Online Library, 550/9-74-004, 1-78. <https://www.nrc.gov/docs/ML1224/ML12241A393.pdf>
- United States Fish and Wildlife Service (2007). National bald eagle management guidelines. <https://www.fws.gov/media/national-bald-eagle-management-guidelines-0>

Weinzimmer, D., Newman, P., Taff, D., Benfield, J., Lynch, E., & Bell, P. (2014). Human responses to simulated motorized noise in national parks. *Leisure Sciences*, 36(3), 251–267.
<https://doi.org/10.1080/01490400.2014.888022>

APPENDIX C

Categorical Exclusion Documentation Form



Categorical Exclusion Documentation Form (CE Form)

PROJECT INFORMATION

Project Title: Mount Rainier National Park Air Tour Management Plan

PEPC Project Number: 102920

Project Type: Categorical Exclusion

Project Location: Pierce County, Washington

PROJECT DESCRIPTION

The proposed action is to implement an Air Tour Management Plan (ATMP) for Mount Rainier National Park (the Park). The ATMP includes the following operating parameters to mitigate impacts from commercial air tours on Park resources. For a full discussion of the impacts of commercial air tours and how these operating parameters will maintain or reduce impacts to Park resources, see the *Environmental Screening Form (ESF)*.

Annual Commercial Air Tour Authorizations

Under the ATMP, one commercial air tour is authorized per year. Table 1 identifies the operator authorized to conduct the commercial air tour and the annual flight allocation.

Table 1. Commercial Air Tour Operations and Aircraft Type by Operator

Commercial Air Tour Operator	Annual Operations	Daily Operations	Aircraft Type
Rite Bros Aviation, Inc.	1	1	CE-172-K, CE-172-N, CE-206-TU206F, CE-206-U206A

Commercial Air Tours Route and Altitude

The commercial air tour authorized under the ATMP shall be conducted on the route in Figure 1 below. Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft. Air tours will fly no lower than 3,000 feet (ft.) AGL when over the Park or within ½ mile of the Park boundary. Except in an emergency or to avoid unsafe conditions, or unless otherwise authorized for a specified purpose, the operator may not deviate from this route and altitude.

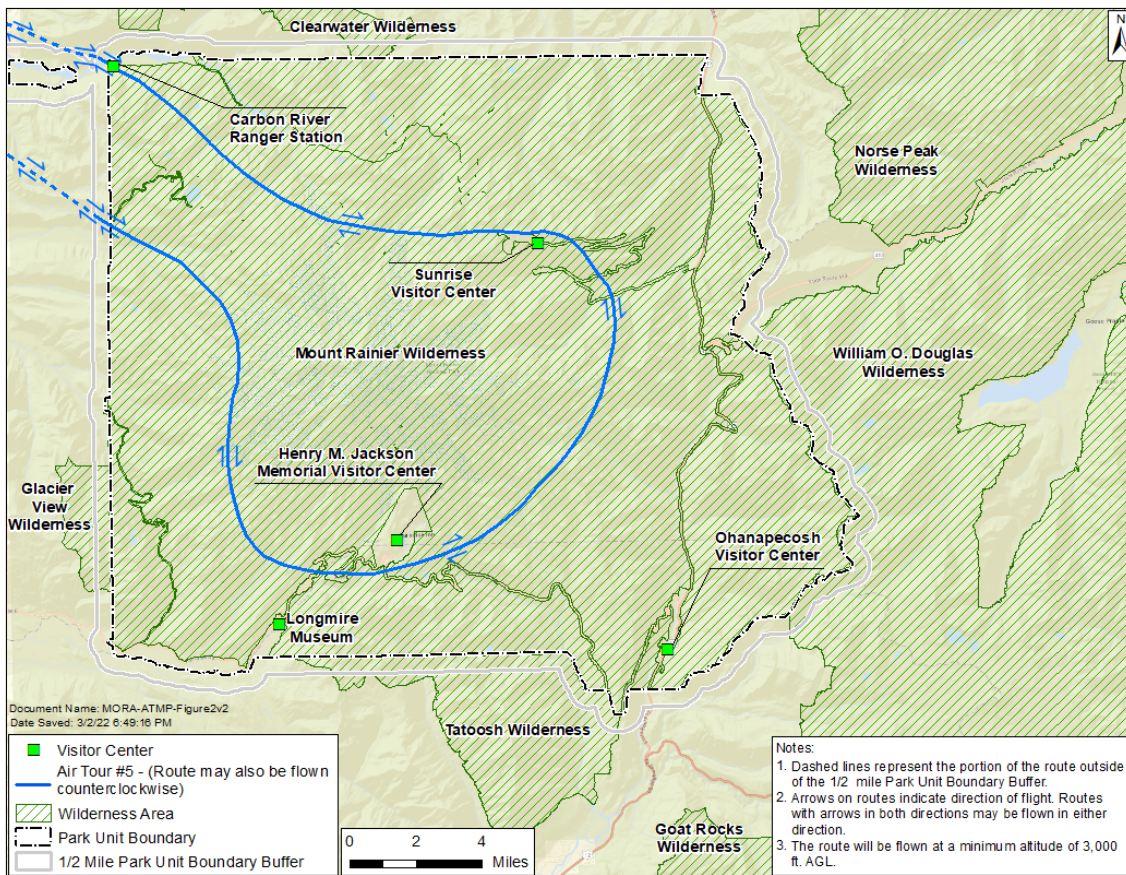


Figure 1. Commercial air tour route over the Park

Aircraft Type

The aircraft types authorized to be used for the commercial air tour are identified in Table 1. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced. In addition to any other applicable notification requirements, the operator will notify the Federal Aviation Administration (FAA) and the National Park Service (NPS) in writing of any prospective new or replacement aircraft and obtain concurrence before initiating air tours with the new or replacement aircraft.

Day/Time

Except as provided in the “Quiet Technology Incentives” section below, the air tour may operate between 10:00 AM and 3:00 PM local time any day of the year.

Quiet Technology Incentives

The ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours from October 1 through March 14 beginning one hour after sunrise until one hour before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA)¹, on all days that flights are authorized. From March 15 through September 30 this incentive will not be available due to protections necessary for northern spotted owl and marbled murrelet during the nesting season. Because aviation technology continues to evolve and advance and the FAA updates its noise certification standards periodically, the aircraft eligible for this incentive will be analyzed on a case-by-case basis at the time of the operator’s request

¹ Sunrise and sunset data is available from the NOAA Solar Calculator, <https://www.esrl.noaa.gov/gmd/grad/solcalc/>

to be considered for this incentive. The NPS will periodically monitor Park conditions and coordinate with the FAA to assess the effectiveness of this incentive. If implementation of this incentive results in unanticipated effects on Park resources or visitor experience, further agency action may be required to ensure the protection of Park resources and visitor experience.

Additional ATMP Parameters

The following elements of the ATMP are not anticipated to have any environmental effects:

- *Compliance* - The NPS and the FAA are both responsible for the monitoring and oversight of the ATMP. To ensure compliance, the operator is required to equip all aircraft used for air tours with flight monitoring technology, use flight monitoring technology during all air tours under the ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports.
- *Required Reporting* – The operator is required to submit to the FAA and the NPS semi-annual reports regarding the number of commercial air tours conducted over the Park or within ½ mile of its boundary, and flight monitoring data.
- *Operator Training and Education* – When made available by Park staff, the operator/pilot may take at least one training course per year conducted by the NPS.
- *Annual Meeting* – At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO) with jurisdiction, and the operator may meet once per year to discuss the implementation of the ATMP and any amendments or other changes to the ATMP.
- *In-Flight Communication* – For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.75 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.
- *Non-transferability of Allocations* – Annual operations under the ATMP are non-transferable.

CE Citation

NPS NEPA Handbook 3.3 A1 (516 DM 12): Changes or amendments to an approved action when such changes will cause no or only minimal environmental impact.

CE Justification

In 2000, Congress passed the National Parks Air Tour Management Act (NPATMA). NPATMA required operators who wish to conduct commercial air tours over national parks to apply to the FAA for authority to conduct such tours. NPATMA provided for existing commercial air tour operations occurring at the time the law was enacted to continue until an ATMP for the Park was implemented by expressly requiring the FAA to grant interim operating authority (IOA) to existing operators, authorizing them to conduct, on an annual basis, “the greater of (i) the number of flights used by the operator to provide the commercial air tour operations within the 12-month period prior to the date of the enactment of the act, or (ii) the average number of flights per 12-month period used by the operator to provide such operations within the 36-month period prior to such date of enactment, and, for seasonal operations, the number of flights so used during the season or seasons covered by that 12-month period.”² Under NPATMA, the FAA was required to grant IOA for commercial air tours over the Park.³ IOA does not provide any operating conditions (e.g., route, altitudes, time of day, etc.) for commercial air tours other than an annual limit. In 2012, NPATMA was amended, requiring commercial air tour operators to report actual commercial air tours to the FAA and the NPS. IOA granted by the FAA consistent with NPATMA is the approved action for purposes of the CE, as it is a non-discretionary authorization directed by Congress.

² 49 U.S.C. § 40128(c)(2)(A)(i-ii)

³ Federal Register, Vol. 70, No. 194, October 7, 2005, page 58778

Two commercial air tour operators, Classic Helicopter Corp. and Rite Bros Aviation, Inc., hold IOA to conduct a combined total of 34 commercial air tours over the Park each year.⁴ Based on the three-year average of reporting data from 2017 to 2019, the operators conduct an average of one commercial air tour over the Park each year. Classic Helicopter Corp. conducts an average of zero commercial air tours over the Park each year, and Rite Bros Aviation, Inc. conducts an average of one commercial air tour over the Park each year. See Table 2, *Reported Commercial Air Tours from 2013-2020*. Reporting data from 2013 and 2014 are considered incomplete as reporting protocols were not fully in place at that time and likely do not reflect actual flights. The agencies consider the 2017-2019, three-year average, which is one commercial air tour, to be the existing commercial air tour operations for the purposes of understanding both the existing number of commercial air tour flights over the Park and impacts from that activity. Flight numbers from a single year were not chosen as the existing condition because the three-year average accounts for both variation across years and takes into account the most recent years prior to the COVID-19 pandemic. The 2020 COVID-19 pandemic resulted in atypical commercial air tour operations, which does not represent the conditions in a typical year. In addition, the year 2021 was not included because the planning and impact analysis for the ATMP occurred before 2021 reporting information was collected and analyzed. Although the approved action (IOA) allowed 34 flights per year, the current condition of Park resources and values reflects the impact of an average of one flight per year, which represents existing commercial air tour operations. The ATMP sets a maximum of one flight per year.

Rite Bros Aviation conducts commercial air tours on one route over the Park which circumnavigates Mount Rainier either clockwise or counterclockwise, entering and exiting over the northwest corner of the Park, using Cessna 172, 206, and 207 aircraft (fixed wing) at a minimum altitude of 3,000 ft. AGL. This tour is typically conducted between the hours of 10:00 AM and 3:00 PM local time.

The ATMP limits the number of commercial air tours authorized over the Park or within ½ mile of its boundary each year to the three-year average of tours conducted from 2017-2019 (one tour each year) and allocates that tour to Rite Bros Aviation, Inc. The operator will be allowed to conduct one commercial air tour per year on the existing route that the operator currently reports flying over the Park. The ATMP results in no change to the minimum altitude that the commercial air tour may fly over the Park (minimum 3,000 ft. AGL) (see Figure 1). The ATMP restricts the hours during which the commercial air tour may be conducted over the Park, between 10:00 AM and 3:00 PM local time, except as provided for quiet technology incentives.

Table 2. Reported Commercial Air Tours from 2013-2020

Operator	Aircraft	IOA	2013	2014	2015	2016	2017	2018	2019	2020 ⁵
Classic Helicopter Corp.	Robinson R44	32	0	0	0	0	0	0	0	1
Rite Bros Aviation, Inc.	Cessna 172, 206, 207	2	0	0	0	0	0	1	2	2
Total		34	0	0	0	0	0	1	2	3

Consistent with Council on Environmental Quality regulations, the baseline from which to measure environmental impacts of the ATMP is the current condition of the human environment. In this case, the baseline is the current condition of Park resources and values, as impacted by current commercial air tours flown under IOA (between zero and two commercial air tours per year, or an average of one commercial air tour per year).

⁴ NPATMA states that a national park that has 50 or fewer commercial air tour operations over the park each year is exempt from the requirement to develop an ATMP. 49 USC § 40128 (a)(5)(A). However, NPATMA also states that if the NPS determines that an ATMP or voluntary agreement is necessary to protect park resources and values or park visitor use and enjoyment, the NPS may withdraw the exemption for that park. *Id.* § 40128 (a)(5)(B). The NPS withdrew the exemption for the Park.

⁵ Based on unpublished reporting data.

Though IOA does not set a minimum altitude or set designated routes, the baseline also includes the route and altitude information provided by the operator, as well as timing and daily air tour information during the years of 2017-2019 as reported by the operator. Environmental impacts or effects are changes to the human environment (natural and physical) from the ATMP.⁶ Because the ATMP is very similar to existing commercial air tour operations and includes new operating parameters designed to improve resource protections and visitor experience, impacts resulting from effects of the ATMP will result in no or only minimal environmental impacts. Under the ATMP, the number of commercial air tours may not increase without an amendment to the ATMP, guaranteeing no greater impacts to the environment will occur without subsequent review consistent with the National Environmental Policy Act (NEPA). An amendment would also be required for a change in the routes beyond that permitted by adaptive management or where the impacts have been already analyzed by the agencies. In addition, the inclusion of mitigating elements including altitude restrictions, time of day restrictions, and quiet aircraft technology incentives will further reduce the impacts of commercial air tours under the ATMP, which will lead to beneficial impacts to the environment compared to current conditions. The use of CE 3.3 A1 is appropriate because environmental impacts resulting from the ATMP will result in no or only minimal changes to the current condition of Park resources and values and impacts will be beneficial compared to current conditions.

Even if impacts of the ATMP were measured against the total number of commercial air tours authorized under IOA for the Park (though such a baseline does not reflect actual commercial air tours conducted over the Park as demonstrated by reported data and is not, therefore, an accurate depiction of the current condition of the human environment) impacts compared to current conditions will be beneficial because the ATMP will set the maximum number of commercial air tours at a level much lower than the maximum number of commercial air tours authorized under IOA and includes mitigating elements noted above. Therefore, even if the analysis were approached from a baseline of IOA, the CE would still be an acceptable NEPA pathway since NEPA is primarily concerned with adverse impacts, not beneficial ones like those that will result from the ATMP. In conclusion, the use of this CE is justified because the changes to the approved action (IOA) from the implementation of the ATMP will result in no or only minimal environmental impacts. The use of the CE is consistent with NEPA.

Table 3. Extraordinary Circumstances

If implemented, would the proposal...	Yes/No	Notes
A. Have significant impacts on public health or safety?	No	Commercial air tours are subject to the FAA regulations for protecting individuals and property on the ground, and preventing collisions between aircraft, land or water vehicles, and airborne objects. The operator must continue to meet the FAA safety regulations. Therefore, health and safety impacts will not be significant.
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?	No	As noted above, the ATMP authorizes the average number of flights that that were flown from 2017-2019 on the same route. Therefore, there will be no or minimal change in the potential for impacts compared to current conditions. The route restriction, minimum altitude requirement, and time of day restrictions further mitigate any potential adverse impacts and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions. <i>See</i> ESF for a full description of the impacts considered.

⁶ See 40 C.F.R. § 1508.1(g)

If implemented, would the proposal...	Yes/No	Notes
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	<p>There are no highly controversial environmental effects. Impacts from commercial air tours generally are understood from existing modeling and literature and can be accurately projected for Park resources. Information and models used to assess impacts for commercial air tours, as discussed in the ESF, are consistent with peer reviewed literature.</p> <p>Additionally, there are no unresolved conflicts over available resources. This extraordinary circumstance applies to the use or consumption of resources in a way that prohibits another use of the same resource. Commercial air tours do not consume NPS resources. The impacts from tours affect resources but the resources remain present for others to enjoy or appreciate.</p>
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	<p>There are no highly uncertain impacts associated with commercial air tours over the Park. The significance of the environmental effects is to be measured by the change from current condition. As noted above, the ATMP authorizes the average number of flights that were flown from 2017-2019, which is one flight each year, on the same route. Therefore, there will be no or minimal impacts compared to current conditions. As also noted above, the route restriction, minimum altitude requirement, and time of day restrictions further mitigate any potential adverse impacts and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions. <i>See</i> ESF for more information.</p>
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	<p>The ATMP will not make any decisions in principle about future actions or set a precedent for future action. The NPS and the FAA may choose to amend the ATMP at any time consistent with NPATMA.</p>
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	<p>The FAA and the NPS qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities described in the ESF. In some cases, the noise contribution from other sources may be substantial, such as military overflights, high altitude jets, or roadway traffic. The addition of noise from a single commercial air tour each year is such a small contribution of noise overall that it is unlikely it would result in noticeable or meaningful change in the overall acoustic environment. Commercial air tours over roadways or heavily used motorized waterways are likely to be masked by existing noise and therefore the impacts would be <i>de minimis</i>. Finally, the ATMP does not add new noise to</p>

If implemented, would the proposal...	Yes/No	Notes
		<p>the existing acoustic environment and visual impacts associated with aircraft are most noticeable because of noise and have been found to be not significant. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP, the continuation of one commercial air tour will not result in a meaningful change to the current condition of the visual or auditory landscape at the Park, and no significant cumulative environmental impacts are likely to result from the ATMP. <i>See</i> ESF for more information.</p>
<p>G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?</p>	No	<p>As noted above, the ATMP authorizes the same number of flights as the average number that was flown from 2017-2019 on the same route. Therefore, there will be no or minimal change in the potential for impacts compared to current condition. The route restriction, minimum altitude requirement, and time of day restrictions further mitigate any potential adverse impacts; and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions.</p> <p>The authorized level of commercial air tours is not anticipated to adversely affect properties eligible for listing on the National Register of Historic Places. The agencies have consulted with the State Historic Preservation Office, Tribal Historic Preservation Offices, federally recognized tribes and other consulting parties to reach this determination pursuant to 36 CFR Part 800. The agencies have subsequently concluded that under Section 106 of the National Historic Preservation Act, there will be no adverse effects to historic properties from this undertaking. <i>See</i> ESF for more information.</p>
<p>H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?</p>	No	<p>As noted above, the ATMP authorizes the average number of flights that were flown from 2017-2019 on the same route. Therefore, there will be no or minimal change in the potential for impacts compared to current conditions. The route restriction, minimum altitude requirement, and time of day restrictions further mitigate any potential adverse impacts, and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions. The NPS has determined the ATMP will have <i>No Effect</i> on listed species. Therefore, there is no potential for significant impacts to any listed species associated with the commercial air tour activity proposed in the ATMP. <i>See</i> ESF for more information.</p>

If implemented, would the proposal...	Yes/No	Notes
I. Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	The ATMP will comply with all applicable federal, state, local and tribal laws. <i>See</i> ESF for more information.
J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	The ATMP will not have a disproportionate effect on low income or minority populations. <i>See</i> ESF for more information.
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	No	The ATMP will not limit access to or change ceremonial use of Indian sacred sites on federal lands in any way. Sacred ceremonies or other Tribal activities which occur without notice to the NPS may be interrupted by noise, however, commercial air tours have no effect on Tribal access. Additionally, the ATMP does not involve any ground disturbing or other activities that would adversely affect the physical integrity of sacred sites. <i>See</i> ESF for more information.
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?	No	The ATMP does not involve any ground disturbance or other activities with the potential to contribute to the introduction, continued existence, spread, growth, or expansion of invasive or exotic species in the Park.

Decision

I find that the action fits within the categorical exclusion above. Therefore, I am categorically excluding the described project from further NEPA analysis. No extraordinary circumstances apply.

Signature

**GREGORY
DUDGEON** Digitally signed by
GREGORY DUDGEON
Date: 2022.07.11
10:00:41 -07'00'

Greg Dudgeon, Superintendent
Mount Rainier National Park
National Park Service

Date

APPENDIX D

FAA Categorical Exclusion Adoption



Federal Aviation Administration

Adoption of the Categorical Exclusion Determination by the National Park Service for the Mount Rainier National Park Air Tour Management Plan.

The National Parks Air Tour Management Act (NPATMA) 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 Federal Aviation Administration (FAA) for authority to undertake such activity. 49 U.S.C. § 40128(a)(2)(A). NPATMA, as amended, further requires the FAA, in cooperation with the National Park Service (NPS), to establish an Air Tour Management Plan (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. 49 U.S.C. § 40128(b)(1)(A).

The FAA and the NPS are proposing to implement the ATMP for Mount Rainier National Park (Park), in accordance with NPATMA, as amended, its implementing regulations (14 Code of Federal Regulations (CFR) Part 136), and all other applicable laws and policies. This document memorializes the FAA's adoption of the NPS determination that its categorical exclusion (CATEX) covers the scope of its proposed action.

1. Regulatory Framework

The Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA), 40 CFR Parts 1500-1508, require an agency wishing to apply a CATEX identified in its agency NEPA procedures to first make a determination that the CATEX covers the proposed action and to "evaluate the action for extraordinary circumstances in which a normally excluded action may have a significant effect." 40 CFR §1501.4(b). If the agency determines that no extraordinary circumstances exist or that "there are circumstances that lessen the impacts or other conditions sufficient to avoid significant effects," the agency may categorically exclude the proposed action. 40 CFR §1501.4(b)(1).

Section 1506.3(a) of the CEQ regulations authorizes agencies to adopt other agencies' NEPA documents under certain conditions, while section 1506.3(d) of the regulations applies specifically to the adoption of other agencies' CATEX determinations and reads as follows:

An agency may adopt another agency's determination that a categorical exclusion applies to a proposed action if the action covered by the original categorical exclusion determination and the adopting agency's proposed action are substantially the same. The agency shall document the adoption.

40 CFR § 1506.3(d). This document has been prepared to comply with that Regulation.

2. The NPS's Proposed Action

The NPS's proposed action is to implement an ATMP for the Park. The ATMP includes operating parameters to mitigate impacts from commercial air tours on Park resources, which are described in the

NPS Categorical Exclusion Documentation Form attached to the Record of Decision (ROD) as Appendix C.

3. FAA's Proposed Action

Like the NPS, the FAA's Proposed Action is to implement the ATMP for the Park subject to the operating parameters described in the NPS Categorical Exclusion Documentation Form (*see* Appendix C of the ROD). In addition, the FAA will update the operations specifications (OpSpecs) for the air tour operator to incorporate the terms and conditions of the ATMP accordingly.

4. Scope of Applicable CATEX and the NPS Extraordinary Circumstances Analysis

For its proposed action, the NPS has applied the Categorical Exclusion from the NPS NEPA Handbook 3.3 A1 (516 DM 12): "Changes or amendments to an approved action when such changes will cause no or only minimal environmental impact."

Per 40 CFR § 1501.4(b), an agency must first determine that the categorical exclusion identified in its agency NEPA procedures covers the proposed action. In this case, the NPS states as follows:

In 2000, Congress passed the National Parks Air Tour Management Act (NPATMA). NPATMA required operators who wish to conduct commercial air tours over national parks to apply to the FAA for authority to conduct such tours. NPATMA provided for existing commercial air tour operations occurring at the time the law was enacted to continue until an ATMP for the Park was implemented by expressly requiring the FAA to grant interim operating authority (IOA) to existing operators, authorizing them to conduct, on an annual basis, "the greater of (i) the number of flights used by the operator to provide the commercial air tour operations within the 12-month period prior to the date of the enactment of the act, or (ii) the average number of flights per 12-month period used by the operator to provide such operations within the 36-month period prior to such date of enactment, and, for seasonal operations, the number of flights so used during the season or seasons covered by that 12-month period." Under NPATMA, the FAA issued IOA for commercial air tours over the Park. IOA does not provide any operating conditions (e.g., route, altitudes, time of day, etc.) for commercial air tours other than an annual limit. In 2012, NPATMA was amended, requiring commercial air tour operators to report actual commercial air tours to the FAA and the NPS. IOA issued by the FAA consistent with NPATMA is the approved action for purposes of the CE, as it is a non-discretionary authorization directed by Congress.

...The use of CE 3.3 A1 is appropriate because environmental impacts resulting from the ATMP will result in no or only minimal changes to the current condition of Park resources and values and impacts will be beneficial compared to current conditions.

For a complete discussion of the NPS's justification for using the above-noted CE, *see* the NPS's Categorical Exclusion Documentation Form, attached to the ROD as Appendix C.

Section 1501.4(b) of the CEQ regulations requires an agency seeking to categorically exclude a proposed action to "evaluate the action for extraordinary circumstances in which a normally excluded action may have a significant effect." the NPS confirms it has performed an appropriate extraordinary circumstances analysis. *See* the NPS's Categorical Exclusion Documentation Form, attached to the ROD as Appendix C, and the NPS's Environmental Screening Form, attached to the ROD as Appendix B.

5. FAA's "Substantially the Same Action" Determination

As noted above, the CEQ Regulations provide that an agency "may adopt another agency's determination that a categorical exclusion applies to a proposed action **if the action covered by the original categorical exclusion determination and the adopting agency's proposed action are substantially the same.**" 40 CFR § 1506.3(d) (emphasis added). Thus, in order to adopt the NPS's CATEX determination, the FAA must conclude that its proposed action and the NPS's Proposed Action are "substantially the same."

In the preamble to the final amended regulations, CEQ stated:

The final rule provides agencies the flexibility to adopt another agency's determination that a [CATEX] applies to an action when the actions are substantially the same to address situations where a proposed action would result in a [CATEX] determination by one agency and an EA and FONSI by another agency.

85 Fed. Reg. 43304, 43336 (July 16, 2020).

In this case, the FAA has been directed by Congress to implement an ATMP for the Park in cooperation with the NPS. The proposed action is an action to be taken jointly by both agencies, as NPATMA requires. Therefore, the proposed actions of the agencies are necessarily substantially the same and any reasonably foreseeable changes to the human environment arising from the NPS's implementation of the proposed action are identical to those that would arise from the FAA's proposed action. While the FAA's action also includes updating the operator's OpSpecs, the update would simply further require the operator to comply with the terms and conditions contained in the ATMP and would not result in any impacts beyond those that could result from implementation of the ATMP itself. Accordingly, the FAA determines that the NPS's Proposed Action and FAA's Proposed Action are substantially the same.¹

6. FAA's Extraordinary Circumstances Analysis

Extraordinary circumstances are factors or circumstances in which a normally categorically excluded action may have a significant environmental impact that then requires further analysis in an EA or an EIS. For FAA proposed actions, extraordinary circumstances exist when the proposed action: (1) involves any of the circumstances described in paragraph 5-2 of FAA Order 1050.1F; and (2) may have a significant impact. See FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, section 5-2.

The most potentially relevant circumstances listed in paragraph 5-2 of FAA Order 1050.1F are as follows:²

- An adverse effect on cultural resources protected under the National Historic Preservation Act (*see* ROD Appendix F);

¹ Updating the operator's OpSpecs is also independently subject to an FAA CATEX covering "Operating specifications and amendments that do not significantly change the operating environment of the airport." FAA Order 1050.1F, § 5-6.2(d).

² Section 5-2(b)(10) of FAA Order 1050.1F includes a circumstance reading "[i]mpacts on the quality of the human environment that are likely to be highly controversial on environmental grounds" and explains that "[t]he term 'highly controversial on environmental grounds' means there is a substantial dispute involving reasonable disagreement over the degree, extent, or nature of a proposed action's environmental impacts or over the action's risks of causing environmental harm. Mere opposition is not sufficient for a proposed action or its impacts to be considered highly controversial on environmental grounds." The 2020 updates to the CEQ regulations eliminated the "intensity" factor on which this circumstance is based. The FAA nevertheless considered this factor in its extraordinary circumstances analysis for disclosure purposes and to the extent relevant.

- An impact on properties protected under Section 4(f) of the Department of Transportation Act;
- An impact on natural, ecological, or scenic resources of Federal, state, tribal, or local significance (e.g., federally listed or proposed endangered, threatened, or candidate species, or designated or proposed critical habitat under the Endangered Species Act) (*see* ROD Appendix E);
- An impact on national marine sanctuaries or wilderness areas;
- An impact to noise levels at noise sensitive areas;
- An impact on air quality or violation of Federal, state, tribal, or local air quality standards under the Clean Air Act; and
- An impact on the visual nature of surrounding land uses.

In support of this adoption, the FAA performed its own extraordinary circumstances analysis to ensure that a CATEX was the appropriate level of environmental review and adoption of the NPS's CATEX determination was permissible. The FAA evaluated each of its extraordinary circumstances to determine if any would have the potential for significant impacts and determined that no extraordinary circumstances exist. *See* Documentation of FAA's Extraordinary Circumstances Analysis for the Park, attached as Exhibit 1.

7. Section 4(f) of the Department of Transportation Act

Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

... the Secretary may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

The term “use” refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A physical use involves the physical occupation or alteration of a Section 4(f) resource, while constructive use occurs when a proposed action results in substantial impairment of a resource to the degree that the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished. Under the ATMP, potential impacts to Section 4(f) resources from commercial air tours may include noise from aircraft within the acoustic environment, as well as visual impacts.

To comply with Section 4(f) and as part of its extraordinary circumstances analysis, the FAA prepared a 4(f) analysis, which is attached as Exhibit 2, and determined that there would be no use of any 4(f) resource associated with the implementation of the proposed action. As part of this analysis, the FAA consulted with Officials with Jurisdiction of 4(f) resources in the study area. Further information about those consultations are included in Exhibit 2.

8. Attachments:

The FAA prepared this document on review and contemplation of the following documents, which are attached hereto:

- Exhibit 1: Documentation of FAA Extraordinary Circumstances Analysis
- Exhibit 2: FAA Section 4(f) Analysis for Mount Rainier National Park

9. Adoption Statement

In accordance with 40 CFR § 1506.3(d), the FAA hereby finds that the NPS's and FAA's proposed actions are substantially the same, that no extraordinary circumstances exist, and that adoption of the NPS's CATEX determination is otherwise appropriate. Accordingly, FAA hereby adopts the NPS's CATEX determination.

Approved: **GRADY B STONE**
Date: _____

Digitally signed by
GRADY B STONE
Date: 2022.07.13
10:58:21 -07'00'

Grady Stone, Regional Administrator
Northwest Mountain Region
Federal Aviation Administration

EXHIBIT 1

Documentation of FAA Extraordinary Circumstances Analysis

**The FAA's Extraordinary Circumstance Analysis
For Mount Rainier National Park ATMP**

Extraordinary Circumstance	Yes	No	Notes
1. Is the action likely to have an adverse effect on cultural resources protected under the National Historic Preservation Act of 1966, as amended?		✓	The FAA and the NPS consulted with the Washington State Historic Preservation Office, Native American tribes, and other consulting parties on the potential impacts of the ATMP on Historic Properties, including cultural landscapes. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties. See Section 106 documentation for more information.
2. Is the action likely to have an impact on properties protected under Section 4(f) of the Department of Transportation Act?		✓	The ATMP limits the number of commercial air tours to one tour per year and maintains the same route as is currently flown under existing conditions. Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes the same number of annual flights as the average number of flights from 2017-2019 and requires commercial air tours to maintain the same route and altitude flown under existing conditions. Refer to the Noise Technical Analysis. For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the FAA noise evaluation is based on Yearly ¹ Day Night Average Sound Level (Ldn or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the undertaking will not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for NEPA. In addition, visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and route will remain the same as compared to existing conditions. After consulting with officials with jurisdiction over appropriate 4(f) resources, the FAA has determined that the ATMP will not result in substantial impairment of Section 4(f) resources; therefore, no constructive use of a Section 4(f) resource associated with the ATMP will occur. See Section 4(f) analysis.
3. Is the action likely to have an impact on natural,		✓	The ATMP limits the number of commercial air tours to one tour per year and maintains the same route as is

¹ As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

Extraordinary Circumstance	Yes	No	Notes
ecological, or scenic resources of Federal, state, tribal or local significance?			currently flown under existing conditions. Therefore, impacts to viewsheds will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and the route will remain the same as compared to existing conditions. Therefore, the ATMP will not impact scenic resources. The FAA and NPS determined the ATMP will result in No Effect to Federally listed species or critical habitat. See No Effect determination memo.
4. Is this action likely to have an impact on the following resources:			
Resources protected by the Fish and Wildlife Coordination Act		✓	The ATMP will not result in the control or modification of a natural stream or body of water. Therefore, no resources protected by the Fish and Wildlife Coordination Act will be impacted.
Wetlands		✓	While wetlands are present within the project area, the ATMP will not result in ground disturbance or fill. Therefore, no impacts to wetlands will occur.
Floodplains		✓	While floodplains are present within the project area, the ATMP will not result in ground disturbance or fill. Therefore, no impacts to floodplains will occur.
Coastal zones		✓	No coastal zones are located within the Park or its ½-mile boundary.
National marine sanctuaries		✓	No national marine sanctuaries are located within the Park or its ½-mile boundary.
Wilderness areas		✓	The majority of the Park's area is designated wilderness. Because commercial air tours do not land in wilderness or parks, the undeveloped quality of wilderness will be maintained. Because the ATMP authorizes the same number of commercial air tours as the average number of flights from 2017-2019 which amounts to a single flight per year, and the same route will be used, impacts to solitude and the natural quality of wilderness will be similar or decrease compared to impacts currently occurring.
National Resource Conservation Service-designated prime and unique farmlands		✓	The ATMP will not result in ground disturbance. Therefore, the project will not impact designated prime and unique farmlands.
Energy supply and natural resources		✓	The ATMP will not affect energy supplies or natural resources.
Resources protected under the Wild and Scenic Rivers Act and		✓	No wild and scenic rivers are located within the Park. However, three of the Park's waterways are listed on the Nationwide Rivers Inventory (NRI) as eligible for Wild

Extraordinary Circumstance	Yes	No	Notes
rivers, or river segments listed on the Nationwide Rivers Inventory (NRI)			and Scenic River designated. The ATMP will not result in ground disturbance or physical impacts to waterways. Therefore, the ATMP will not impact waterways potentially eligible for Wild and Scenic River designation.
Solid waste management		✓	The ATMP will not result in the generation of solid waste, construction, or demolition debris.
5. Is the action likely to cause a division or disruption of an established community, or a disruption of orderly, planned development, or an inconsistency with community plans or goals?		✓	The ATMP will not disrupt communities or developments plans or goals.
6. Is the action likely to cause an increase in surface transportation congestion?		✓	The ATMP will not cause an increase in surface transportation congestion.
7. Is the action likely to have an impact on noise levels in noise-sensitive areas?		✓	Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes the same number of annual flights as the average number of flights from 2017-2019 (one flight per year) and requires commercial air tours to maintain the same route and altitude flown under existing conditions. Refer to the Noise Technical Analysis in the ESF. For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under NEPA, the FAA noise evaluation is based on Yearly Day Night Average Sound Level (Ldn or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the undertaking will not result in any noise impacts that would be “significant” or “reportable” as defined in FAA Order 1050.1F.
8. Is the action likely to have an impact on air quality or violate Federal, state, tribal, or local air quality standards under the Clean Air Act?		✓	The findings from the air quality screening analysis demonstrate that implementing the ATMP will not meaningfully impact local air quality and will not have regional impacts from implementation of the ATMP in the Park. See Air Quality Technical Analysis in the ESF.
9. Is the action likely to have an impact on water quality, aquifers, public water supply systems, or state or tribal water quality standards under the Clean Water Act or		✓	The ATMP will not result in ground disturbance or other activities that will impact water quality, aquifers, public water supply systems, or water quality standards under the Clean Water Act or Safe Drinking Water Act.

Extraordinary Circumstance	Yes	No	Notes
the Safe Drinking Water Act?			
10. Is the action likely to be highly controversial on environmental grounds?		✓	There are no highly controversial environmental effects. The term “highly controversial on environmental grounds” means there is a substantial dispute involving reasonable disagreement over the degree, extent, or nature of a proposed action’s environmental impacts or over the action’s risks of causing environmental harm. Mere opposition is not sufficient for a proposed action or its impacts to be considered highly controversial on environmental grounds. See FAA Order 1050.1F 5-2(b)(10) ² . Impacts from commercial air tours generally are understood from existing modeling and literature and can be accurately projected for Park resources. Information and models used to assess impacts for commercial air tours, as discussed in the NPS CE/ESF, is consistent with peer reviewed literature. Therefore, the ATMP will not result in substantial dispute involving reasonable disagreement over the degree, extent, or nature of the environmental impacts or the risk of causing environmental harm.
11. Is the action likely to be inconsistent with any Federal, State, Tribal, or local law relating to the environmental aspects of the project?		✓	The ATMP will be consistent with all applicable Federal, State, Tribal, and local law.
12. Is the action likely to directly, indirectly, or cumulatively create a significant impact on the human environment?		✓	The FAA and NPS qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities described in the NPS CE/ESF. In some cases, the noise contribution from other sources may be substantial, such as military overflights. In those cases, the addition of air tour noise from a single flight annually is such a small contribution of noise overall that it is unlikely it will result in noticeable or meaningful change in the acoustic environment. Commercial air tours over roadways or heavily used motorized waterways are likely to be masked by existing noise and therefore the impacts will be de minimis. Finally, the ATMP does not add new noise to the existing acoustic environment. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP, the continuation of one commercial air tour per year will not result in a meaningful

² The 2020 updates to the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA eliminated the “intensity” factor on which this circumstance is based. It is nevertheless included for disclosure purposes and to the extent relevant.

Extraordinary Circumstance	Yes	No	Notes
			change to the current condition of the visual or auditory landscape at the Park.

**Extraordinary circumstances exist when the proposed action (1) involves any of the listed circumstances, and (2) may have significant impacts (FAA Order 1050.1F para. 5-2 and 40 CFR § 1508.4). See also FAA Order 1050.1F Desk Reference for a more detailed description of the analysis for each extraordinary circumstance.*

EXHIBIT 2

FAA Section 4(f) Analysis for Mount Rainier National Park

Section 4(f) Analysis in FAA Adoption Document

Table of Contents

Introduction.....	1
Regulatory Context.....	1
Section 4(f) Resources	2
Potential Use of Section 4(f) Resources	12
Noise Impacts Analysis.....	12
Indicators of Acoustic Conditions.....	12
Modeling Noise Impacts	13
Summary of Potential Noise Impacts.....	14
Vibrational Impacts.....	15
Visual Impacts Analysis	15
Conclusion	15

Introduction

The Federal Aviation Administration (FAA) prepared this document to analyze and evaluate the Proposed Action’s potential impacts to resources protected under Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The Proposed Action is to implement an Air Tour Management Plan (ATMP) at Mount Rainier National Park (the Park). As land acquisition, construction, or other ground disturbance activities would not occur under the ATMP, the Proposed Action would not have the potential to cause a direct impact to a Section 4(f) resource. Therefore, analysis of potential impacts to Section 4(f) resources is limited to identifying impacts that could result in a constructive use. Section 4(f) is applicable to historic sites and publicly owed parks, recreation areas, and wildlife and waterfowl refuges of national, State, or local significance that may be impacted by transportation programs or projects carried out by the U.S. Department of Transportation (USDOT) and its operating administrations, including the FAA.

This document describes Section 4(f) regulations and requirements, the study area for Section 4(f), the process used to identify Section 4(f) resources in the study area, and consideration of potential impacts that could result in substantial impairment to Section 4(f) resources in the study area.

Regulatory Context

Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

“... the Secretary may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

The term “use” refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A physical use involves the physical occupation or alteration of a Section 4(f) resource, while constructive use occurs when a proposed action results in substantial impairment of a resource to the degree that the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished. Under the ATMP, potential impacts to Section 4(f) resources from commercial air tours may include noise from aircraft within the acoustic environment, as well as visual impacts.

The FAA uses procedures in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*¹ for meeting Section 4(f) requirements. Federal Highway Administration/Federal Transit Administration regulations and policy are not binding on the FAA; however, the FAA may use them as guidance to the extent relevant to aviation projects.² The FAA requires consideration of noise impacts for proposed changes in air traffic procedures or airspace redesign across a study area which may extend vertically from the surface to 10,000 feet above ground level (AGL).³ The land use compatibility guidelines in 14 CFR Part 150 assist with determining whether a proposed action would constructively use a Section 4(f) resource. These guidelines rely on the Day Night Average Sound level (DNL), which is considered the best measure of impacts to the quality of the human environment from exposure to noise.

The FAA acknowledges that the land use categories in 14 CFR Part 150 may not be sufficient to determine the noise compatibility of Section 4(f) properties (including, but not limited to, noise sensitive areas within national parks and wildlife refuges), where a quiet setting is a generally recognized purpose and attribute. The FAA has consulted with the National Park Service (NPS) and included supplemental noise metrics in the Section 4(f) analysis for the ATMP (see Modeling Noise Impacts below).

Section 4(f) is applicable to all historic sites of national, State, or local significance, whether or not they are publicly owned or open to the public. Except in unusual circumstances, Section 4(f) protects only those historic sites that are listed or eligible for inclusion on the National Register of Historic Places (NRHP).⁴ Historic sites are normally identified during the process required under Section 106 of the National Historic Preservation Act. Section 4(f) is not applicable to privately owned parks, recreation areas, and wildlife and waterfowl refuges.

Section 4(f) Resources

The study area for considering Section 4(f) resources for the ATMP consists of the commercial air tour routes over the Park and ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour route (the buffer is a total of ten miles wide).

¹ Federal Aviation Administration. 2015. 1050.1F - *Environmental Impacts: Policies and Procedures*. Also see 1050.F Desk Reference (Version 2, February 2020).

² See 1050.1F Desk Reference, Section 5-3.

³ Department of Transportation, Federal Aviation Administration, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Appendix B. Federal Aviation Administration Requirements for Assessing Impacts Related to Noise and Noise-Compatible Land Use and Section 4(f) of the Department of Transportation Act (49 U.S.C. § 303), Para. B-1.3, Affected Environment. July 16, 2015.

⁴ If a historic site is not NRHP-listed or eligible, a State or local official may formally provide information to FAA to indicate that a historic site is locally significant. The responsible FAA official may then determine it is appropriate to apply Section 4(f). See FAA Order 1050.1F and the 1050.1F Desk Reference, for further detail.

The study area for Section 4(f) resources also corresponds with the Area of Potential Effects (APE) used for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Section 106) for the Park. See Figure 1 for a depiction of the Section 4(f) study area. Historic properties were identified as part of the Section 106 consultation process. Parks, recreational areas, and wildlife and waterfowl refuges were identified using public datasets from Federal, State, and local sources, which included the U.S. Forest Service. Each resource that intersected the study area (i.e., some portion of the property fell within the buffer around the route) was included in the Section 4(f) analysis.

Table 1 lists Section 4(f) historic sites and Table 2 shows Section 4(f) parks and recreational areas identified in the study area.⁵ There were no wildlife or waterfowl refuges identified in the study area. Figure 1 shows a map of all Section 4(f) resources within the study area.

Table 1. Section 4(f) historic sites within the study area

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Christine Falls Bridge	NPS, State Historic Preservation Officer (SHPO)	Structure	Listed	The Christine Falls Bridge was constructed in 1927-28 as part of the Nisqually Road improvements in the late twenties. The Christine Falls Bridge is an excellent example of rustic styling employed to harmonize the structure with its natural setting.
Cougar Rock Campground ranger station L-650	NPS, SHPO	Building	Eligible	The Cougar Rock Ranger Station was constructed in 1963 as part of the broader National Park Service's MISSION 66 initiative. The Cougar Rock Ranger Station served as the administrative point of contact for visitors staying at Cougar Rock Campground located approximately two miles above Longmire along the road to Paradise.
Edith Creek Chlorination House P 205	NPS, SHPO	Building	Listed	This building reflects the prominent design ethic for parks at that time. The non-intrusive design philosophy practiced by architects and landscape architects in the NPS's Branch of Plans and Design set the standard for park areas across the nation, including municipal and state parks.
Indian Bar Trail Shelter	NPS, SHPO	Building	Listed	One of the numerous park structures built by Civilian Conservation Corps, this facility is one of the two stone trail shelters remaining in Mount Rainier. Indian Bar Trail Shelter was constructed during the administration of Superintendent O.A. Tomlinson, when a string of patrol cabins and trail shelters were built along the famous Wonderland Trail to accommodate

⁵ All data sources were accessed the week of March 21, 2022.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				backcountry rangers on patrol and provide shelter for the hiking public.
Indian Henry's Patrol Cabin N 106	NPS, SHPO	Building	Listed	Indian Henry's Patrol Cabin is the oldest backcountry ranger station in the park. It is one of the several patrol cabins located on the popular Wonderland Trail.
Ipsut Creek Ranger Cabin C 250	NPS, SHPO	Building	Listed	Constructed during the administration of Superintendent O.A. Tomlinson for use as a backcountry patrol facility, this cabin was a component of the early park policy to develop a string of shelters and cabins around the park to accommodate backcountry rangers on patrol, and provide shelter for the hiking public.
Longmire Buildings	NPS, SHPO	Building	Listed National Historic Landmark (NHL)	See Longmire Historic District
Longmire Cabin	NPS, SHPO	Building	Listed	See Longmire Historic District
Longmire Campground Comfort Station No. L-302	NPS, SHPO	Building	Listed	Comfort Station L-302 is typically constructed to blend with its natural setting. It was designed along with the entire Longmire Public Auto Camp by the National Park Service, Western Division, Branch of Plans and Design. Thomas C. Vint served as Chief Architect. Part of Longmire Developed Area.
Longmire Campground Comfort Station No. L-303	NPS, SHPO	Building	Listed	Comfort Station L-303 is typically constructed to blend with its natural setting. It was designed along with the entire Longmire Public Auto Camp by the National Park Service, Western Division, Branch of Plans and Design. Thomas C. Vint served as Chief Architect. Part of Longmire Developed Area.
Longmire Campground Comfort Station No. L-304	NPS, SHPO	Building	Listed	Comfort Station L-305 is typically constructed to blend with its natural setting. It was designed along with the entire Longmire Public Auto Camp by the National Park Service, Western Division, Branch of Plans and Design. Thomas C. Vint served as Chief Architect. Part of Longmire Developed Area.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Longmire Developed Area	NPS, SHPO	District	Listed NHL	There are 58 contributing buildings and 16 non-contributing buildings in the Longmire Village developed area. The buildings that are non-contributing either do not date to the period of significance or have been significantly altered in a way that has profoundly changed their physical appearance and character. Three buildings in this developed area are already designated National Historic Landmarks for their architectural significance: the Longmire Administration Building, the Service Station, and the Community Building. Together, the buildings of Longmire Village are one of the most extensive collections of the Park Service Rustic architectural style that exists. Many of the buildings are also of unusual distinction in design. Besides the outstanding examples, such as the Administration Building, there is a full complement of residential bungalows and other more modest buildings that are excellent examples of Park Service architecture of the period. In addition, the village has excellent integrity.
Longmire Historic District	NPS, SHPO	District	Listed	The Longmire Historic District is historically and architecturally significant at local level of significance as a visually cohesive complex of rustic style structures associated with the early development of the park. This includes administrative, residential, and maintenance structures form the Longmire village that served as the park's headquarters from 1916-1977. This group of buildings illustrates the National Park Service Landscape Division's application of the "rustic" style of architecture during the 1920s and 1930s. Under the direction of Thomas Vint, the division employed the style on a broad variety of structures at Longmire. Characteristic features of the rustic style include the use of materials such as stone and wood in close to their raw or natural form or state, dark forest colors, and irregular setting to harmonize with the natural environment.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Macy Dormitory	NPS, SHPO	Building	Eligible	Macy Dorm is a rustic style dormitory located in the Maintenance Area of the Longmire Developed Area in Mount Rainier National Park. Built in 1913 and originally functioning as a warehouse, the dormitory is one of the oldest government-built buildings remaining in the park.
Mount Rainier National Park Historic District	NPS, SHPO	District	Listed NHL	<p>Mount Rainier National Park Historic District stresses the history of National Park Service master planning, an aspect of the larger practice of Park Service landscape architecture. Beginning in the late 1920s, the master plan for Mount Rainier was the first and the most complete national park master plan to be developed and implemented by the landscape division. The goal of all such plans was to locate, coordinate, and integrate all park systems and facilities in a unified, comprehensive plan. Most facilities were concentrated along the park road system in order to limit the impact of development to a narrow area. Since the significance of this National Historic Landmark (NHL) District depends on the history of park master planning--a discipline which treated the park as a synthetic whole, not as a group of fragmented resources--all the facilities and systems that represent the historic master planning process should be included in a single district. Therefore, the use of a discontinuous NHL District is desirable and justified in this case.</p> <p>Thomas Vint and his landscape division compiled master plans for almost every national park and monument in the late 1920s and early 1930s, but few plans were as significant or as complete as the plans for Mount Rainier. The physical integrity of the developed areas and facilities of Mount Rainier also set it apart. As a whole, no other collection of park roads, bridges, major and minor developed areas, trails, etc., are more completely preserved as an intact example of park planning of the period.</p>

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Mowich Lake Patrol Cabin C 252	NPS, SHPO	Building	Listed	Mowich Lake Patrol Cabin is one of the oldest backcountry ranger stations in the park. It was intended as a temporary headquarters for rangers on patrol of the park's western boundary and the Wonderland Trail. This cabin was an early component of Superintendent Roger Toll's vision of a string of Wonderland Trail to accommodate the increasing need for backcountry ranger patrols and shelters for the public.
Mt. Fremont Fire Lookout	NPS, SHPO	Building	Listed	Mt. Freemont Fire Lookout is one of four such remaining facilities at Mount Rainier National Park. Built to standard plans between 1932-34. The plans for lookout houses were developed in the early the NPS Western Division, Branch of Plans and Design.
Narada Falls Bridge	NPS, SHPO	Structure	Listed	The Narada Falls Bridge was constructed in 1927 as part of the Nisqually Road Improvements in the late twenties. The work was carried out by a private contractor and administered by the NPS and Bureau of Public Roads.
Narada Falls Comfort Station	NPS, SHPO	Building	Listed	Completed with CCC labor in 1942, the Narada Falls Comfort Station was designed by the Western Region Landscape Engineering Division. Its design was approved by Thomas C. Vint, Chief of Planning for the National Park Service.
National Park Inn	NPS, SHPO	Building	Listed	The National Park Inn was constructed during the brief era of competition between concessionaires in the park (1906-1918). Although the building was relocated in 1920 and assumed the name of the original National Park Inn in 1926 its exterior front facade has remained virtually unaltered.
Nisqually Glacier Bridge	NPS, SHPO	Structure	Eligible	A modern steel and concrete box girder bridge is located 600' downstream from the location of the (washed out) 1936 bridge.
North Mowich Trail Shelter C 253	NPS, SHPO	Building	Listed	The North Mowich River trail shelter (C-253) is one of the oldest backcountry shelters in the park and one of the numerous structures built by the CCC. It is one of the numerous trail shelters constructed on the popular Wonderland

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				Trail, a policy begun under Superintendent Roger W. Toll (1919-20) and expanded during the superintendency of Major O. A. Tomlinson (1932-41).
Paradise Historic District	NPS, SHPO	District	Listed	For most of the park's history the Paradise Historic District has been dominated by concession-built structures, including the Paradise Inn, the Annex, the Guide House, and numerous support structures. However, park operations at Paradise did require some government facilities -- a ranger station and comfort station in the 1920s and, in the late 1930s, facilities to support the heavy use of Paradise by ski enthusiasts.
Paradise Inn	NPS, SHPO	Building	Listed	See Paradise Historic District
South Puyallup River Bridge	NPS, SHPO	Structure	Listed	The South Puyallup River Bridge was completed in 1931 as part of the West Side Road construction. Originally planned to link the Nisqually entrance with the Carbon River Entrance, the West Side Road was first in 1925-26. The project, carried out over a ten-year period beginning in 1926, was never wholly completed.
Sunrise Comfort Station S 005	NPS, SHPO	Building	Listed	See Sunrise Historic District.
Sunrise Comfort Station S 310	NPS, SHPO	Building	Listed	Comfort Station S-310 is representative of the standardized design for comfort stations created by the NPS Western Division, Branch of Plans and Design in the late twenties. Thomas C. Vint served as Chief Architect. The facility was erected c.1930 along with four others as part of the Yakima Park public auto camp. E.A. Davidson supervised field construction; Comfort Station S-310 is the last survivor in this region.
Sunrise Historic District (Yakima Park)	NPS, SHPO	District	Listed	Planning for the third and last major development of government and concession facilities within the park boundaries began in the late 1920s when state highway construction promised to open up an easily accessible approach to the mountain from eastern Washington.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				Because the Superintendent and other Service officials were determined to avoid haphazard development that would destroy the fragile subalpine environment, the National Park Service Branch of Plans and Designs in San Francisco undertook the planning of Sunrise Village, a comprehensive development at Yakima Park in the northeastern region of the park. An historical theme - the block house and stockades of the early settlement of Washington Territory - was chosen for the development.
Sunset Park Patrol Cabin N 105	NPS, SHPO	Building	Listed	Sunset Park patrol cabin is one of the oldest backcountry ranger stations in the park. This cabin was an early component of Superintendent Roger Toll's vision of a string of Wonderland Trail to accommodate the increasing need for backcountry ranger patrols and shelters for the public. This policy evolved and expanded under O. A. Tomlinson's administration.
Sunset Park Trail Shelter N 109	NPS, SHPO	Building	Listed	The oldest extant shelter in the park is the Sunset Park Trail Shelter.
Tahoma Vista Comfort Station	NPS, SHPO	Building	Listed	This comfort station was built in conjunction with the West Side Highway's scenic Tahoma Vista point. Associate Landscape Architect E.A. Davidson of the National Park Service, Western Region in San Francisco, supervised construction of the scenic overlook.
Tolmie Peak Fire Lookout	NPS, SHPO	Building	Listed	Tolmie Peak is one of the four remaining fire lookouts at Mount Rainier. They are all similar design constructed between 1932 and 1934. These lookouts have played a significant role in the protection of natural resources in the park and in the surrounding national forest lands. Although aerial fire detection has somewhat reduced the importance of lookouts in recent years, they still play a significant role in visitor interpretation and assistance, as a backcountry patrol base, and during extreme fire danger periods.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
White River Bridge	NPS, SHPO	Structure	Listed	The White River Bridge, associated with the early development of Yakima Park (Sunrise), is additionally an outstanding example of rustic architecture.
White River Entrance	NPS, SHPO	District	Listed	The buildings at White River are similar in plan and design to contemporary rustic structures at Nisqually and Longmire. The log frame entrance station was modeled after the Nisqually entrance station. However, the porte-cochere feature is original to White River and was only copied in the late thirties at Nisqually as part of the Civilian Conservation Corps (CCC) remodeling.
White River Mess Hall and Dormitory W 207	NPS, SHPO	Building	Listed	The Mess Hall and Dormitory is a Civilian Conservation Corps (CCC) building and is believed to be the only such remnant of a CCC camp in the park.
White River Patrol Cabin W 051	NPS, SHPO	Building	Listed	The White River cabin is the oldest surviving structure in the White River region.
Yakima Park Stockade Group	NPS, SHPO	Building	Listed NHL	See Sunrise Historic District

Table 2. Section 4(f) parks and recreational resources in the study area

Property Name	Official(s) with Jurisdiction	Description	Approximate Size
Mount Rainier National Park	NPS	National Park located in Washington State which includes Mount Rainier, a glaciated volcano and the highest point in the Cascade Range.	360 square miles (326,381 acres)
Gifford Pinchot National Forest	USFS	Forest lands, wildlife habitat, watersheds & mountains, including Mt. Adams and the Mount St. Helens National Volcanic Monument.	1.3 million acres (172 acres in study area)
Mt. Baker-Snoqualmie National Forest	USFS	Located on the west side of the Cascades between the Canadian border and Mt. Rainier National Park, including glacier-covered peaks, mountain meadows and old-growth forests rich in history and outdoor opportunities.	1.7 million acres (1875 acres in study area)

Section 4(f) Study Area and Properties for ATMP at Mount Rainier National Park

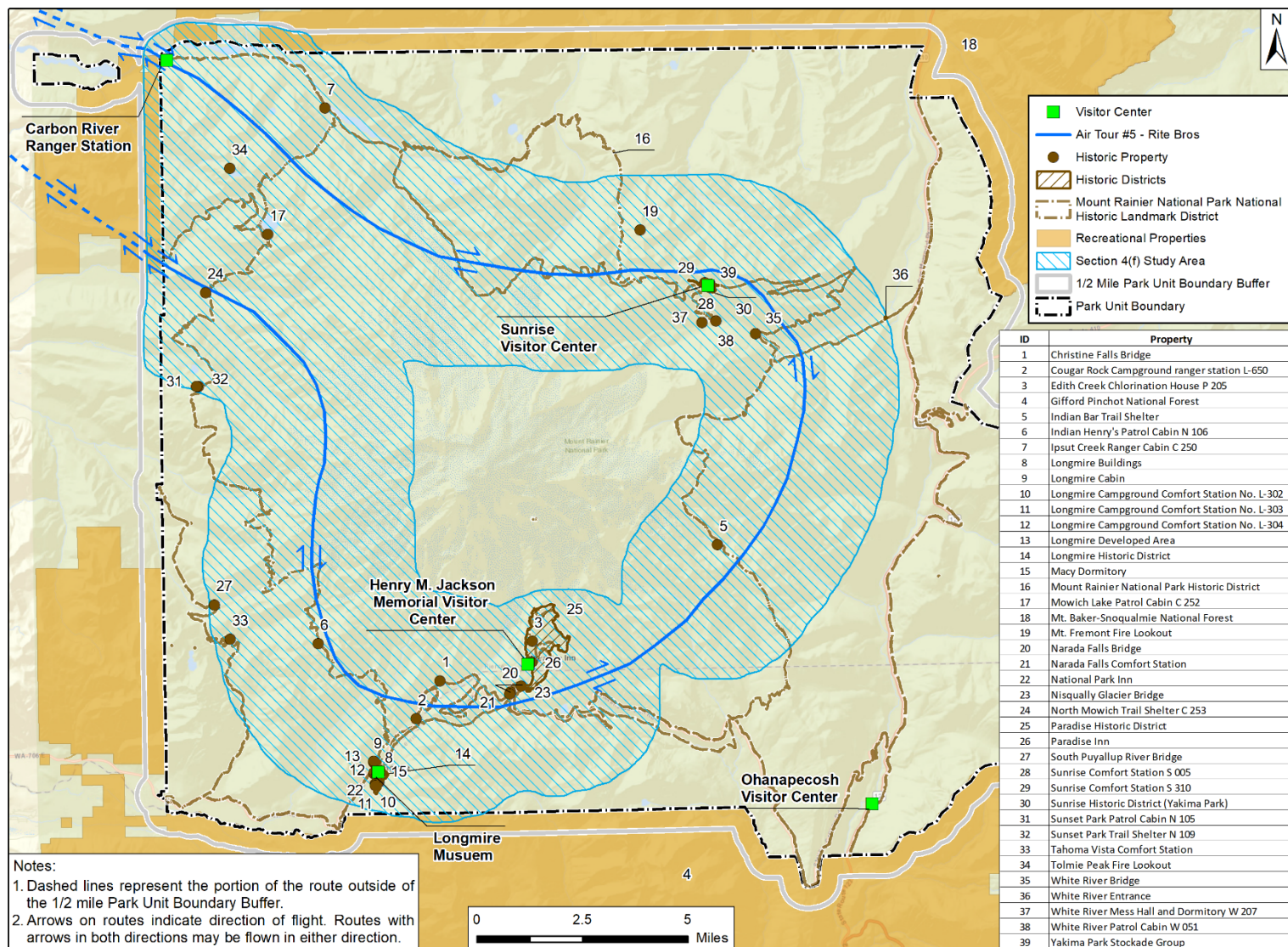


Figure 1. Map of Section 4(f) resources at the Park; includes resources entirely and partially within the Park study area.

Potential Use of Section 4(f) Resources

Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the ATMP. A constructive use of a Section 4(f) resource would occur if there was a substantial impairment of the resource to the degree that the activities, features, or attributes of the site that contribute to its significance or enjoyment are substantially diminished. This could occur as a result of both visual and noise impacts. The FAA evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts to determine if there was substantial impairment to Section 4(f) resources due to the ATMP that would result in a constructive use.

Noise Impacts Analysis

Indicators of Acoustic Conditions

There are numerous ways to describe the potential impacts of noise from commercial air tours on the acoustic environment of a park, including intensity, duration, and spatial footprint of the noise. The FAA's noise evaluation is based on Day Night Average Sound Level Average Annual Day (L_{dn} or DNL), the cumulative noise energy exposure from aircraft. As part of the ATMP noise analysis, the NPS provided supplemental metrics to assess the impact of commercial air tours on visitor experience in quiet settings, including noise sensitive areas of Section 4(f) resources. The metrics and acoustical terminology considered for the Section 4(f) noise analysis are shown in Table 3.

Table 3. Metrics used for the noise analysis.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>The FAA's indicators of significant impacts are for an action that would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.⁶</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL and characterize:</p> <ul style="list-style-type: none">Increases in both the loudness and duration of noise eventsThe number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>

⁶ FAA Order 1050.1F, Exhibit 4-1

Maximum sound level, L_{\max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{\max} does not provide any context of frequency, duration, or timing of exposure.
Time Above 35 dBA ⁷	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility.⁸</p>

Modeling Noise Impacts

For aviation noise analyses under the National Environmental Policy Act (NEPA), the FAA determines the cumulative noise energy exposure of individuals resulting from aviation activities in terms of the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts.⁹ A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

This provides a conservative evaluation of potential noise impacts to park resources, as well as Section 4(f) resources, under the ATMP, as the AAD will always reflect fewer commercial air tour operations than a peak day. The 90th percentile day was identified for representation of a peak day and derived from the busiest year of commercial air tour activity from 2017-2019, based on the total number of commercial air tour operations and total flight miles over the Park. It was then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air tour activity at the

⁷ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μ Pa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. Sound levels are reported in units of decibels (dB) (ANSI S1.1-1994, American National Standard Acoustical Terminology). A-weighting is applied to sound levels in order to account for the sensitivity of the human ear (ANSI S1.42-2001, Design Response of Weighting Networks for Acoustical Measurements). To approximate human hearing sensitivity, A-weighting discounts sounds below 1 kHz and above 6 kHz.

⁸ Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

⁹ See *U.S. Air Tour Ass'n v. F.A.A.*, 298 F.3d 997, 1017-18 (D.C. Cir. 2002).

Park. For the Park, the 90th percentile day was identified as a single (one) flight on the route authorized by the ATMP (Air Tour #5).

The noise was modeled for the acoustic indicators in Table 3 and 90th percentile day using the FAA's Aviation Environmental Design Tool (AEDT) version 3d. The noise was modeled at points spaced every 0.25 nautical mile throughout the potentially affected area. Please refer to the Environmental Screening Form for further detail.

Summary of Potential Noise Impacts

The noise analysis indicates that the ATMP would not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for the NEPA guidance.¹⁰ Under the ATMP, there are no changes to the route or number of commercial air tours as compared with existing conditions. The resultant DNL due to the ATMP is expected to be below DNL 45 dBA and does not cause any reportable noise as there is no expected increase or change in noise from the ATMP.

Because the number of authorized flights under the ATMP would be the same as the average number of flights from 2017 to 2019, evaluation of the NPS supplemental metrics show that impacts to Section 4(f) resources would be similar to impacts currently occurring:

- On days when a commercial air tour will occur, noise levels above 35 dBA (an indicator used by NPS to assess the potential for degradation of the natural sound environment) will occur for less than five minutes a day in areas directly beneath and adjacent to the route (see NPS Environmental Screening Form, Figure 2).
- On days when a commercial air tour will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in several small areas directly beneath and adjacent to the route. Section 4(f) resources which fall under the 52 dBA noise contour include: Indian Henry's Patrol Cabin N 106, Nisqually Glacier Bridge, Sunrise Comfort Station S 310, Yakima Park Stockade Group (see Environmental Screening Form, Figure 3).

In addition, the ATMP limits the operation of commercial air tours to between 10:00 AM and 3:00 PM local time any day of the year, or from one hour after sunrise until one hour before sunset for operators that have converted to quiet technology aircraft, which provides times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. Collectively, these changes from existing operations and their effect on the current use of Section 4(f) resources will likely result in beneficial impacts to the Section 4(f) resources.

As a result, FAA concludes there would be no substantial impairment of Section 4(f) resources in the study area from noise-related effects by the implementation of the ATMP. The ATMP would not result in significant or reportable increase in noise at the Park and the ATMP will likely provide beneficial impacts to Section 4(f) resources. This all supports the FAA's has determination that implementation of the Proposed Action would not constitute a constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is consistent with the Section 106 no adverse effect determination at the Park (see Section 106 Consultation and Finding of No Adverse Effect letter).

¹⁰ Per FAA Order 1050.1F, the FAA refers to noise changes meeting the following criteria as "reportable": for DNL 65 dB and higher, \pm DNL 1.5 dB; for DNL 60 dB to <65 dB, \pm DNL 3 dB; for DNL 45 dB to <60 dB, \pm DNL 5 dB. See also 1050.1F Desk Reference, Section 11.3.

Vibrational Impacts

A review of the potential for vibrational impacts on sensitive structures such as historic buildings, parklands, and forests suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency is well above the natural frequency of these structures. Additionally, the vibration amplitude of these overflights at the altitudes prescribed in the ATMP will be well below recommended limits.^{11, 12} Vibrational impacts are not anticipated to surrounding parkland and National Forest areas given that aircraft overflights do not contain vibrational energy at levels which would affect outdoor areas or natural features and there is no substantial change from existing conditions.

Visual Impacts Analysis

The ATMP would not substantially impair Section 4(f) resources within the study area because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP will remain the same. Recognizing that some types of Section 4(f) resources may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could substantially diminish the significance or enjoyment of Section 4(f) resources in the study area. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property, forest, or parkland would experience a visual effect from the ATMP. One's perspective of or viewshed from a historic property and natural areas is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography.

The ATMP limits the annual number of commercial air tours to one flight and maintains the same route as is currently flown under existing conditions. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than one commercial air tour per year, thus 364 days of the year are free of commercial air tours.

Visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and the route will remain the same as compared to existing conditions. The ATMP 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. Therefore, there would be no constructive use from visual impacts of Section 4(f) resources.

Conclusion

The FAA has determined that there would be no constructive use to Section 4(f) properties from implementation of the Proposed Action because noise from and visual impacts commercial air tours under the ATMP would not constitute a substantial impairment of Section 4(f) resources in the study area. The noise analysis indicated that there would be no significant impact or reportable increase from implementation of the ATMP. NPS's supplemental noise metrics show that the noise impacts would be similar to current conditions and provisions within the ATMP would provide benefits to Section 4(f)

¹¹ Hanson, C.E., King, K.W., et al., "Aircraft Noise Effects on Cultural Resources: Review of Technical Literature," NPOA Report No. 91-3 (HMMH Report No.290940.04-1), September 1991.

¹² Volpe National Transportation Systems Center, Department of Transportation, 2014. Literature Review: Vibration of Natural Structures and Ancient/Historical Dwellings, Internal Report for National Park Service, Natural Sounds and Night Skies Division, August 21, 2014.

resources. Likewise, the visual impacts to Section 4(f) resources would be similar to impacts currently occurring because the number of authorized flights under the ATMP (one flight per year) would be the same as the average number of flights from 2017 to 2019, and the route would remain the same as compared to existing conditions. Together, this supports the FAA's determination that the Proposed Action would not substantially diminish the protected activities, features, or attributes of the Section 4(f) resources in the study area.

The FAA consulted with the NPS and other officials with jurisdiction (OWJ) over Section 4(f) resources in the study area regarding FAA's finding of no substantial impairment, and hence, its no constructive use determination. As a cooperating agency on the Air Tour Management Plan and associated environmental review, NPS was actively engaged with FAA on the proposed action. FAA consulted with the State Historic Preservation Office (SHPO) on historic properties and received a concurrence on a finding of "no adverse effect."

In addition to consultation with the NPS and the SHPO, FAA corresponded with the officials with jurisdiction related to the remaining Section 4(f) resources. On June 7, 2022, FAA sent two letters to the U.S. Forest Service describing the proposed action, analysis on potential use of Section 4(f) resources under their respective jurisdiction, and FAA's preliminary determination (see attached). Follow-ups were sent on June 14, 2022. Responses from both Gifford Pinchot National Forest and Mt. Baker-Snoqualmie National Forest indicated they had no concerns with the FAA's determination (see attached).

CORRESPONDENCE



U.S. Department
of Transportation
**Federal Aviation
Administration**

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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 7, 2022

Re: Consultation under Section 4(f) of the U.S. Department of Transportation Act (49 U.S.C. § 303) for the development of an Air Tour Management Plan for Mount Rainier National Park

Eric Veach
U.S. Forest Service
501 E. Fifth St. #404
Vancouver, WA 98661

Dear Eric Veach:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Mount Rainier National Park (Park). The FAA is preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws, including Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The purpose of this letter is to coordinate with you on FAA's preliminary findings related to the ATMP's potential impacts to Gifford Pinchot National Forest, which is a protected property under Section 4(f).

Project Background and Purpose of the Action

NPATMA (Public Law 106-181, codified at 49 U.S.C. § 40128) of 2000, directs the agencies to develop ATMPs for commercial air tour operations over units of the national park system. A commercial air tour operation is defined as "a flight conducted for compensation or hire in a powered aircraft where the purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of a national park or over tribal lands, during which the aircraft flies below an altitude of 5,000 feet (ft.) above ground level (AGL) or less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary)." When NPATMA was passed in 2000, existing air tour operators were permitted to continue air tour operations in parks until an ATMP was completed. To facilitate this continued use, FAA issued Interim Operating Authority (IOA) to existing air tour operators. IOA set an annual limit of the number of flights per operator for each park. In 2012, NPATMA was amended by Congress to, among other things, require operators to report the number of flights conducted on a quarterly interval each year. On February 14, 2019, Public Employees for Environmental Responsibility and the Hawai'i Coalition Malama Pono filed a petition for writ of mandamus seeking to have the agencies complete air tour management plans or voluntary agreements at seven specified parks. In re Public Employees for Environmental Responsibility, et al., Case No. 19-1044 (D.C. Cir.). On May 1, 2020, the United States Court of Appeals for the District of Columbia Circuit granted the petition and

ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Mount Rainier National Park, into compliance with NPATMA within two years. The agencies submitted a plan to complete all ATMPs to the court on August 31, 2020.

Section 4(f) is applicable to historic sites and publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, State, or local significance that may be impacted by transportation programs or projects carried out by the U.S. Department of Transportation (USDOT) and its operating administrations, including the FAA. Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

“... the Secretary may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

The term “use” refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A physical use involves the physical occupation or alteration of a Section 4(f) resource, while constructive use occurs when a proposed action results in substantial impairment of a resource to the degree that the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished. Under the ATMP, potential impacts to Section 4(f) resources from commercial air tours may include noise from aircraft within the acoustic environment, as well as visual impacts.

Description of the Proposed Action

The FAA and the NPS (collectively, the agencies) are developing ATMPs for 24 parks,¹ including the Mount Rainier National Park. The ATMPs are being developed in accordance with NPATMA. Each ATMP is unique and therefore, each ATMP is being assessed individually under Section 4(f).

Commercial air tours have been operating intermittently over the Park for over 20 years. Since 2005, these air tours have been conducted pursuant to IOA issued by FAA in accordance with NPATMA. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than a limit of 34 air tours per year. The ATMP will replace IOA.

The FAA and the NPS have documented the existing conditions for commercial air tour operations at the Park. The FAA and the NPS consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is a single (one) air tour. The agencies decided to use a three-year average because it reflects the most accurate and reliable air tour conditions based on available

¹ On March 4, 2021, the NPS notified the FAA that an air tour management plan was necessary to protect Muir Woods National Monument’s resources and values and withdrew the exemption for the that park. The agencies are now proceeding with ATMPs for 24 parks instead of 23.

operator reporting, and accounts for variations across multiple years, excluding more recent years affected by the COVID 19 pandemic.²

The proposed action is implementing the ATMP at the Park. The following elements of the ATMP are included for the Park:

- A maximum of one commercial air tour is authorized per year on the route(s) depicted in **Attachment A**;
- The air tour will fly no lower than 3,000 ft. above ground level (AGL) when over the Park or within ½ mile of its boundary;
- The aircraft types authorized for the commercial air tour includes: CE-172-K, CE-172-N, CE-206-TU206F, CE-206-U206A. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The air tour may operate between 10:00 AM and 3:00 PM local time any day of the year, except as provided by the quiet technology incentive. The NPS can establish temporary no-fly periods that apply to commercial air tours for special events or planned Park management.
- The operator is required to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted;
- When made available by Park staff, the operator/pilot may take at least one training course per year conducted by the NPS. The training will include Park information that the operator can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and the operator may meet once per year to discuss the implementation of this ATMP and any amendments or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training; and
- For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.75 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

The FAA and the NPS are both responsible for monitoring and oversight of the ATMP.

Section 4(f)

The study area for considering Section 4(f) resources for the ATMP consists of the commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour route (the total buffer is 10 miles wide). The study area for Section 4(f) resources also corresponds with the Area of Potential Effects (APE) used for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Section 106) for the Park. See **Attachment A** for a depiction of the Section 4(f) study area. Historic properties were identified as part of the Section 106 consultation process. Parks, recreational areas, and wildlife and waterfowl refuges were identified using public datasets from Federal, State, and local sources, which

² Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in median sea level (MSL) refers to the altitude of 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.

included the U.S. Forest Service. Each resource that intersected the study area (i.e., some portion of the property fell within the buffer around the route) was included in the Section 4(f) analysis.

Potential Use of Section 4(f) Resources

Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the ATMP. A constructive use of a Section 4(f) resource would occur if there was a substantial impairment of the resource to the degree that the activities, features, or attributes of the site that contribute to its significance or enjoyment are substantially diminished. This could occur as a result of both visual and noise impacts. The FAA evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts to determine if there was substantial impairment to Section 4(f) resources due to the ATMP that might result in a constructive use.

Noise Impacts Analysis

The FAA's noise evaluation is based on Day Night Average Sound Level Average Annual Day (Ldn or DNL), the cumulative noise energy exposure from aircraft. As part of the ATMP noise analysis, the NPS provided supplemental metrics to assess the impact of commercial air tours on visitor experience in quiet settings, including noise sensitive areas of Section 4(f) resources. The metrics and acoustical terminology considered for the Section 4(f) noise analysis are shown in the table below.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>The FAA's indicators of significant impacts are for an action that would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.³</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL and characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>

³ FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1

Maximum sound level, L_{\max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{\max} does not provide any context of frequency, duration, or timing of exposure.
Time Above 35 dBA ⁴	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility.⁵</p>

For aviation noise analyses under the National Environmental Policy Act (NEPA), the FAA determines the cumulative noise energy exposure of individuals resulting from aviation activities in terms of the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature, the FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

This provides a conservative evaluation of potential noise impacts to park resources, as well as Section 4(f) resources, under the ATMP, as the AAD will always reflect fewer commercial air tour operations than a peak day. The 90th percentile day was identified for representation of a peak day and derived from the busiest year of commercial air tour activity from 2017-2019, based on the total number of commercial air tour operations and total flight miles over the Park. It was then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air

⁴ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μ Pa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. Sound levels are reported in units of decibels (dB) (ANSI S1.1-1994, American National Standard Acoustical Terminology). A-weighting is applied to sound levels in order to account for the sensitivity of the human ear (ANSI S1.42-2001, Design Response of Weighting Networks for Acoustical Measurements). To approximate human hearing sensitivity, A-weighting discounts sounds below 1 kHz and above 6 kHz.

⁵ Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

tour activity at the Park. For the Park, the 90th percentile day was identified as a single (one) flight on the route authorized by the ATMP.

The noise was modeled for the acoustic indicators in the table above and 90th percentile day using the Federal Aviation Administration's Aviation Environmental Design Tool (AEDT) version 3d. The noise was modeled at points spaced every 0.25 nautical mile throughout the potentially affected area.

The noise analysis indicates that the ATMP would not result in any noise impacts that would be "significant," as described in the table above, or "reportable" under FAA's policy for the NEPA. Under the ATMP, there are no changes to the route or number of commercial air tours as compared with existing conditions. The resultant DNL due to the ATMP is expected to be below DNL 45 dBA and does not cause any reportable noise as there is no expected increase or change in noise from the ATMP.

Evaluation of the NPS supplemental metrics show that impacts to Section 4(f) resources would be similar to impacts currently occurring because the number of authorized flights under the ATMP would be the same as or less than the average number of flights from 2017 to 2019.

- On days when a commercial air tour will occur, noise levels above 35 dBA (an indicator used by NPS to assess the potential for degradation of the natural sound environment) will occur for less than five minutes a day in areas directly beneath and adjacent to the route.
- On days when a commercial air tour will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in several small areas directly beneath and adjacent to the route. Gifford Pinchot National Forest does not fall under the 52 dBA noise contour.

In addition, the ATMP limits the operation of commercial air tours to between 10:00 AM and 3:00 PM local time any day of the year, or from one hour after sunrise until one hour before sunset for operators that have converted to quiet technology aircraft, which provides times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. Collectively, these changes from existing operations and their effect on the current use of Section 4(f) resources will likely result in beneficial impacts to the Section 4(f) resources.

A review of the potential for vibrational impacts on historic buildings, parklands, and forests suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency is well above the natural frequency of these structures. Additionally, the vibration amplitude of these overflights at the altitudes prescribed in the ATMP will be well below recommended limits.

As a result, FAA concludes there would be no substantial impairment of Section 4(f) resources in the study area from noise-related and vibrational effects by the implementation of the ATMP. The ATMP would not result in significant or reportable increase in noise at the Park, and the ATMP will likely provide beneficial impacts to Section 4(f) resources. Likewise, vibrational impacts from air tour overflights would be minimal. This all supports the FAA's determination that implementation of the Proposed Action would not constitute a constructive use of Section 4(f) resources in the study area.

Visual Impacts Analysis

The ATMP would not substantially impair Section 4(f) resources within the study area because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP will remain the same. Recognizing that some types of Section 4(f) resources may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could substantially diminish the significance or enjoyment of Section 4(f) resources in the study area. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property, forest, or parkland would experience a visual effect from the ATMP. One's perspective of or viewshed from a historic property and natural areas is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography.

The ATMP limits the annual number of commercial air tours to one flight and maintains the same route as is currently flown under existing conditions. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than one commercial air tour per year, thus 364 days of the year are free of commercial air tours.

Visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and the route will remain the same as compared to existing conditions. The ATMP would not introduce visual elements that would diminish the integrity of a Section 4(f) resource.

Preliminary Finding

The FAA has preliminarily determined the ATMP would not substantially diminish the protected activities, features, or attributes of the Section 4(f) resources in the study area. There is no anticipated change in visual and noise impacts over existing conditions as a result of the ATMP. Moreover, the noise analysis indicated that there would be no significant impact or reportable increase from implementation of the ATMP. The ATMP would not result in substantial impairment of Section 4(f) resources; therefore, based on the analysis above, FAA intends to make a determination of no constructive use of Gifford Pinchot National Forest. We request that you review this information and respond with any concerns or need for further consultation on the FAA's proposed no substantial impairment finding within fourteen days of receiving this letter.

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,

ERIC M
ELMORE

Digitally signed by ERIC
M ELMORE
Date: 2022.06.07
00:57:07 -04'00'

Eric Elmore
Senior Policy Advisor
Office of Environment and Energy
Federal Aviation Administration

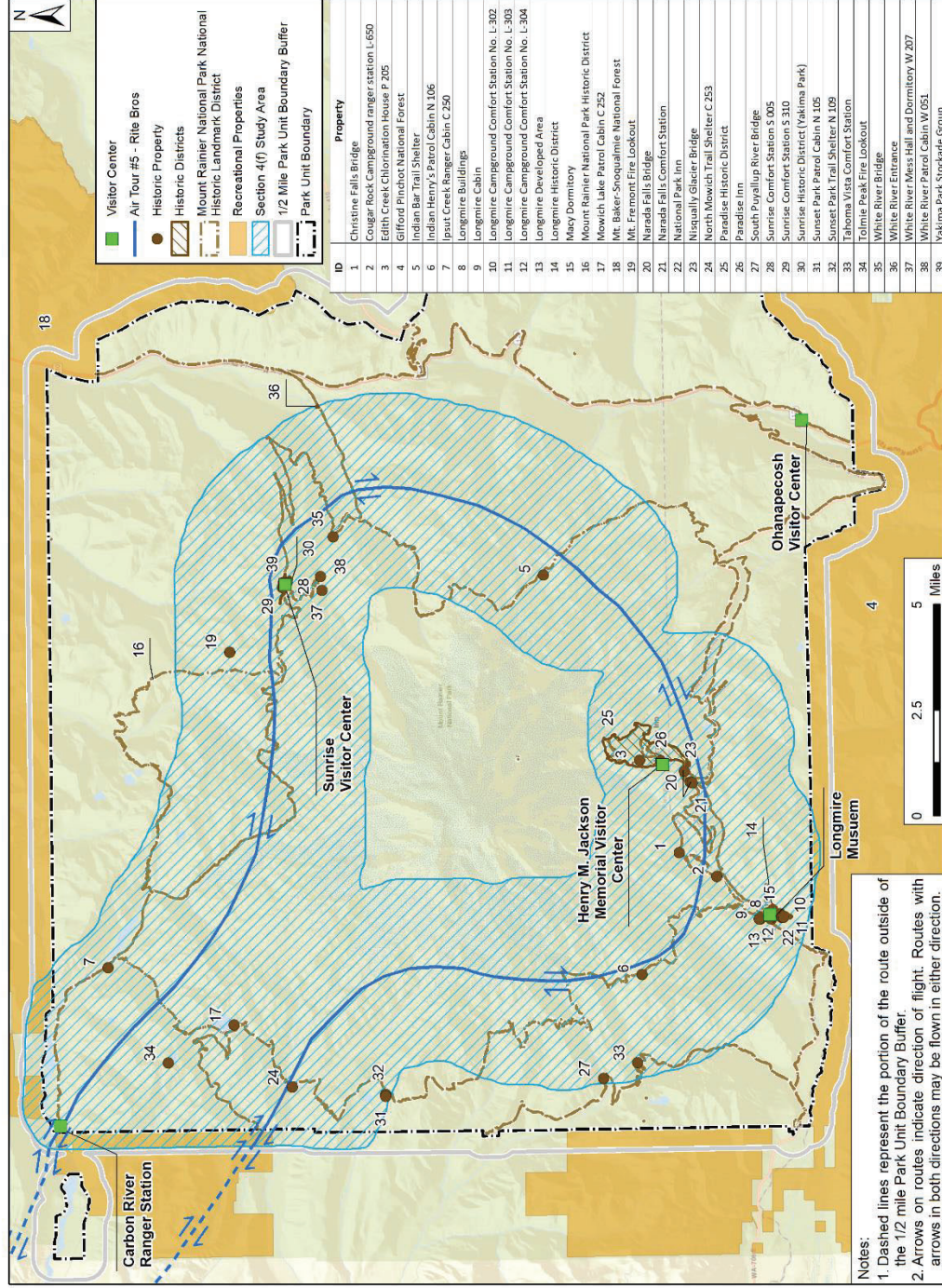
Attachments

- A. Map including proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

ATTACHMENT A

Map of Proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

Section 4(f) Study Area and Properties for ATMP at Mount Rainier National Park





United States
Department of
Agriculture

Forest
Service

Gifford Pinchot National Forest

501 E 5th Street #404
Vancouver, WA 98661
360-891-5001
Fax: 360-891-5045

File Code: 2100; 2700
Date: June 15, 2022

United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy
Attn: Eric Elmore

Dear Eric Elmore:

This letter serves as formal acknowledgement and response to FAA's letter related to the Air Tour Management Plan (ATMP) for the Mount Rainier National Park and potential impacts to the Gifford Pinchot National Forest.

Based on FAA's preliminary determinations, and further, with no constructive use of Gifford Pinchot National Forest, I do not have any concerns with the ATMP and do not require additional consultation.

Sincerely,

ERIC VEACH Digitally signed by ERIC VEACH
Date: 2022.06.15 13:11:28 -07'00'

ERIC VEACH
Forest Supervisor

cc: ATMPTeam@dot.gov





U.S. Department
of Transportation
**Federal Aviation
Administration**

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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 7, 2022

Re: Consultation under Section 4(f) of the U.S. Department of Transportation Act (49 U.S.C. § 303) for the development of an Air Tour Management Plan for Mount Rainier National Park

Jody Weil
U.S. Forest Service
2930 Wetmore Ave, Suite 3A
Everett, WA 98201

Dear Jody Weil:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Mount Rainier National Park (Park). The FAA is preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws, including Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The purpose of this letter is to coordinate with you on FAA's preliminary findings related to the ATMP's potential impacts to Mt. Baker-Snoqualmie National Forest, which is a protected property under Section 4(f).

Project Background and Purpose of the Action

NPATMA (Public Law 106-181, codified at 49 U.S.C. § 40128) of 2000, directs the agencies to develop ATMPs for commercial air tour operations over units of the national park system. A commercial air tour operation is defined as "a flight conducted for compensation or hire in a powered aircraft where the purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of a national park or over tribal lands, during which the aircraft flies below an altitude of 5,000 feet (ft.) above ground level (AGL) or less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary)." When NPATMA was passed in 2000, existing air tour operators were permitted to continue air tour operations in parks until an ATMP was completed. To facilitate this continued use, FAA issued Interim Operating Authority (IOA) to existing air tour operators. IOA set an annual limit of the number of flights per operator for each park. In 2012, NPATMA was amended by Congress to, among other things, require operators to report the number of flights conducted on a quarterly interval each year. On February 14, 2019, Public Employees for Environmental Responsibility and the Hawai'i Coalition Malama Pono filed a petition for writ of mandamus seeking to have the agencies complete air tour management plans or voluntary agreements at seven specified parks. In re Public Employees for Environmental Responsibility, et al., Case No. 19-1044 (D.C. Cir.). On May 1, 2020, the United States Court of Appeals for the District of Columbia Circuit granted the petition and

ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Mount Rainier National Park, into compliance with NPATMA within two years. The agencies submitted a plan to complete all ATMPs to the court on August 31, 2020.

Section 4(f) is applicable to historic sites and publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, State, or local significance that may be impacted by transportation programs or projects carried out by the U.S. Department of Transportation (USDOT) and its operating administrations, including the FAA. Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

“... the Secretary may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

The term “use” refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A physical use involves the physical occupation or alteration of a Section 4(f) resource, while constructive use occurs when a proposed action results in substantial impairment of a resource to the degree that the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished. Under the ATMP, potential impacts to Section 4(f) resources from commercial air tours may include noise from aircraft within the acoustic environment, as well as visual impacts.

Description of the Proposed Action

The FAA and the NPS (collectively, the agencies) are developing ATMPs for 24 parks,¹ including the Mount Rainier National Park. The ATMPs are being developed in accordance with NPATMA. Each ATMP is unique and therefore, each ATMP is being assessed individually under Section 4(f).

Commercial air tours have been operating intermittently over the Park for over 20 years. Since 2005, these air tours have been conducted pursuant to IOA issued by FAA in accordance with NPATMA. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than a limit of 34 air tours per year. The ATMP will replace IOA.

The FAA and the NPS have documented the existing conditions for commercial air tour operations at the Park. The FAA and the NPS consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is a single (one) air tour. The agencies decided to use a three-year average because it reflects the most accurate and reliable air tour conditions based on available

¹ On March 4, 2021, the NPS notified the FAA that an air tour management plan was necessary to protect Muir Woods National Monument’s resources and values and withdrew the exemption for the that park. The agencies are now proceeding with ATMPs for 24 parks instead of 23.

operator reporting, and accounts for variations across multiple years, excluding more recent years affected by the COVID 19 pandemic.²

The proposed action is implementing the ATMP at the Park. The following elements of the ATMP are included for the Park:

- A maximum of one commercial air tour is authorized per year on the route(s) depicted in **Attachment A**;
- The air tour will fly no lower than 3,000 ft. above ground level (AGL) when over the Park or within ½ mile of its boundary;
- The aircraft types authorized for the commercial air tour includes: CE-172-K, CE-172-N, CE-206-TU206F, CE-206-U206A. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The air tour may operate between 10:00 AM and 3:00 PM local time any day of the year, except as provided by the quiet technology incentive. The NPS can establish temporary no-fly periods that apply to commercial air tours for special events or planned Park management.
- The operator is required to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted;
- When made available by Park staff, the operator/pilot may take at least one training course per year conducted by the NPS. The training will include Park information that the operator can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and the operator may meet once per year to discuss the implementation of this ATMP and any amendments or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training; and
- For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.75 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

The FAA and the NPS are both responsible for monitoring and oversight of the ATMP.

Section 4(f)

The study area for considering Section 4(f) resources for the ATMP consists of the commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour route (the total buffer is 10 miles wide). The study area for Section 4(f) resources also corresponds with the Area of Potential Effects (APE) used for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Section 106) for the Park. See **Attachment A** for a depiction of the Section 4(f) study area. Historic properties were identified as part of the Section 106 consultation process. Parks, recreational areas, and wildlife and waterfowl refuges were identified using public datasets from Federal, State, and local sources, which

² Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in median sea level (MSL) refers to the altitude of 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.

included the U.S. Forest Service. Each resource that intersected the study area (i.e., some portion of the property fell within the buffer around the route) was included in the Section 4(f) analysis.

Potential Use of Section 4(f) Resources

Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the ATMP. A constructive use of a Section 4(f) resource would occur if there was a substantial impairment of the resource to the degree that the activities, features, or attributes of the site that contribute to its significance or enjoyment are substantially diminished. This could occur as a result of both visual and noise impacts. The FAA evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts to determine if there was substantial impairment to Section 4(f) resources due to the ATMP that might result in a constructive use.

Noise Impacts Analysis

The FAA's noise evaluation is based on Day Night Average Sound Level Average Annual Day (Ldn or DNL), the cumulative noise energy exposure from aircraft. As part of the ATMP noise analysis, the NPS provided supplemental metrics to assess the impact of commercial air tours on visitor experience in quiet settings, including noise sensitive areas of Section 4(f) resources. The metrics and acoustical terminology considered for the Section 4(f) noise analysis are shown in the table below.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>The FAA's indicators of significant impacts are for an action that would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.³</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL and characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>

³ FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1

Maximum sound level, L_{\max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{\max} does not provide any context of frequency, duration, or timing of exposure.
Time Above 35 dBA ⁴	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility.⁵</p>

For aviation noise analyses under the National Environmental Policy Act (NEPA), the FAA determines the cumulative noise energy exposure of individuals resulting from aviation activities in terms of the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature, the FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

This provides a conservative evaluation of potential noise impacts to park resources, as well as Section 4(f) resources, under the ATMP, as the AAD will always reflect fewer commercial air tour operations than a peak day. The 90th percentile day was identified for representation of a peak day and derived from the busiest year of commercial air tour activity from 2017-2019, based on the total number of commercial air tour operations and total flight miles over the Park. It was then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air

⁴ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μ Pa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. Sound levels are reported in units of decibels (dB) (ANSI S1.1-1994, American National Standard Acoustical Terminology). A-weighting is applied to sound levels in order to account for the sensitivity of the human ear (ANSI S1.42-2001, Design Response of Weighting Networks for Acoustical Measurements). To approximate human hearing sensitivity, A-weighting discounts sounds below 1 kHz and above 6 kHz.

⁵ Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

tour activity at the Park. For the Park, the 90th percentile day was identified as a single (one) flight on the route authorized by the ATMP.

The noise was modeled for the acoustic indicators in the table above and 90th percentile day using the Federal Aviation Administration's Aviation Environmental Design Tool (AEDT) version 3d. The noise was modeled at points spaced every 0.25 nautical mile throughout the potentially affected area.

The noise analysis indicates that the ATMP would not result in any noise impacts that would be "significant," as described in the table above, or "reportable" under FAA's policy for the NEPA. Under the ATMP, there are no changes to the route or number of commercial air tours as compared with existing conditions. The resultant DNL due to the ATMP is expected to be below DNL 45 dBA and does not cause any reportable noise as there is no expected increase or change in noise from the ATMP.

Evaluation of the NPS supplemental metrics show that impacts to Section 4(f) resources would be similar to impacts currently occurring because the number of authorized flights under the ATMP would be the same as or less than the average number of flights from 2017 to 2019.

- On days when a commercial air tour will occur, noise levels above 35 dBA (an indicator used by NPS to assess the potential for degradation of the natural sound environment) will occur for less than five minutes a day in areas directly beneath and adjacent to the route.
- On days when a commercial air tour will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in several small areas directly beneath and adjacent to the route. Mt. Baker-Snoqualmie National Forest does not fall under the 52 dBA noise contour.

In addition, the ATMP limits the operation of commercial air tours to between 10:00 AM and 3:00 PM local time any day of the year, or from one hour after sunrise until one hour before sunset for operators that have converted to quiet technology aircraft, which provides times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. Collectively, these changes from existing operations and their effect on the current use of Section 4(f) resources will likely result in beneficial impacts to the Section 4(f) resources.

A review of the potential for vibrational impacts on historic buildings, parklands, and forests suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency is well above the natural frequency of these structures. Additionally, the vibration amplitude of these overflights at the altitudes prescribed in the ATMP will be well below recommended limits.

As a result, FAA concludes there would be no substantial impairment of Section 4(f) resources in the study area from noise-related and vibrational effects by the implementation of the ATMP. The ATMP would not result in significant or reportable increase in noise at the Park, and the ATMP will likely provide beneficial impacts to Section 4(f) resources. Likewise, vibrational impacts from air tour overflights would be minimal. This all supports the FAA's determination that implementation of the Proposed Action would not constitute a constructive use of Section 4(f) resources in the study area.

Visual Impacts Analysis

The ATMP would not substantially impair Section 4(f) resources within the study area because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP will remain the same. Recognizing that some types of Section 4(f) resources may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could substantially diminish the significance or enjoyment of Section 4(f) resources in the study area. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property, forest, or parkland would experience a visual effect from the ATMP. One's perspective of or viewshed from a historic property and natural areas is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography.

The ATMP limits the annual number of commercial air tours to one flight and maintains the same route as is currently flown under existing conditions. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than one commercial air tour per year, thus 364 days of the year are free of commercial air tours.

Visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and the route will remain the same as compared to existing conditions. The ATMP would not introduce visual elements that would diminish the integrity of a Section 4(f) resource.

Preliminary Finding

The FAA has preliminarily determined the ATMP would not substantially diminish the protected activities, features, or attributes of the Section 4(f) resources in the study area. There is no anticipated change in visual and noise impacts over existing conditions as a result of the ATMP. Moreover, the noise analysis indicated that there would be no significant impact or reportable increase from implementation of the ATMP. The ATMP would not result in substantial impairment of Section 4(f) resources; therefore, based on the analysis above, FAA intends to make a determination of no constructive use of Mt. Baker-Snoqualmie National Forest. We request that you review this information and respond with any concerns or need for further consultation on the FAA's proposed no substantial impairment finding within fourteen days of receiving this letter.

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,

ERIC M
ELMORE

Digitally signed by ERIC
M ELMORE
Date: 2022.06.07
00:57:46 -04'00'

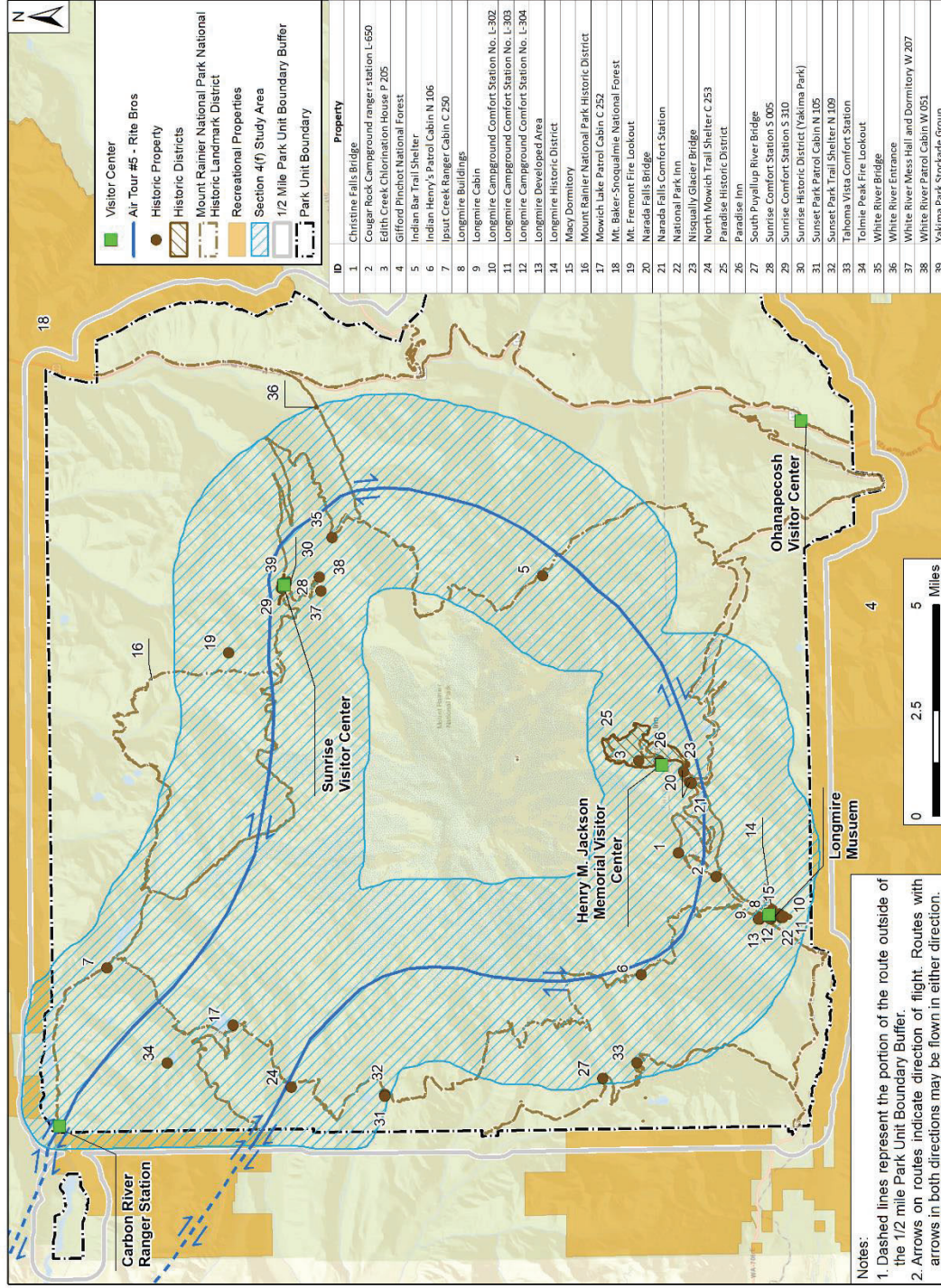
Eric Elmore
Senior Policy Advisor
Office of Environment and Energy
Federal Aviation Administration

Attachments

- A. Map including proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

ATTACHMENT A

Map of Proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources
Section 4(f) Study Area and Properties for ATMP at Mount Rainier National Park



From: Weil, Jody - FS <Jody.Weil@usda.gov>
Sent: Thursday, June 16, 2022 3:20 PM
To: ATMPTeam
Cc: Elmore, Eric <FAA>
Subject: RE: Section 4(f) Consultation – Air Tours at Mount Rainier National Park - Mt. Baker National Forest

Follow Up Flag: Follow up
Flag Status: Flagged

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the request for input.

We agree with the conclusions that there will not be significant impacts to forest resources associated with this proposal. The number of flights are minimal, project footprint only arbitrarily overlaps with the forest, and the elevation is such that we would not anticipate concerns for any other resources.

No need for additional consultation.

-Jody Weil

From: ATMPTeam <ATMPTeam@dot.gov>
Sent: Wednesday, June 15, 2022 5:02 AM
To: Weil, Jody - FS <Jody.Weil@usda.gov>
Cc: Elmore, Eric <FAA> <eric.elmore@faa.gov>; ATMPTeam <ATMPTeam@dot.gov>
Subject: RE: Section 4(f) Consultation – Air Tours at Mount Rainier National Park - Mt. Baker National Forest

Dear Jody Weil,

This email serves as a reminder to please provide any feedback on the Federal Aviation Administration's preliminary findings in accordance with Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)) related to potential impacts to Mt. Baker National Forest, which is a protected property under Section 4(f), by June 21st (see email below).

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

From: ATMPTeam <ATMPTeam@dot.gov>
Sent: Tuesday, June 7, 2022 2:40 PM
To: Jody.Weil@usda.gov
Cc: Elmore, Eric <FAA> <eric.elmore@faa.gov>; ATMPTeam <ATMPTeam@dot.gov>
Subject: Section 4(f) Consultation – Air Tours at Mount Rainier National Park - Mt. Baker National Forest

Dear Jody Weil,

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Olympic National Park (Park). The FAA is preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws, including Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The purpose of the attached letter is to coordinate with you on FAA's preliminary findings related to the ATMP's potential impacts to Mt. Baker National Forest, which is a protected property under Section 4(f).

We request that you review the attached letter and respond with any concerns or need for further consultation on the FAA's proposed no substantial impairment finding within fourteen days of receiving this email.

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

APPENDIX E

Mount Rainier National Park Air Tour
Management Plan Section 7 Endangered
Species Act No Effect Determination
(No Effect Determination Memorandum)



United States Department of the Interior
NATIONAL PARK SERVICE
Natural Resource Stewardship & Science
Natural Sounds and Night Skies Division



U.S. Department
of Transportation
**Federal Aviation
Administration**

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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 29, 2022

**Re: Mount Rainier National Park Air Tour Management Plan
Section 7 Endangered Species Act No Effect Determination**

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS) (collectively, the agencies), is developing an Air Tour Management Plan (ATMP) for Mount Rainier National Park (the Park). The agencies are preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act and other applicable laws. This memorandum documents the agencies' No Effect determination associated with the proposed action for the purpose of compliance with Section 7 of the Endangered Species Act (the Act).

Action Area and Description of Proposed Action

The action area includes the Park and the land within a ½-mile boundary from the Park depicted in Figure 1. This area encompasses all of the effects of the proposed action. The ATMP applies to all commercial air tours over the Park and commercial air tours within ½ mile outside the boundary of the Park. A commercial air tour subject to the ATMP is any flight, conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, during which the aircraft flies:

- (1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½-mile outside the Park boundary).

The proposed action is implementation of an ATMP for the Park which establishes the following conditions for the management of commercial air tour operations.

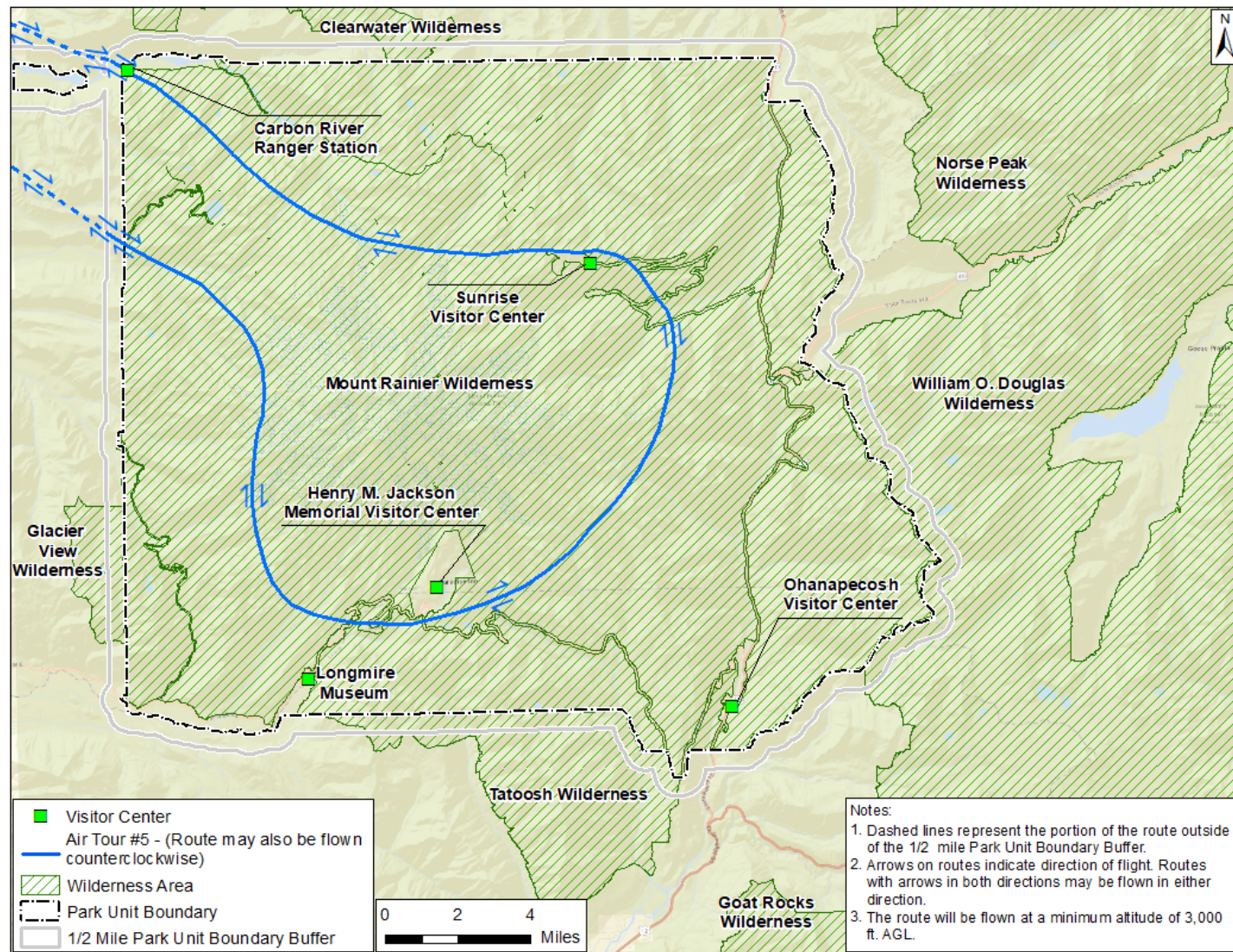


Figure 1 Commercial Air Tour Route at the Park

Annual Commercial Air Tours Authorized

The ATMP authorizes one commercial air tour per year. The rest of the year would be free of air tours and on the day that the air tour occurs, there would be only one air tour.

Commercial Air Tour Routes and Altitudes

The ATMP implements the designated route and minimum altitude above ground level (AGL) that the commercial air tour is required to fly (See Figure 1). Within the Park, the commercial air tour is required to fly no lower than 3,000 ft. above ground level (AGL).

Day/Time

Under the proposed action, the commercial air tour may operate between 10:00 AM and 3:00 PM local time any day of the year. This proposed window of operation would provide additional protection to wildlife during critical dusk/dawn periods that are prime foraging, mating, and communication times of the day.

Required Reporting

As part of the ATMP, the commercial air tour operator is required to equip all aircraft used for commercial air tours with flight monitoring technology and to submit these tracking data to the agencies. The operator is also required to submit semi-annual reports confirming the number of commercial air tours conducted over the Park and implementation of the ATMP flight parameters.

The requirements to equip aircraft with flight monitoring technology, use flight monitoring technology during all air tours under this ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports are necessary to enable the agencies to appropriately monitor operations and ensure compliance with the ATMP.

Quiet Technology Incentives

This ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours from October 1 through March 14 beginning one hour after sunrise or ending one hour before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA)¹, on all days that flights are authorized.

From March 15 through September 30 this incentive will not be available due to protections necessary for northern spotted owl and marbled murrelet during the nesting season.

Listed Species Evaluated for Effects

The U.S. Fish and Wildlife Service's Information Planning and Consultation (IPaC) tool was used to determine the potential for any federal threatened and endangered species or designated critical habitat that may occur within this area.

¹ Sunrise and sunset data is available from the NOAA Solar Calculator, <https://www.esrl.noaa.gov/gmd/grad/solcalc/>

The agencies analyzed potential impacts for all listed species with suitable habitat within the park with a focus on for two species. The marbled murrelet and northern spotted owl are both noise sensitive listed species associated with the Park. Northern spotted owls and marbled murrelets are likely to be disrupted by loud noises that occur in close proximity to an active nest or when the activity occurs within the line-of-sight of the nesting birds. Sound generating activities located within close proximity of occupied nest sites or unsurveyed suitable habitat during the early breeding and nesting season have the potential to adversely affect marbled murrelets and northern spotted owls.²

The nesting season for northern spotted owls is from March 15 to September 30. Marbled murrelet nesting season occurs from April 1 to September 23. The Park has high priority habitat and a record of northern spotted owl and marbled murrelet presence and nesting indicators. The Park contains approximately 80,000 acres of suitable spotted owl habitat, which extends up to an elevation of about 4,800 feet. Marbled murrelet habitat includes suitable forested areas within 55 miles of coastal waters. There are approximately 26,500 acres of potential murrelet nesting habitat in the park extending up to an elevation of about 3,800 feet. During the nesting season, murrelets make daily flights from coastal waters to their inland nests to feed nestlings. The period during dawn and dusk is a peak activity time for feeding exchanges between murrelets and their nesting young (including approximately two-hours after sunrise and two hours before sunset).

The minimum altitude of 3,000 ft. AGL is consistent with the avoidance recommendations (USFWS 2013) for marbled murrelets and northern spotted owls (no closer than 0.25 mile/1,320 feet by small fixed-wing aircraft). Based on the Noise Technical Analysis conducted by the agencies, the maximum noise levels (see Figure 2) would not exceed 55 decibels (dB) at 3,000 ft. AGL at any given point along the route when the air tour occurs, which is below the sound-only injury threshold of 92 dB for northern spotted owls (USFWS 2013). In addition, the measure which requires commercial air tours only be conducted between 10:00 AM and 3:00 PM, further avoids potential disruption to marbled murrelets during peak activity periods for feeding and incubation exchanges during the nesting season (April 1 through September 23). These mitigations, applied to the single annual flight authorized under the ATMP, will result in the single authorized air tour having no effect on these species.

² U.S. Fish and Wildlife Service (2020). Biological Opinion for Programmatic Forest Management Activities on the Olympic National Forest, 2020-2030. USFWS Reference: 13410-2009-F-0388-R001

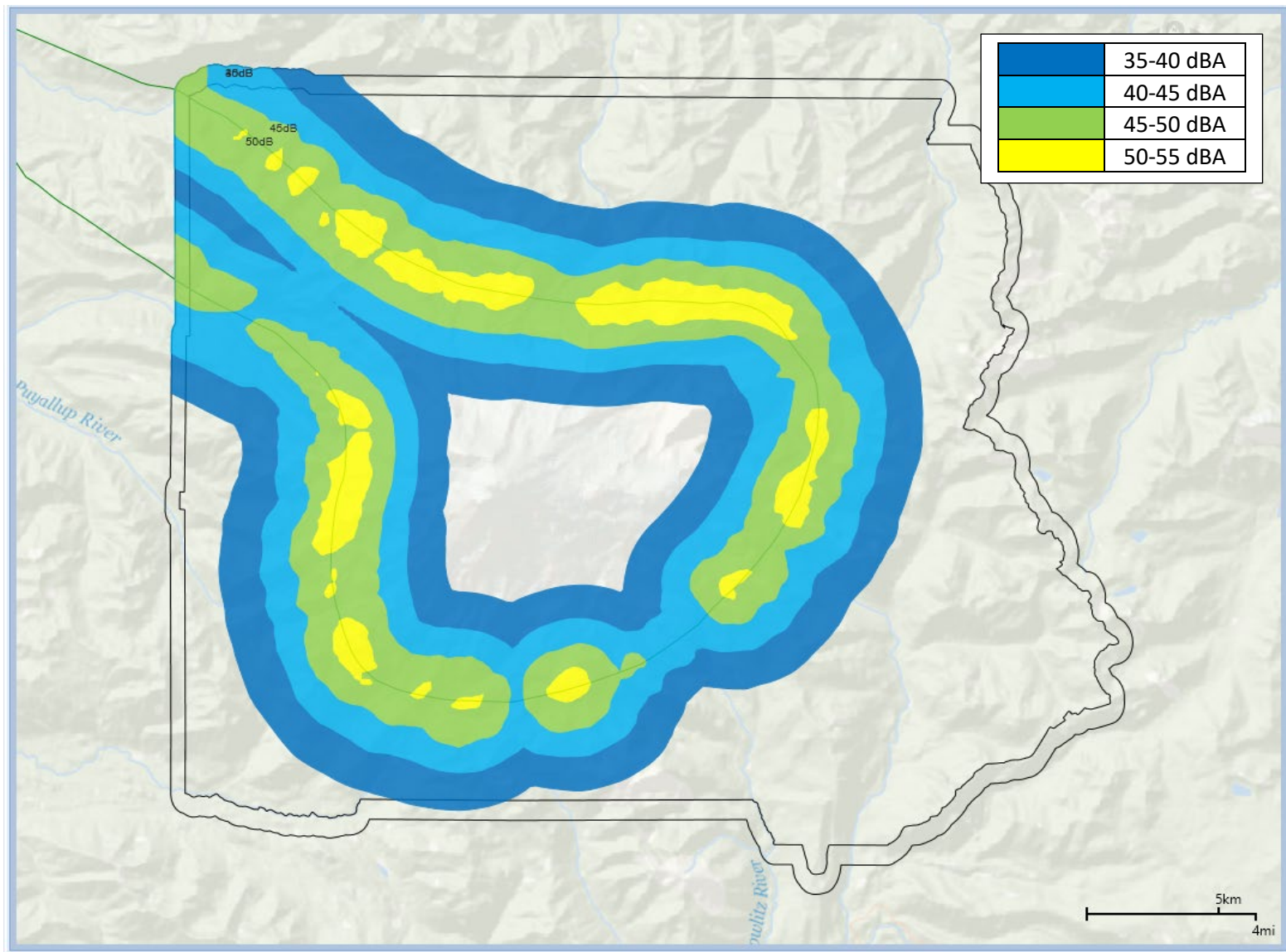


Figure 2 Maximum Sound Levels at the Park

Table 1 Listed Species in the Action Area with No Effect Determination

Birds Common Name	Birds Scientific Name	Birds Status (Federal)	Birds Critical Habitat (Y or N)	Birds Occurrence in Park³
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	Threatened	Y	Present
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	Threatened	Y	Present
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Threatened	N	Unknown
Conifers and Cycads Common Name	Conifers and Cycads Scientific Name	Conifers and Cycads Status (Federal)	Conifers and Cycads Critical Habitat (Y or N)	Conifers and Cycads Occurrence in Park³
Whitebark Pine	<i>Pinus albicaulis</i>	Proposed threatened	N	Present
Fishes Common Name	Fishes Scientific Name	Fishes Status (Federal)	Fishes Critical Habitat (Y or N)	Fishes Occurrence in Park³
Bull Trout	<i>Salvelinus confluentus</i>	Threatened	Y	Present
Pugest Sound Chinook salmon ⁴	<i>Oncorhynchus tshawytscha</i>	Threatened	N	Present
Steelhead trout ⁴	<i>Oncorhynchus mykiss</i>	Threatened and Endangered ⁵	N	Unknown
Mammals Common Name	Mammals Scientific Name	Mammals Status (Federal)	Mammals Critical Habitat (Y or N)	Mammals Occurrence in Park³
Canada Lynx	<i>Lynx canadensis</i>	Threatened	N	Unknown
North American Wolverine	<i>Gulo gulo luscus</i>	Proposed Threatened	N	Unknown
Gray Wolf	<i>Canis lupus</i>	Endangered	Y	Unknown
Insects Common Name	Insects Scientific Name	Insects Status (Federal)	Insects Critical Habitat (Y or N)	Insects Occurrence in Park³
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	N	Unknown

³ Based on NPS species list, <https://irma.nps.gov/NPSpecies/Search/SpeciesList>

⁴ Covered under the Marine Mammal Protection Act (MMPA)

⁵ According to the Fisheries NOAA Species Directory, one distinct population segment is listed as endangered under the Endangered Species Act, and 10 DPS and 1 experimental non-essential population are listed as threatened. <https://www.fisheries.noaa.gov/species/steelhead-trout>

Conclusion

No effect means that there would be no consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

While an individual aircraft flying on a designated route has the potential to generate noise of short duration and low intensity, the duration of disturbance to wildlife associated with the noise from a commercial air tour would be temporary and likely limited to no more than a few minutes when commercial air tours occur. Only one commercial air tour would occur annually, with no flights occurring on most days during the year. The ATMP also implements a fixed route and sets a minimum altitude. Therefore, the ATMP results in no meaningful, measurable or noticeable impact on the species listed in Table 1. In accordance with Section 7 of the ESA, the agencies have determined that the proposed project would have No Effect on threatened and endangered species or their critical habitats.

APPENDIX F

National Historic Preservation Act: Section 106 Compliance Documentation



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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

April 11, 2022

Re: Section 106 Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Mount Rainier National Park (Project #: 2021-03-1892)

Dr. Allyson Brooks
State Historic Preservation Officer
Department of Archaeology and Historic Preservation
11100 South Capitol Way, Suite 30
Olympia, WA 98501

Dear Dr. Brooks:

Introduction

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS), seeks to continue consultation with your office under Section 106 of the National Historic Preservation Act (NHPA) for the development of an Air Tour Management Plan (ATMP) for Mount Rainier National Park (Park). At this time, the FAA requests your concurrence with its proposed finding that the undertaking would have no adverse effect on historic properties, in accordance with 36 CFR 800.5(c). On this date, we are also notifying all consulting parties of this proposed finding and providing the documentation below for their review.

In accordance with the requirements of 36 CFR 800.11(e), this letter describes the undertaking, including: changes that have occurred since the draft ATMP was issued to the public; the Area of Potential Effects (APE); a description of steps taken to identify historic properties; a description of affected historic properties in the APE and the characteristics that qualify them for the National Register of Historic Places (NRHP); and an explanation of why the criteria of adverse effect are inapplicable. This letter also describes the Section 106 consultation process and public involvement for this undertaking.

The FAA initiated Section 106 consultation with your office by letter dated March 29, 2021. In a follow-up letter dated July 30, 2021, we described the proposed undertaking in more detail, proposed a preliminary APE, and provided our initial list of historic properties identified within the APE. FAA conducted additional identification efforts and provided a revised list of historic properties in our most recent correspondence dated January 27, 2022. Similar letters were sent to all consulting parties; Section 106 consultation with tribes is described below. Public involvement for this undertaking was integrated with the National Parks Air Tour Management Act (NPATMA) process. We issued the draft

ATMP on July 29, 2021, in the Federal Register. The public comment period on the draft ATMP was July 29, 2021, through August 28, 2021. A public meeting was held August 16, 2021.

The FAA and NPS received public comments about the potential noise and visual effects from commercial air tours. Several comments generally encouraged the agencies to comply with Section 106 of the NHPA. However, none of those commenters expressed specific concerns regarding effects to historic properties.

The FAA and the NPS received comments from the public related to tribal concerns. One commenter noted support for a provision in the ATMP and suggested that the NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management. The commenter requested that the same language pertaining to tribal ceremonies or events should be included in all ATMPs, and ATMPs should be expanded to include tribal lands and sacred sites. Another commenter questioned how the ATMP would affect traditional uses by the Nisqually Indian Tribe, the Puyallup Tribe of Indians, the Squaxin Island Tribe, the Muckleshoot Indian Tribe, the Confederated Tribes and Bands of the Yakama Nation, and the Cowlitz Indian Tribe. The FAA and NPS have established no-fly periods that apply to air tours for special events or planned Park management within the ATMP. The FAA and NPS have also conducted additional tribal outreach in an attempt to engage with tribes interested in participating in Section 106 consultation for the undertaking. These additional efforts are described within this letter.

Description of the Undertaking

The FAA and the NPS are developing ATMPs for 24 parks, including Mount Rainier National Park. The ATMPs are being developed in accordance with NPATMA. Each ATMP is unique and therefore, each ATMP is being assessed individually under Section 106.

Commercial air tours have been operating intermittently over Mount Rainier National Park for over 20 years. Since 2005, these air tours have been conducted pursuant to interim operating authority (IOA) issued by FAA in accordance with NPATMA. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than an annual limit of 34 air tours per year. The ATMP will replace IOA.

The FAA and the NPS have documented the existing conditions for commercial air tour operations at the Park. The FAA and the NPS consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is one air tour. The agencies decided to use a three-year average because it reflects the most accurate and reliable air tour conditions based on available operator reporting, and accounts for variations across multiple years, excluding more recent years affected by the COVID 19 pandemic. Commercial air tours currently are conducted using Cessna models 172-K, 172-N, TU206F, and U206A, which are all fixed-wing aircraft. Commercial air tours are conducted on the route shown in **Attachment A**. Commercial air tour operations presently fly no lower than 3,000 feet (ft.) above ground level (AGL).¹

¹ Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in median sea level (MSL) refers to the altitude of 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.

The undertaking for purposes of Section 106 is implementing the ATMP that applies to all commercial air tours over the Park and within ½ mile outside the boundary of the Park. A commercial air tour subject to the ATMP is any flight conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, or within ½ mile of the Park boundary, during which the aircraft flies:

- (1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½ mile outside the Park boundary).

The undertaking was previously described in detail in our Section 106 consultation letter dated July 30, 2021. The following elements of the ATMP have remained unchanged since the issuance of the draft ATMP to the public.

- A maximum of one commercial air tour is authorized per year on the route depicted in **Attachment A**;
- Air tours will fly no lower than 3,000 ft. above ground level (AGL) when over the Park or within ½ mile of its boundary;
- The aircraft type authorized for the commercial air tour includes Cessna models 172-K, 172-N, TU206F, and U206A. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The air tour may operate between 10:00 AM and 3:00 PM local time, except as provided by the quiet technology incentive. The air tour may be conducted any day of the year;
- The operator is required to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted;
- When made available by Park staff, the operator/pilot may take at least one training course per year conducted by the NPS. The training will include Park information that the operator can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients;
- At the request of either of the agencies, the Park staff, the FAA Seattle Flight Standards District Office (FSDO), and the operator may meet once per year to discuss the implementation of this ATMP and any amendments or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training;
- For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.75² and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position; and

The FAA and the NPS are both responsible for monitoring and oversight of the ATMP. As a result of comments received from participating tribes and other consulting parties through the Section 106

² The in-flight communication frequency was changed from 122.8 to 122.75 in response to a comment that frequency 122.750 would be more appropriate for approved fixed wing air to air communication. However, this change is not the type of change that could affect historic properties.

process and from members of the public submitted through the draft ATMP public review, the following changes to the undertaking at the Park have been made:

A new subsection was added in response to questions and comments regarding the transferability of air tour allocations, or the assumption of allocations of commercial air tours by a successor corporation. The added language makes clear that annual allocations of air tours are not transferrable between operators, though they may be assumed by a successor purchaser. Conditions are included to ensure that the agencies have sufficient time to review the transaction to avoid an interruption of service and the successor operator must acknowledge and agree to comply with the ATMP. This language is excerpted below:

- Annual operations under the ATMP are non-transferable. An allocation of annual operations may be assumed by a successor purchaser that acquires an entity holding allocations under this ATMP in its entirety. In such case the prospective purchaser shall notify the FAA and the NPS of its intention to purchase the operator at the earliest possible opportunity to avoid any potential interruption in the authority to conduct commercial air tours under the ATMP. This notification must include a certification that the prospective purchase has read and will comply with the terms and conditions in the ATMP. The FAA will consult with the NPS before issuing new or modified operations specifications or taking other formal steps to memorialize the change in ownership.

The agencies revised some of the language related to the quiet technology incentive, but not the incentive itself, in order to clarify that applications for the incentive will be analyzed on a case-by-case basis. The revised language is below:

- The ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft may request to be allowed to conduct air tours from October 1 through March 14 beginning one hour after sunrise until one hour before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA)³, on all days flights are authorized. From March 15 through September 30 this incentive will not be available due to protections necessary for northern spotted owl and marbled murrelet. Because aviation technology continues to evolve and advance and FAA updates its noise certification standards periodically, the aircraft eligible for this incentive will be analyzed on a case-by-case basis at the time of the operator's request to be considered for this incentive. The NPS will periodically monitor Park conditions and coordinate with FAA to assess the effectiveness of this incentive. If implementation of this incentive results in unanticipated effects on Park resources or visitor experience, further agency action may be required to ensure the protection of Park resources and visitor experience;

The draft ATMP was edited to make clear that there are no tribal lands within the Park boundary, or within ½ mile of the Park boundary, and that the route designated in the ATMP does not fly over tribal lands. Minor edits were made to clearly state in various subsections that the ATMP applies not only to the area within the Park boundary, but also to areas ½ mile outside the Park boundary.

³Sunrise and sunset data is available from the NOAA Solar Calculator, <https://www.esrl.noaa.gov/gmd/grad/solcalc/>

The agencies also clarified that a plan amendment, and additional environmental review, would be required in order to increase the number of authorized commercial air tours per year above the one authorized in the ATMP. The revised language is below:

- Increases to the total number of air tours authorized per year under the ATMP resulting from accommodation of a new entrant application or a request by an existing operator will require an amendment to the ATMP and additional environmental review. Notice of all amendments to this ATMP will be published in the Federal Register for notice and comment.

Area of Potential Effects

The APE for the undertaking was proposed in the Section 106 consultation letter dated July 30, 2021. The undertaking does not require land acquisition, construction, or ground disturbance. In establishing the APE, the FAA sought to include areas where any historic property present could be affected by noise from or sight of commercial air tours over the Park or adjacent tribal lands. The FAA considered the number and altitude of commercial air tours over historic properties in these areas to further assess the potential for visual effects and any incremental change in noise levels that may result in alteration of the characteristics of historic properties qualifying them as eligible for listing in the NRHP.

The APE for the undertaking comprises the commercial air tour route over the Park and a ½ mile outside the boundary of the Park, plus an additional buffer of two miles extending from either side of the centerline of the air tour route, as depicted in **Attachment A** below. The FAA requested comments from all consulting parties, including federally recognized tribes. The FAA has not received any comments regarding the APE. The changes to the undertaking described above have the potential to cause alterations in the character or use of historic properties in a manner that is commensurate with the elements of the undertaking that have been consistent throughout Section 106 consultation. As a result, the delineated APE adequately captures potential effects from the undertaking on historic properties and is unchanged.

Identification of Historic Properties

Preliminary identification of historic properties relied upon data submitted by NPS park staff about known historic properties within the Park. Section 106 consultation efforts involved outreach to tribes, the Washington State Historic Preservation Office, operators, and other consulting parties including local governments and neighboring federal land managers. Public comments submitted as part of the draft ATMP public review process also informed identification efforts.

The FAA, in cooperation with the NPS, coordinated with park staff to identify known historic properties located within the APE. The FAA also accessed WISAARD on December 14, 2021, to collect GIS data for previously-identified properties both inside and outside the Park and consulted with the tribes listed in **Attachment B** regarding the identification of any other previously unidentified historic properties that may also be located within the APE.

As the undertaking would not result in physical effects, the identification effort focused on identifying properties where setting and feeling are characteristics contributing to a property's NRHP eligibility, as they are the type of historic properties most sensitive to the effects of aircraft overflights. These may include isolated properties where a cultural landscape is part of the property's significance, rural historic districts, outdoor spaces designed for meditation or contemplation, and certain traditional cultural properties (TCPs). In so doing, the FAA has taken into consideration the views of consulting parties, past planning, research and studies, the magnitude and nature of the undertaking, the degree of Federal

involvement, the nature and extent of potential effects on historic properties, and the likely nature of historic properties within the APE in accordance with 36 CFR 800.4(b)(1).

In accordance with 36 CFR 800.4, the FAA has made a reasonable and good faith effort to identify historic properties within the APE. Those efforts resulted in identification of 37 historic properties within the APE listed in **Attachment C** and shown in the APE map provided in **Attachment A**. There have been no changes to the list of historic properties identified in the APE since the FAA's January 27, 2022 Section 106 consultation letter.

Summary of Section 106 Consultation with Tribes

The FAA contacted nine federally recognized tribes via letter on March 26, 2021, inviting them to participate in Section 106 consultations and requesting their expertise regarding historic properties, including TCPs that may be located within the APE. On July 30, 2021, the FAA sent the identified federally recognized tribes a Section 106 consultation letter describing the proposed undertaking in greater detail in which we proposed an APE and provided the results of our preliminary identification of historic properties.

On December 1, 2021, the FAA sent follow-up emails to the federally recognized tribes that did not respond to our prior Section 106 consultation requests, once again inviting them to participate in Section 106 consultations. On December 14, 2021, the FAA followed up with phone calls to those tribes that did not respond to our prior Section 106 consultation requests. The FAA received responses from the Cowlitz Indian Tribe, Nisqually Indian Tribe, Confederated Tribes and Bands of the Yakama Nation, and Squaxin Island Tribe expressing interest in participating in the Section 106 consultation process. The FAA also received a response from the Confederated Tribes of the Chehalis Reservation opting out of additional Section 106 consultation. Tribes and all consulting parties will continue to receive Section 106 consultation letters unless they specifically request to opt out of Section 106 consultation for the undertaking. The tribes whom the FAA contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment B**. None of the tribes or other consulting parties have identified historic properties including TCPs in response to the FAA's March and July 2021, and January 2022 Section 106 consultation letters.

Assessment of Effects

The undertaking could have an effect on a historic property if it alters the characteristics that qualify the property for eligibility for listing or inclusion in the NRHP. Effects are considered adverse if they diminish the integrity of a property's elements that contribute to its significance. The undertaking does not include land acquisition, construction, or ground disturbance and will not result in physical effects to historic properties. The FAA, in coordination with the NPS, focused the assessment of effects on the potential for adverse effects from the introduction of audible or visual elements that could diminish the integrity of the property's significant historic features.

Assessment of Noise Effects

The undertaking would not alter the characteristics of historic properties within the APE because there would be no measurable change in audible effects from existing conditions. To assess the potential for the introduction of audible elements, including changes in the character of aircraft noise, the FAA and

NPS considered whether there would be a potential change in the number, frequency, or routes of commercial air tours, as well as the type of aircraft used to conduct those tours.

Since the ATMP authorizes the same number of annual flights as the average number of flights from 2017-2019 and maintains the same route as is currently flown under existing conditions, overall noise impacts associated with commercial air tours over the Park are not expected to measurably change in either character or decibel level.

Likewise, the ATMP authorizes the use of the Cessna models 172-K, 172-N, TU206F, and U206A fixed-wing aircraft, the same aircraft currently in use. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced. The ATMP also requires commercial air tour altitudes to remain the same, therefore noise levels at sites directly below the commercial air tour route will remain unchanged.

For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the agencies conducted a noise analysis using the following metrics:

- Time above 35 dBA (minutes)
- Time above 52 dBA (minutes)
- Equivalent Sound Level or LAeq (over 12 hours)
- Day-night Average Sound Level (DNL) or Ldn (over 24 hours)
- Maximum sound level or Lmax

DNL is FAA's primary noise metric. **Attachment D** provides further information about the noise metrics and presents the noise contours (i.e., graphical illustration depicting noise exposure) from the modeling.

The noise analysis indicates that the undertaking would not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for NEPA.⁴ The resultant DNL due to the undertaking is expected to be well below 65 dBA, FAA's significance threshold. The average sound levels for LAeq are below 35 dBA for the Proposed Action modeled at the Park; DNL is arithmetically 3 dBA lower than LAeq as there are no nighttime events at the Park. The resultant DNL similarly does not cause any reportable noise impacts as there is no expected increase or change in noise from the undertaking.

Attachment D presents noise contours for the Time Above 35 dBA (the amount of time in minutes that aircraft sound levels are above 35 dBA). Noise related to commercial air tours is modeled to be greater than 35 dBA for less than 5 minutes a day within the Park. There are no historic properties where the duration above 35 dBA is between 5 and 10 minutes. Because noise is modeled using conservative assumptions (see **Attachment D**) and implementing the ATMP would result in limiting the number consistent with flights and using the same route and aircraft, audible impacts will be similar to existing

⁴ Under FAA policy, an increase in the Day-Night Average Sound Level (DNL) of 1.5 dBA or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dBA noise exposure level, or that will be exposed at or above the DNL 65 dBA level due to a DNL 1.5 dBA or greater increase, is significant. FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1. Noise increases are "reportable" if the DNL increases by 5 dB or more within areas exposed to DNL 45-60 dB, or by 3 dB or more within areas exposed to DNL 60-65 dB. FAA Order 1050.1F, Appendix B, section B-1.4.

conditions or decrease under the ATMP. Because the ATMP would not change the noise environment it would not introduce audible elements that would alter the characteristics of any historic property that qualifies it for inclusion in the NRHP or diminish the integrity of its significant historic features.

Assessment of Visual Effects

The undertaking would not alter the characteristics of historic properties within the APE because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP (a single flight per year) will remain the same. Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could alter the characteristics of a historic property that qualifies it for inclusion in the NRHP. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The fact that only one flight per year is authorized and the short duration of that flight make it unlikely a historic property would experience a visual effect from the undertaking. One's perspective of or viewshed from a historic property is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography. The FAA and NPS also considered the experience of tribal members who may conduct ceremonies or practices that could involve looking toward the sky.

Under existing conditions, only one commercial air tour is conducted per year on one route. This commercial air tour route is a circumnavigation of Mount Rainier either clockwise or counterclockwise, entering and exiting at the northwest corner of the Park, passing through the Longmire Historic District, Sunrise Historic District, and flying over the Park and ½ mile buffer for approximately 46 flight miles, thereby avoiding the vast majority of the historic properties within the Park as demonstrated on **Attachment A**. The ATMP limits the annual number of commercial air tours to one tour and maintains the same route as is currently flown under existing conditions. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the Park are not likely to see the commercial air tour. During a typical year, there is one day during which a commercial air tour is conducted over the Park, leaving the remainder of the year free of commercial air tours.

Visual impacts to historic properties will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same or less than the average number of flights from 2017-2019, and the route will remain the same as compared to existing conditions. The undertaking would not introduce visual elements that would alter the characteristics of a historic property that qualifies it for inclusion in the NRHP.

Finding of No Adverse Effect Criteria

To support a finding of no adverse effect, an undertaking must not meet any of the criteria set forth in the Advisory Council on Historic Preservation's Section 106 regulations at 36 CFR 800.5(a). This section demonstrates the undertaking does not meet those criteria. The undertaking would not have any physical impact on any property. The undertaking is located in the airspace above historic properties and would not result in any alteration or physical modifications to these resources. The undertaking would not remove any property from its location. The undertaking would not change the character of any property's use or any physical features in any historic property's setting. As discussed above, the undertaking would not introduce any audible or visual elements that would diminish the integrity of the

significant historical features of any historic properties in the APE. The undertaking would not cause any property to be neglected, sold, or transferred.

Proposed Finding and Request for Review and Concurrence

We propose that FAA and NPS approval of the undertaking would not alter the characteristics of any historic properties located within the APE as there would be no measurable change in audible or visual effects from existing conditions. Based on the analysis above, the FAA and NPS propose a finding of no adverse effect on historic properties. We request that you review the information and respond whether you concur with the proposed finding within thirty days of receiving this letter.

Should you have any questions regarding any of the above, please contact Judith Walker at 202-267-4185 or Judith.Walker@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Judith Walker', with a stylized flourish extending to the right.

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

CC: Dennis Wardlaw, Washington State Historic Preservation Office

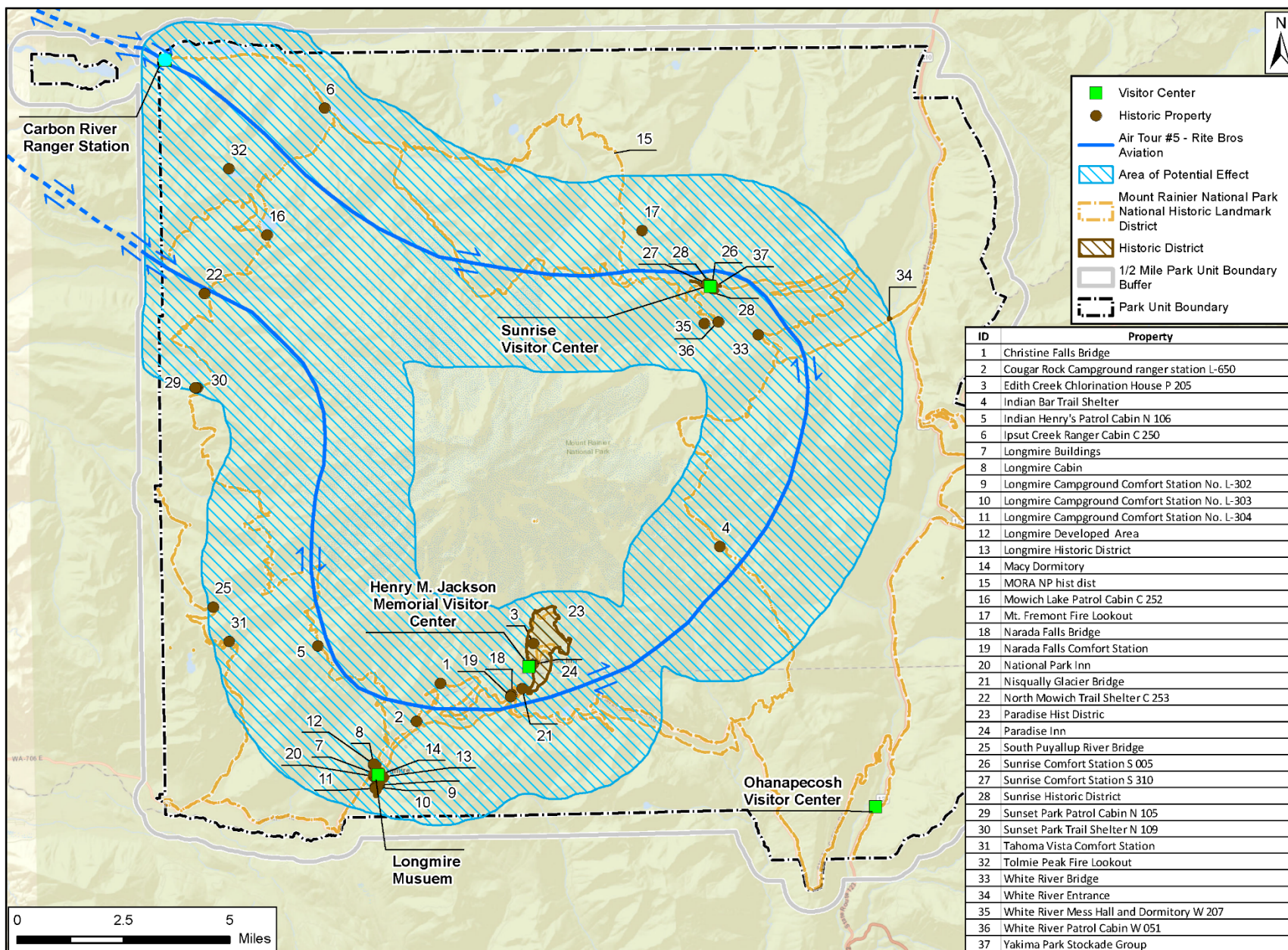
Attachments

- A. APE Map including proposed Commercial Air Tour Route
- B. List of Consulting Parties
- C. List of Historic Properties in the APE and Description of Significant Characteristics
- D. Methodology of NEPA Technical Noise Analysis

ATTACHMENT A

**Area of Potential Effect Map
Including
Commercial Air Tour Route**

Area of Potential Effects Map for ATMP at Mount Rainier National Park



ATTACHMENT B

List of Additional Consulting Parties Invited to Participate in Section 106 Consultation

Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Chehalis Reservation ¹
Confederated Tribes of the Warm Springs Reservation of Oregon ²
Cowlitz Indian Tribe
Gifford Pinchot National Forest
Mt. Baker-Snoqualmie National Forest
Muckleshoot Indian Tribe ²
National Trust for Historic Preservation
Nisqually Indian Tribe ²
Okanogan-Wenatchee National Forest
Puyallup Tribe of Indians ²
Rite Bros. Aviation, Inc.
Squaxin Island Tribe of the Squaxin Island Reservation
Suquamish Indian Tribe of the Port Madison Reservation ²

¹Tribe opted out of Section 106 consultation

²Tribe received follow up email and/or phone calls in December 2021 and January 2022.

ATTACHMENT C

List of Historic Properties in the APE and Description of Significant Characteristics

Property ID #	Property Name	Property Type	NRHP Status	Significance
PI00667	Christine Falls Bridge	Structure	Listed under Criteria A and C	The Christine Falls Bridge was constructed in 1927-28 as part of the Nisqually Road improvements in the late twenties. The work was performed by a private contractor and administered by the NPS and Bureau of Public Roads. The NPS Branch of Plans and Design, Western Division, recommended the use of stone for facing the arch and parapet walls. The Christine Falls Bridge is an excellent example of rustic styling employed to harmonize the structure with its natural setting.
677683	Cougar Rock Campground Ranger Station L-650 ¹	Building	Eligible under Criteria A and C	The Cougar Rock Ranger Station was constructed in 1963 as part of the broader National Park Service's MISSION 66 initiative. MISSION 66 was a 10-year program of redevelopment and improvement of the national parks' infrastructure, visitor services, and visitor experience. Under the guidance of the Western Office of Design and Construction, plans for ranger stations such as this one was developed and constructed across the nation. The Cougar Rock Ranger Station was constructed as part of the larger Cougar Rock Campground development. Increased automobile use, shifting visitor uses, and a demand for overnight camping sites resulted in park service planners developing campgrounds as a major component of MISSION 66 plans. The Cougar Rock Ranger Station served as the administrative point of contact for visitors staying at Cougar Rock Campground located approximately two miles above Longmire along the road to Paradise.
PI00668	Edith Creek Chlorination House	Building	Listed under Criteria A and C	The buildings, structures and sites designed in the Rustic Style at Mount Rainier are a significant collection of resources that reflect the prominent design ethic for parks at that time. The non-intrusive design philosophy practiced by architects and landscape architects in the NPS's Branch of Plans and Design set the standard for park areas across the nation, including municipal and state parks.

Property ID #	Property Name	Property Type	NRHP Status	Significance
PI00671	Indian Bar Trail Shelter	Building	Listed under Criteria A and C	One of the numerous park structures built by Civilian Conservation Corps, this facility is one of the two stone trail shelters remaining in Mount Rainier. Both this structure and the stone shelter at Summerland were constructed from plans drawn up by the NPS Branch of Plans and Design, under the supervision of Edwin A. Nickel. Indian Bar Trail Shelter was constructed during the administration of Superintendent O.A. Tomlinson, when a string of patrol cabins and trail shelters were built along the famous Wonderland Trail to accommodate backcountry rangers on patrol and provide shelter for the hiking public.
PI00672	Indian Henry's Patrol Cabin	Building	Listed under Criteria A and C	Indian Henry's Patrol Cabin is the oldest backcountry ranger station in the park. Rectangular in plan, the cabin's log framed construction with saddle notch cornering, a cedar shake roof, and a loft above the first floor, became typical of backcountry patrol cabins in the park. The station is located in an area visited often by tribes and contemporary, backcountry enthusiasts, and the site of one of the earliest tourist facilities at Mount Rainier. It is one of the several patrol cabins located on the popular Wonderland Trail.
PI00673	Ipsut Creek Ranger Cabin	Building	Listed under Criteria A and C	Constructed during the administration of Superintendent O.A. Tomlinson for use as a backcountry patrol facility, this cabin was a component of the early park policy to develop a string of shelters and cabins around the park to accommodate backcountry rangers on patrol, and provide shelter for the hiking public. One of the several patrol cabins at Mount Rainier was constructed from plans drawn up by the NPS Branch of Plans and Design in San Francisco, under the supervision of Acting Chief Architect W.G.Games.
PI00702	Longmire Buildings	Building	National Historic Landmark	See Longmire Historic District
PI00697	Longmire Cabin ¹	Building	Listed under Criteria A and C	See Longmire Historic District
LE00550	Longmire Campground Comfort Station No. L-302	Building	Listed under Criteria A and C	Comfort Station L-302 is typically constructed to blend with its natural setting. It was designed along with the entire Longmire Public Auto Camp by the National Park Service, Western Division, Branch of Plans and Design. Thomas C. Vint served as Chief Architect. Part of Longmire Developed Area.

Property ID #	Property Name	Property Type	NRHP Status	Significance
LE00551	Longmire Campground Comfort Station No. L-303	Building	Listed under Criteria A and C	Comfort Station L-303 is typically constructed to blend with its natural setting. It was designed along with the entire Longmire Public Auto Camp by the National Park Service, Western Division, Branch of Plans and Design. Thomas C. Vint served as Chief Architect. Part of Longmire Developed Area.
LE00552	Longmire Campground Comfort Station No. L-305	Building	Listed under Criteria A and C	Comfort Station L-305 is typically constructed to blend with its natural setting. It was designed along with the entire Longmire Public Auto Camp by the National Park Service, Western Division, Branch of Plans and Design. Thomas C. Vint served as Chief Architect. Part of Longmire Developed Area.
96993	Longmire Developed Area ¹	District	National Historic Landmark	There are 58 contributing buildings and 16 non-contributing buildings in the Longmire Village developed area. The buildings that are non-contributing either do not date to the period of significance or have been significantly altered in a way that has profoundly changed their physical appearance and character. Three buildings in this developed area are already designated National Historic Landmarks for their architectural significance: the Longmire Administration Building, the Service Station, and the Community Building. Together, the buildings of Longmire Village are one of the most extensive collections of the Park Service Rustic architectural style that exists. Many of the buildings are also of unusual distinction in design. Besides the outstanding examples, such as the Administration Building, there is a full complement of residential bungalows and other more modest buildings that are excellent examples of Park Service architecture of the period. In addition, the village has excellent integrity.
DT00145	Longmire Historic District	District	Listed under Criteria A and C	The Longmire Historic District is historically and architecturally significant at local level of significance as a visually cohesive complex of rustic style structures associated with the early development of the park. This includes administrative, residential, and maintenance structures from the Longmire village that served as the park's headquarters from 1916-1977. This group of buildings illustrates the National Park Service Landscape Division's application of the "rustic" style of architecture during the 1920s and 1930s. Under the direction of Thomas Vint, the division employed the style on a broad variety of structures at Longmire. Characteristic features of the rustic style include the

Property ID #	Property Name	Property Type	NRHP Status	Significance
				use of materials such as stone and wood in close to their raw or natural form or state, dark forest colors, and irregular setting to harmonize with the natural environment.
53984	Macy Dormitory ¹	Building	Eligible under Criteria A and C	Macy Dorm is a rustic style dormitory located in the Maintenance Area of the Longmire Developed Area in Mount Rainier National Park. Built in 1913 and originally functioning as a warehouse, the dormitory is one of the oldest government-built buildings remaining in the park. Longmire is Mount Rainier National Park's oldest developed area and the first developed area encountered by visitors entering the park from the southwest through the Nisqually Entrance.
PI00624	Mount Rainier National Park Historic District	District	National Historic Landmark	Mount Rainier National Park Historic District stresses the history of National Park Service master planning, an aspect of the larger practice of Park Service landscape architecture. Beginning in the late 1920s, the master plan for Mount Rainier was the first and the most complete national park master plan to be developed and implemented by the landscape division. The goal of all such plans was to locate, coordinate, and integrate all park systems and facilities in a unified, comprehensive plan. Most facilities were concentrated along the park road system in order to limit the impact of development to a narrow area. This fact makes it easy to define a single corridor district (following the park roads and the Wonderland Trail) that encompasses all the major developed areas of the park. Some facilities, however, were planned with the opposite intention; backcountry patrol cabins and fire lookouts, for example, were carefully scattered throughout the park in order to effectively serve park administration and fire control. Since the significance of this NHL District depends on the history of park master planning--a discipline which treated the park as a synthetic whole, not as a group of fragmented resources--all the facilities and systems that represent the historic master planning process should be included in a single district. Therefore, the use of a discontinuous NHL District is desirable and justified in this case. Thomas Vint and his landscape division compiled master plans for almost every national park and monument in the late 1920s and early 1930s, but few plans were as significant

Property ID #	Property Name	Property Type	NRHP Status	Significance
				or as complete as the plans for Mount Rainier. The physical integrity of the developed areas and facilities of Mount Rainier also set it apart. As a whole, no other collection of park roads, bridges, major and minor developed areas, trails, etc., are more completely preserved as an intact example of park planning of the period. Very few postwar construction projects have had a large impact on the designed landscapes built during the period of significance. No other park in the national park system is better preserved, as whole, as a complete illustration of park planning and development of the period.
PI00675	Mowich Lake Patrol Cabin	Building	Listed under Criteria A and C	Mowich Lake Patrol Cabin is one of the oldest backcountry ranger stations in the park. It was intended as a temporary headquarters for rangers on patrol of the park's western boundary and the Wonderland Trail. Aspects of the cabin's log frame, rectangular design, with its steeply pitched cedar shaked gable roof, saddle notch cornering, and post and beam frame front porch, were incorporated into the construction of future patrol cabins in the park. This cabin was an early component of Superintendent Roger Toll's vision of a string of Wonderland Trail to accommodate the increasing need for backcountry ranger patrols and shelters for the public. This policy evolved and expanded under O. A. Tomlinson's administration.
PI00676	Mt. Fremont Fire Lookout	Building	Listed under Criteria A and C	Mt. Fremont Fire Lookout is one of four such remaining facilities at Mount Rainier National Park. Built to standard plans between 1932-34. The plans for lookout houses were developed in the early the NPS Western Division, Branch of Plans and Design. These lookouts have played a significant role in the protection of natural resources in the park and in the surrounding national forest lands. Although aerial fire detection has somewhat reduced the importance of lookouts in recent years, they still play a significant role in visitor interpretation and assistance, as a backcountry patrol base, and during extreme fire danger periods.
LE00553	Narada Falls Bridge	Structure	Listed under Criteria A and C	The Narada Falls Bridge was constructed in 1927 as part of the Nisqually Road Improvements in the late twenties. The work was carried out by a private contractor and administered by the NPS and Bureau of Public Roads. The NPS Branch of Plans and Design, Western Division, recommended the use of native

Property ID #	Property Name	Property Type	NRHP Status	Significance
				stone facing in the concrete arch bridge. The Narada Falls Bridge is an excellent example of the attempt to achieve a rustic appearance.
LE00554	Narada Falls Comfort Station	Building	Listed under Criteria A and C	Completed with CCC labor in 1942, the Narada Falls Comfort Station was designed by the Western Region Landscape Engineering Division. Its design was approved by Thomas C. Vint, Chief of Planning for the National Park Service.
53980	National Park Inn ¹	Building	Listed under Criteria A and C	The National Park Inn was constructed during the brief era of competition between concessionaires in the park (1906-1918). Although the building was relocated in 1920 and assumed the name of the original National Park Inn in 1926 its exterior front facade has remained virtually unaltered.
702993	Nisqually Glacier Bridge ¹	Structure	Eligible under Criteria A and C	A modern steel and concrete box girder bridge is located 600' downstream from the location of the (washed out) 1936 bridge. A large, high-level bridge, it is the most expensive river crossing in the park and is of a markedly different scale and character from the bridges dating to the historic period.
PI00678	North Mowich Trail Shelter	Building	Listed under Criteria A and C	The North Mowich River trail shelter (C-253) is one of the oldest backcountry shelters in the park and one of the numerous structures built by the CCC. It is one of the numerous trail shelters constructed on the popular Wonderland Trail, a policy begun under Superintendent Roger W. Toll (1919-20) and expanded during the superintendency of Major O. A. Tomlinson (1932-41).
DT00146	Paradise Historic District	District	Listed under Criteria A and C	For most of the park's history the Paradise Historic District has been dominated by concession-built structures, including the Paradise Inn, the Annex, the Guide House, and numerous support structures. However, park operations at Paradise did require some government facilities -- a ranger station and comfort station in the 1920s and, in the late 1930s, facilities to support the heavy use of Paradise by ski enthusiasts. These structures were designed using indigenous materials and detailing in a manner that complemented the rustic vocabulary established by the concession buildings.
PI00703	Paradise Inn	Building	National Historic Landmark	See Paradise Historic District
PI00679	South Puyallup River Bridge	Structure	Listed under Criteria A and C	The South Puyallup River Bridge was completed in 1931 as part of the West Side Road construction. Originally planned to link the Nisqually entrance with

Property ID #	Property Name	Property Type	NRHP Status	Significance
				the Carbon River Entrance, the West Side Road was first in 1925-26. The project, carried out over a ten-year period beginning in 1926, was never wholly completed. The South Puyallup River Bridge is typical of the reinforced concrete arch bridges built in the park in the twenties and thirties, and rustically styled with native stone.
PI00683	Sunrise Comfort Station – S 005	Building	Listed under Criteria A and C	See Sunrise Historic District
N/A	Sunrise Comfort Station S-310	Building	Listed under Criteria A and C	Comfort Station S-310 is representative of the standardized design for comfort stations created by the NPS Western Division, Branch of Plans and Design in the late twenties. Thomas C. Vint served as Chief Architect. The facility was erected c.1930 along with four others as part of the Yakima Park public auto camp. E.A. Davidson supervised field construction; Comfort Station S-310 is the last survivor in this region.
DT00181	Sunrise Historic District (Yakima Park)	District	Listed under Criteria A and C	Planning for the third and last major development of government and concession facilities within the park boundaries began in the late 1920s when state highway construction promised to open up an easily accessible approach to the mountain from eastern Washington. Because the Superintendent and other Service officials were determined to avoid haphazard development that would destroy the fragile subalpine environment, the National Park Service Branch of Plans and Designs in San Francisco undertook the planning of Sunrise Village, a comprehensive development at Yakima Park in the northeastern region of the park. An historical theme - the block house and stockades of the early settlement of Washington Territory - was chosen for the development. Two block houses, planned to serve as administrative-residential structures, a vertical-log stockade, and a community building were designed around a large plaza that served as the main parking area. The hotel was located across the plaza. The South Blockhouse (S-001) and the log-stockade were ready in 1930 when the highway was completed. A large stone and log comfort station (S-005) was opened at the end of the 1932 season. Due to lack of funds however, the North Blockhouse (S-002) and the Community Building (S-003) were not begun until 1939 and finally completed in 1943. All of these structures,

Property ID #	Property Name	Property Type	NRHP Status	Significance
				together with the Sunrise Lodge and the Sunrise Service Station, form the Sunrise Historic District. Their significance lies in their historical association with this first comprehensive planning effort for facilities development in the park, and in the visual unity achieved by the consistent use of design elements of the rustic tradition to integrate the complex with its natural setting.
PI00684	Sunset Park Patrol Cabin	Building	Listed under Criteria A and C	Sunset Park patrol cabin is one of the oldest backcountry ranger stations in the park. Aspects of its log frame, rectangular design, with steeply pitched cedar shaked gable roof, saddle corner notching, and post and beam frame front porch were incorporated in the construction. This cabin was an early component of Superintendent Roger Toll's vision of a string of Wonderland Trail to accommodate the increasing need for backcountry ranger patrols and shelters for the public. This policy evolved and expanded under O. A. Tomlinson's administration.
PI00685	Sunset Park Trail Shelter	Building	Listed under Criteria A and C	The oldest extant shelter in the park is the Sunset Park Trail Shelter
PI00686	Tahoma Vista Comfort Station	Building	Listed	This comfort station was built in conjunction with the West Side Highway's scenic Tahoma Vista point. Associate Landscape Architect E.A. Davidson of the National Park Service, Western Region in San Francisco, supervised construction of the scenic overlook.
PI00688	Tolmie Peak Fire Lookout	Building	Listed under Criteria A and C	Tolmie Peak is one of the four remaining fire lookouts at Mount Rainier. They are all similar design constructed between 1932 and 1934. These lookouts have played a significant role in the protection of natural resources in the park and in the surrounding national forest lands. Although aerial fire detection has somewhat reduced the importance of lookouts in recent years, they still play a significant role in visitor interpretation and assistance, as a backcountry patrol base, and during extreme fire danger periods.
PI00689	White River Bridge	Structure	Listed under Criteria A and C	The White River Bridge, associated with the early development of Yakima Park (Sunrise), is additionally an outstanding example of rustic architecture. Native granite was used for the stone Veneer and parapet walls. As with most of the NPS rustic architecture the Western Division Branch of Plans and Design

Property ID #	Property Name	Property Type	NRHP Status	Significance
				executed the design of the rustic elements. Thomas CO. Vint served as Chief Architect on the project.
PI00690	White River Entrance	District	Listed under Criteria A and C	The buildings at White River are similar in plan and design to contemporary rustic structures at Nisqually and Longmire. The log frame entrance station was modeled after the Nisqually entrance station. However, the porte-cochere feature is original to White River and was only copied in the late thirties at Nisqually as part of the Civilian Conservation Corps (CCC) remodeling. Characteristic features of the other structures in the forested setting at White River are wood frame construction, rough lapped cedar siding painted brown and medium-pitched cedar shake or shingled roofs.
PI00691	White River Mess Hall and Dormitory	Building	Listed under Criteria A and C	The Mess Hall and Dormitory is a Civilian Conservation Corps (CCC) building and is believed to be the only such remnant of a CCC camp in the park.
PI00692	White River Patrol Cabin	Building	Listed under Criteria A and C	The White River cabin is the oldest surviving structure in the White River region.
PI00701	Yakima Park Stockade Group	Building	National Historic Landmark	See Sunrise Historic District

ATTACHMENT D

Summary of Noise Technical Analysis from NEPA Review

For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the agencies used the following metrics:

- Time above 35 dBA (minutes)
- Time above 52 dBA (minutes)
- Equivalent Sound Level or LAeq (over 12 hours)
- Day-night Average Sound Level or Ldn (over 24 hours)
- Maximum sound level or Lmax

Metric	Relevance and citation
Time Above 35 dBA ⁵	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility.⁶</p>

⁵ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 µPa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. Sound levels are reported in units of decibels (dB) (ANSI S1.1-1994, American National Standard Acoustical Terminology). A-weighting is applied to sound levels in order to account for the sensitivity of the human ear (ANSI S1.42-2001, Design Response of Weighting Networks for Acoustical Measurements). To approximate human hearing sensitivity, A-weighting discounts sounds below 1 kHz and above 6 kHz.

⁶ Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 am – 7 pm to represent typical daytime commercial air tour operating hours.
Day-night average sound level, L_{dn} (or DNL)	<p>The 24-hour average sound level, in dBA, after addition of ten decibels to sounds occurring from 10 p.m. to 7 a.m.</p> <p>For aviation noise analyses, the FAA has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of Day-night average sound level (DNL)⁷.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and L_{dn} characterize:</p> <p>Increases in both the loudness and duration of noise events</p> <p>The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for L_{dn})</p> <p>L_{dn} takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, then $L_{Aeq, 12\text{ hr}}$ is arithmetically three dBA higher than L_{dn}.</p> <p>The FAA's indicators of significant impacts are for an action that would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe⁸.</p>
Maximum sound level, L_{max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{max} does not provide any context of frequency, duration, or timing of exposure.

In order to provide a conservative evaluation of potential noise-effects produced by commercial air tours under the ATMP, the analysis is based on a characterization of a busy day of commercial air tour activity. For the busiest year of commercial air tour activity from 2017-2019 based on the total number of commercial air tour operations and total flight miles over the Park, the 90th percentile day was identified for representation of the busy day in terms of number of operations, and then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air tour activity at the Park.

⁷ FAA Order 1050.1F, Appx. B, sec B-1

⁸ FAA Order 1050.1F, Exhibit 4-1

Noise contours for the following acoustic indicators were developed using the Federal Aviation Administration's Aviation Environmental Design Tool (AEDT) version 3d and are provided below. A noise contour presents a graphical illustration or “footprint” of the area potentially affected by the noise.

- Time above 35 dBA (minutes) – see Figure 1
- Time above 52 dBA (minutes) – see Figure 2
- Equivalent sound level, $L_{Aeq, 12hr}$
 - Note 1: Contours are not presented for $L_{Aeq, 12hr}$ as the average sound levels were below 35 dBA for the ATMP modeled at the Park.
 - Note 2: Contours are not presented for L_{dn} (or DNL) as it is arithmetically three dBA lower than $L_{Aeq, 12hr}$ if there are no nighttime events, which is the case for the ATMP modeled at the Park.
- Maximum sound level or L_{max} – see Figure 3

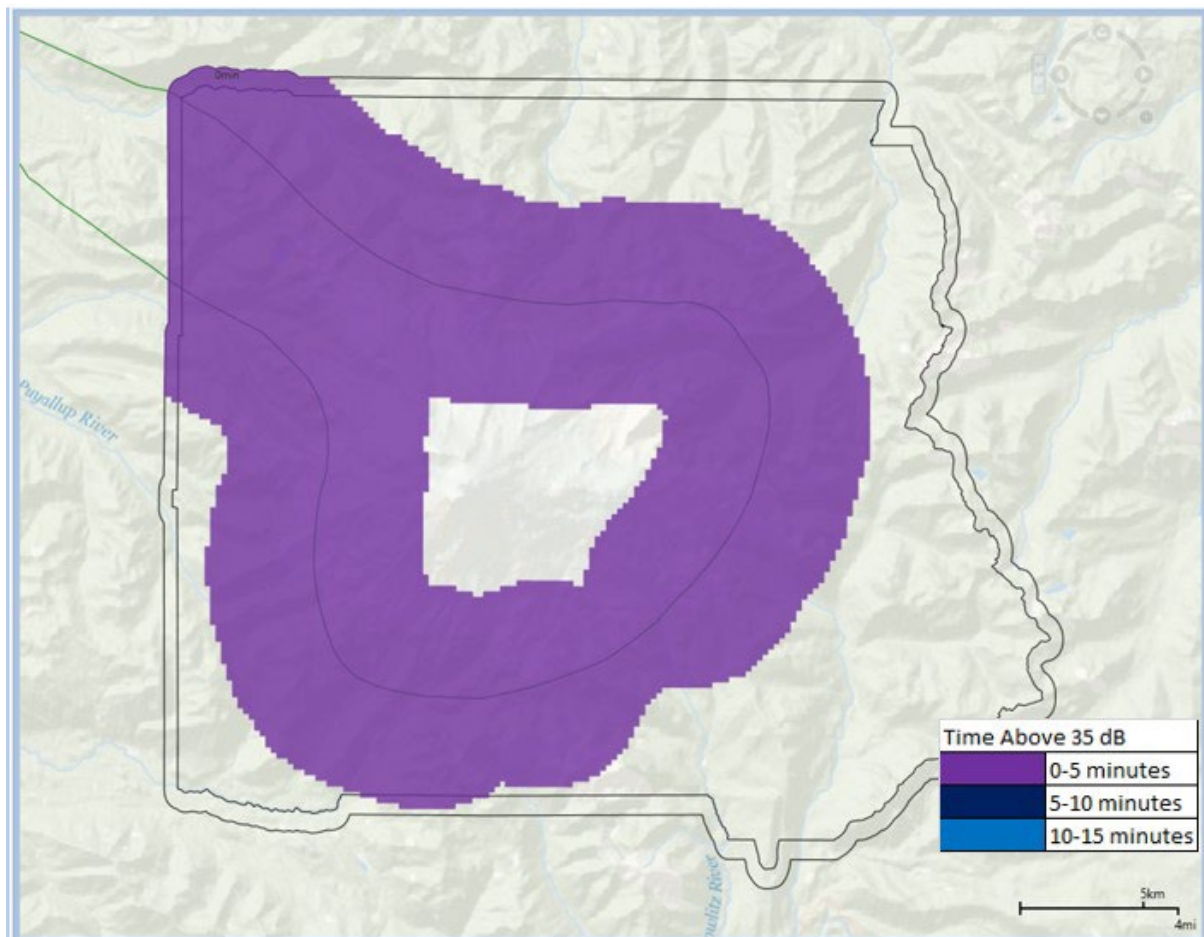


Figure 1. Noise contour results for Time Above 35 dBA

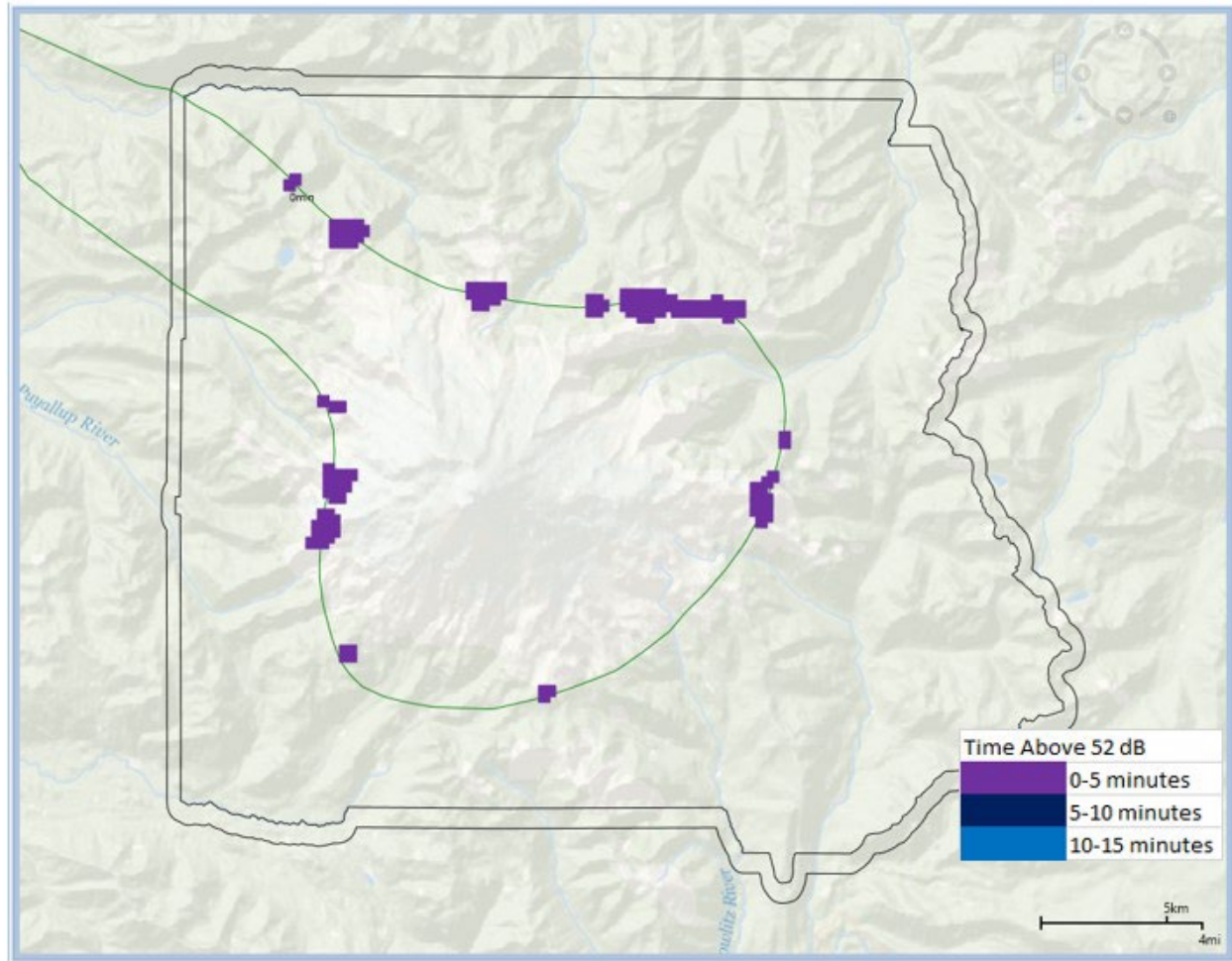


Figure 2. Noise contour results for Time Above 52 dBA

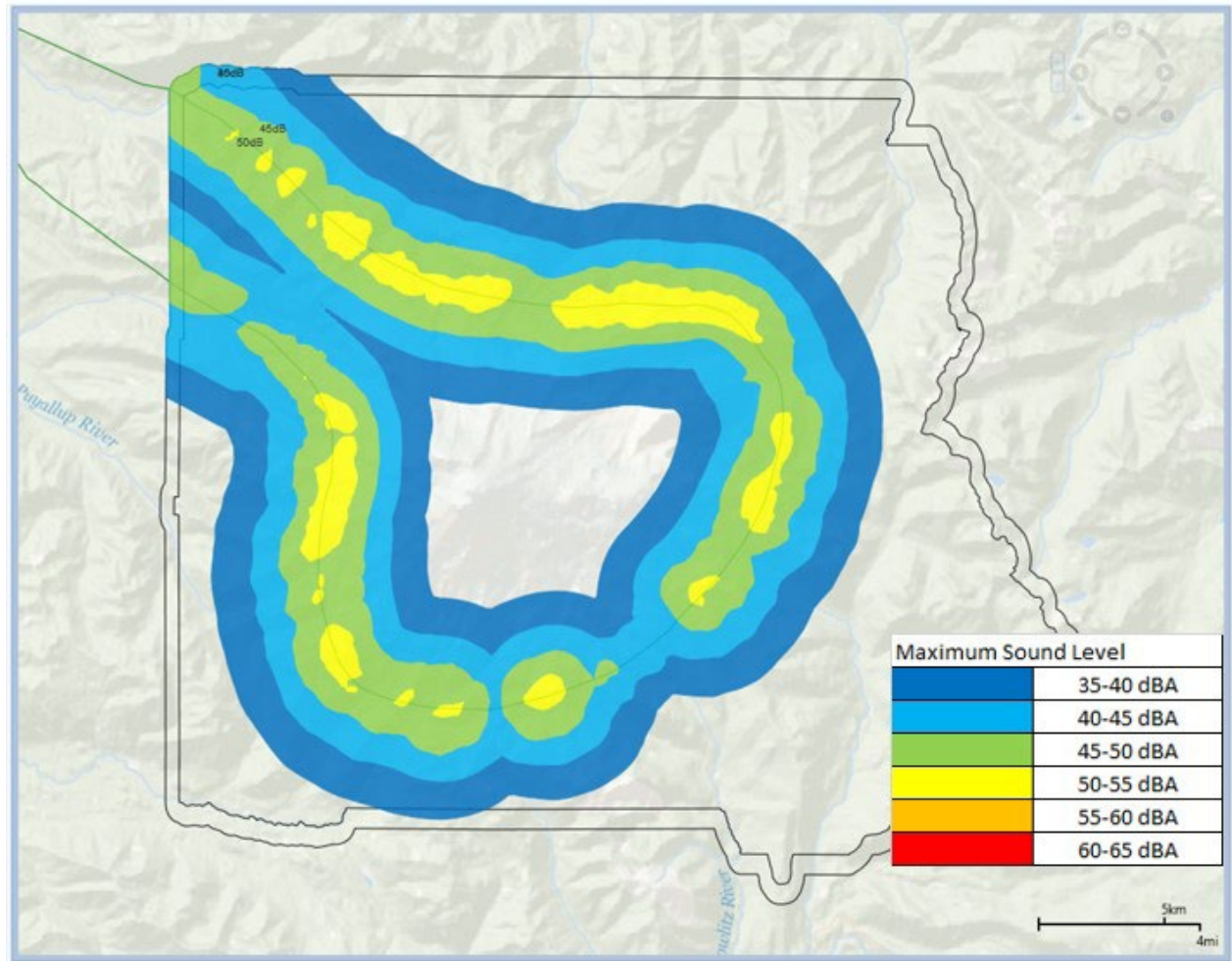


Figure 3. Noise contour results for L_{max}



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

May 4, 2022

Ms. Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division
Federal Aviation Administration

In future correspondence please refer to:
Project Tracking Code: 2021-03-01892
Property: National Parks Air Tours Projects- Mt. Rainier National Park
Re: NO Adverse Effect

Dear Ms. Walker:

Thank you for contacting the State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) regarding the above referenced proposal. This action has been reviewed on behalf of the SHPO under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. Our review is based upon documentation contained in your communication.

We concur that the current project as proposed will have "NO ADVERSE EFFECT" on historic properties within the APE that are listed in, or determined eligible for listing in, the National Register of Historic Places. As a result of our concurrence, further contact with DAHP on this proposal is not necessary.

However, if new information about affected resources becomes available and/or the project scope of work changes significantly, please resume consultation as our assessment may be revised. Also, if any archaeological resources are uncovered during construction, please halt work immediately in the area of discovery and contact the appropriate Native American Tribes and DAHP for further consultation.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,

Dennis Wardlaw
Transportation Archaeologist
(360) 485-5014
dennis.wardlaw@dahp.wa.gov





File Code: 2360

Date: May 2, 2022

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

RE: Section 106 Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Mount Rainier National Park

Dear Judith Walker,

Thank you for contacting the Okanogan-Wenatchee National Forest. We have reviewed the information and cultural resource inventory report summary you provided for the development of an Air Tour Management Plan (ATMP) for Mount Rainier National Park.

We concur with your proposed finding that the undertaking would have no adverse effect on historic properties, in accordance with 36 CFR 800.5(c). We agree that the undertaking would not alter the characteristics of any historic properties located within the area of potential effects (APE) as there would be no measurable change in audible or visual effects from existing conditions.

If you have any questions concerning this concurrence, please contact Katee Withee, Okanogan-Wenatchee National Forest Acting Heritage Program Manager and Tribal Relations Advisor, at katee.withee@usda.gov.

Thank you for your interest in the management of the Okanogan-Wenatchee National Forest.

Sincerely,

KRISTIN BAIL Digitally signed by KRISTIN BAIL
Date: 2022.05.03 18:12:17 -07'00'

KRISTIN M. BAIL
Forest Supervisor

cc: Bryan Mulligan
Katee Withee
Anna Jansson



APPENDIX G

NPS Statement of Compliance

APPENDIX G

NATIONAL PARK SERVICE STATEMENT OF COMPLIANCE

Mount Rainier National Park Air Tour Management Plan

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

As described in National Park Service (NPS or Service) 2006 Management Policies, § 1.4.4, the National Park Service Organic Act prohibits the impairment of park resources and values. *Guidance for Non-Impairment Determinations and the NPS NEPA Process* (September 2011) provides guidance for completing non-impairment determinations for NPS actions requiring preparation of an environmental assessment (EA) or environmental impact statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The applicable NPS guidance does not require the preparation of a non-impairment determination where a categorical exclusion (CE) is applied because impacts associated with CEs are generally so minimal they do not have the potential to impair park resources. Nonetheless, out of an abundance of caution, the NPS has completed a non-impairment analysis for the Mount Rainier National Park (Park) Air Tour Management Plan (ATMP) and determined that it will not result in impairment of Park resources, or in unacceptable impacts as described in § 1.4.7.1 of the 2006 NPS Management Policies.

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

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

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

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

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

soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

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

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

Non-Impairment Determination for the Mount Rainier National Park ATMP

The purposes of Mount Rainier National Park, along with Park significance statements and a description of the Park's fundamental resources and values, are described in the Park's Foundation Statement. *Foundation Document for Mount Rainier National Park (Foundation Document)*, April 2015:

The purpose of Mount Rainier National Park is to protect and preserve unimpaired the majestic icon of Mount Rainier, a glaciated volcano, along with its natural and cultural resources, values, and dynamic processes. The Park provides opportunities for people to experience, understand, and care for the park environment, and also provides for wilderness experiences and sustains wilderness values.

Foundation Document, page 5.

The Park's significance statements highlight several resources which may be impacted by commercial air tours including wildlife and cultural resources (*Foundation Document*, pages 6-7). Cultural resources, diverse ecosystems including the wildlife within, and natural soundscapes, clean air, viewsheds are listed as fundamental resources and values of the Park, all of which are potentially impacted by air tours (*Foundation Document*, pages 8-11).

As a basis for evaluating the potential for impairment or unacceptable impacts on Park resources, the NPS relied on the environmental analysis in the Environmental Screening Form (ESF) (Appendix B to the Record of Decision (ROD)); the Mount Rainier National Park Air Tour Management Plan Section 7 Endangered Species No Effect Determination (Appendix E to the ROD); and, the Section 106 Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Mount Rainier National Park (Appendix F to the ROD). The ESF includes analysis of impacts to air quality; biological resources including wildlife, wildlife habitat, and special status species;

cultural resources including cultural landscapes, ethnographic resources, prehistoric and historic structures; soundscapes; lightscapes; wilderness; visitor experience; and viewsheds. The ESF considers both the change from current conditions as well the impact from the commercial air tour authorized under the ATMP. *See* ESF, Appendix B to the ROD.

The ATMP would result in limited impacts to the Park's natural and cultural soundscapes. Acoustic conditions in the Park were measured in 2006, 2007 and 2009 (National Park Service, 2011). To determine the severity of the effect and potential for impairment, the NPS considered not just the presence of noise and potential for disturbance, but also the duration, frequency, and amplitude of noise. Noise modeling for the ATMP discloses that noise from one commercial air tour would be present only near the designated air tour route. *See* ESF, Appendix B to the ROD. Some areas of the park would experience noise above 35 decibels, a level at which quieter natural sounds may be masked, for between 0-5 minutes one day a year. A limited number of areas would experience noise above 52 decibels, the level at which one may reasonably expect interference with Park interpretive programs, for between 0-5 minutes on one day a year. *ESF, Figures 3. and 4. Noise Technical Analysis*, Appendix B to the ROD. Because there is only one commercial air tour authorized under the ATMP, the area beneath or near the designated route would not have any noise from commercial air tours for at least 364 days per year. Therefore, the natural and cultural soundscapes of the Park remain unimpaired and without unacceptable impacts under the ATMP since noise impacts would occur only once a year and be short in duration, and impacts would occur in only those areas along the designated route, leaving the Park's natural and cultural soundscape largely unimpacted by commercial air tours.

ATMP impacts to wildlife occur from noise generated by low flying tour aircraft. The analysis in the ESF discloses that noise would likely be heard by wildlife near the route. *See* Appendix B to the ROD. Noise from commercial air tours may impact wildlife in a number of ways: altered vocal behavior, breeding relocation, changes in vigilance and foraging behavior, predator avoidance, reproductive success, and impacts on individual fitness and the structure of ecological communities to name a few (Shannon et al., 2016; Kunc et al., 2016; Kunc and Schmidt, 2019). However, again, to determine the severity of the effect and potential for impairment, the NPS considered not just the presence of noise and potential for disturbance, but also the duration, frequency, and amplitude of noise. Because only one commercial air tour is authorized, the impacts would be experienced for only a few minutes once a year. The minimum altitude of the authorized tour, 3,000 ft. above ground level (AGL), minimizes the potential for bird strikes for those species that are found at higher altitudes and is consistent with the avoidance recommendations for marbled murrelet and northern spotted owl habitats. (USFWS 2020). The NPS concluded, in consultation with experts at the U.S. Fish and Wildlife Service, that the commercial air tour authorized by the ATMP would not affect listed species within the Park.¹ *No Effect Determination*, Appendix E to the ROD. In conclusion, the ATMP will not impair the Park's wildlife or its habitat because the impacts from the single commercial air tour does not rise above 35 decibels in most places affected, are extremely short in duration and would only

¹ A no effect determination means there will be no consequences to listed species or critical habitat from the ATMP.

occur one day a year. Impacts to wildlife, if any, would occur on an individual level and would not affect wildlife on the population level. These impacts do not impair the functioning of the Park's unique ecosystems and the wildlife within. Wildlife, including threatened and endangered species, will persist in the Park without a loss of integrity and visitors will continue to enjoy wildlife and their habitats.

Impacts to the Park's cultural resources would be similar in frequency and duration to those described above for wildlife. The NPS concluded, and the State Historic Preservation Officer concurred, that there would be no adverse effects on historic properties from the one commercial air tour authorized under the ATMP. The ESF and consultation materials documented that the ATMP would not diminish the Park's cultural landscape's integrity of location, design, setting, materials, workmanship, feeling, or association. Additionally, the determination documented that commercial air tours do not adversely affect those elements of ethnographic resources that make them significant to traditionally associated groups, nor does the ATMP interfere with the use of ethnographic resources by these groups. Finally, the analysis documented that the ATMP does not adversely affect the feeling and setting of archaeological sites or historic structures that make those sites and structures eligible for listing on the National Register of Historic Properties. *See* Appendices B and F to the ROD. Since there are no adverse effects on these resources, these resources would maintain their integrity and purpose and therefore remain unimpaired under the ATMP.

As disclosed in the ESF, the ATMP may have very limited impacts on the Park's viewshed. As noted in the ESF, aircraft are not typically included in viewshed analyses because they are transitory. They are most noticeable because of the noise associated with them. As noted above, due to the short duration of this tour as well as the limited frequency, impacts to the Park's viewshed will be limited. Visitors will continue to be able to enjoy the Park's beautiful views unimpaired.

The NPS completed an air quality analysis and determined that the one commercial air tour authorized under the ATMP contributes a minimal amount of emissions to the local air quality and would not have a regional impact. *See* ESF, Air Quality Technical Analysis, Appendix B to the ROD. Because the amount of emissions is so small the ATMP does not affect the integrity of the Park's air quality, leaving it unimpaired for future enjoyment.

Impacts to other resources potentially affected were considered so small and insignificant that they did not warrant a written analysis here.

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

Compliance with NPS Management Policies Regarding Appropriate Uses

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

NPS 2006 Management Policies § 1.5 state:

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

They further explain:

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

§ 8.1.2

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

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

§ 8.1.2

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

Mount Rainier National Park ATMP – consistency with NPS Management Policies for Appropriate Uses

The NPS relied on the mitigations in the ATMP (Appendix A to the ROD), the analysis in the ESF (Appendix B to the ROD), the Mount Rainier National Park Air Tour Management Plan Section 7 Endangered Species No Effect Determination (Appendix E to the ROD), the Section

106 Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Mount Rainier National Park (Appendix F to the ROD), and the unacceptable impact and non-impairment analysis above and the language in NPATMA as a basis for finding that the ATMP's authorization of one commercial air tour over Mount Rainier National Park is an appropriate use.

- The ATMP for Mount Rainier National Park is consistent with applicable laws, executive orders, regulations, and policies. NPATMA specifically provides that air tours may be allowed over National Park System units where they do not result in significant impacts. Commercial air tours are not prohibited in applicable laws, regulations, or policies.
- The ATMP's authorization of one commercial air tour over the Park is consistent with the Park's existing management plans. No existing management plans preclude commercial air tours, though the Park may set different management direction in the future. Mitigations, including limiting the number of commercial air tours per year, restricting commercial air tours to the designated route, and setting minimum altitudes, limit impacts to public use and other resources.
- The effects of the one commercial air tour authorized in the ATMP on Park resources was evaluated in the materials referenced above and unacceptable impact and non-impairment discussion above. Impacts would occur only once a year and be short in duration and do not rise to the level of an unacceptable impact nor impair Park resources. The NPS does not interpret § 8.1.1 to require the NPS to contemplate mitigating Park uses to the point that the use no longer has any impact or no longer can occur. Rather, this section requires the NPS to consider whether there are mitigations that can reduce impacts to Park resources and whether the impacts of those uses, after applying mitigations, result in unacceptable impacts or impairment. In this case, the NPS evaluated the impacts of one commercial air tour and included specific mitigations in the ATMP to minimize impacts to Park resources. The NPS acknowledges that prohibiting commercial air tours entirely would avoid all impacts to Park resources, but the elimination of commercial air tours is not required to avoid unacceptable impacts or impairment of Park resources. The NPS believes the mitigations in the ATMP are sufficient to protect Park resources and that additional mitigations are not required because the impacts associated with the ATMP are not significant and do not result in unacceptable impacts or impairment.
- The cost to the NPS from implementing the ATMP includes yearly compiling of operator reported commercial air tours and aircraft monitoring data which is done in coordination with the Federal Aviation Administration. These activities would occur anyway, because they are required under NPATMA, regardless of whether the Park has an ATMP because commercial air tours are currently authorized under interim operating authority (IOA). This is done by the NPS's Natural Sounds and Night Skies Division which also provides noise monitoring, modeling, and planning support to parks across the country.
- While some visitors may not like commercial air tours, others appreciate the opportunity to view the Park from a commercial air tour. Commercial air tours, as contemplated in NPATMA, serve the public in this way.

Additional commercial air tours and commercial air tours on other routes may not be appropriate. In future planning documents, the Park may set management direction to work with the FAA to eliminate all commercial air tours over the Park, in furtherance of other Park management objectives. However, the NPS has determined that because the ATMP authorizes one commercial air tour, because that tour is restricted to a designated route and at a sufficiently high altitude, the ATMP is adequately protective of Park resources and the commercial air tour it authorizes is an appropriate use of the Park at this time.

Compliance with NPS Management Policies for Soundscape Management

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

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

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

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

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

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

Mount Rainier National Park ATMP – consistency with NPS Management Policies for Soundscape Management.

The NPS relied on the mitigations in the ATMP (Appendix A to the ROD), the analysis in the ESF (Appendix B to the ROD), the Mount Rainier National Park Air Tour Management Plan Section 7 Endangered Species No Effect Determination (Appendix E to the ROD), the Section 106 Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Mount Rainier National Park (Appendix F to the ROD), and the unacceptable impact and non-impairment analysis above as a basis for finding that the ATMP complies with the policies and guidance for management of natural and cultural soundscapes.

Consistent with Management Policies § 4.9, the ATMP eliminates some noise, or moves the Park closer to natural ambient conditions, by limiting commercial air tours to one per year, which is a

reduction from the current authorized number (34) under IOA. *See* ATMP, Appendix A to the ROD. When developing the ATMP, the NPS considered the commercial air tour route and evaluated the potential for noise to reach the most sensitive resources in the Park, including cultural and natural resources, and areas where tours could disrupt educational opportunities. The commercial air tours occur along the designated route, which protects these areas from noise.

Management Policies § 5.3.1.7 prohibits excessive noise and § 1.4.7.1 prohibits actions that unreasonably interfere with “the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.” Baseline acoustic conditions in the Park were measured in 2006, 2007 and 2009 (National Park Service, 2011). The existing ambient daytime was reported to be 21-50 decibels, while the natural ambient daytime was reported to be 21-49 decibels. When determining the severity of the impacts, results from the noise modeling for the ATMP were considered against both the natural soundscape and existing soundscape. In this case, there is minimal difference between natural and existing soundscape conditions for median measures. As discussed above under the non-impairment discussion, the noise from commercial air tours is limited. Therefore, the noise from commercial air tours is neither excessive nor does it unreasonably interfere with the peace and tranquility of the Park, wilderness character, or natural or historic or commemorative locations. For all these reasons, the ATMP complies with § 8.4, § 4.9, and § 5.3.1.7 of the Management Policies, since the NPS has successfully collaborated with the FAA and developed an ATMP that will not result in unacceptable impacts to natural or cultural soundscapes or impairment of Park resources.

Compliance with NPS Management Policies for Wilderness Preservation and Management

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

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

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

Mount Rainier National Park ATMP – consistency with NPS Management Policies for Wilderness Preservation and Management.

The NPS relied on the mitigations in the ATMP (Appendix A to the ROD), the analysis in the ESF (Appendix B to the ROD), the unacceptable impact and non-impairment analysis above, and soundscape management analysis above as a basis for finding that the ATMP complies with the policies and guidance for Wilderness Preservation and Management.

The Park includes designated wilderness. The NPS considered the impact of one commercial air tour on wilderness character. The ESF acknowledges noise from aircraft could impact wilderness character although the analysis demonstrates that the impact is extremely limited. As described in detail above and in the ESF, noise from the commercial air tour over wilderness will be infrequent, short, and limited to the area along the designated route. Wilderness character will remain unimpaired under the ATMP since a Park visitor will have the opportunity to hear the sounds of nature and experience the primeval character of the Park's wilderness, and the natural and cultural soundscape will remain largely unmarred by air tour noise the vast majority of time and in most of the Park's wilderness.

Consistent with Director's Order #41, § 7.3, the ATMP includes mitigations which minimize impacts to wilderness character including limiting commercial air tours to one per year, requiring aircraft to fly above 3,000 ft. AGL, and requiring the one commercial air tour to stay on a designated route. *See* ATMP, § 5.0, Appendix A to the ROD.

References

- Kunc, H. P., McLaughlin, K. E., & Schmidt, R. (2016). Aquatic noise pollution: Implications for individuals, populations, and ecosystems. *Proceedings of the Royal Society B: Biological Sciences*, 283(1836), 20160839. Available at <https://doi.org/10.1098/rspb.2016.0839>
- Kunc, H. P., & Schmidt, R. (2019). The effects of anthropogenic noise on animals: A meta-analysis. *Biology Letters*, 15(11), 20190649. Available at <https://doi.org/10.1098/rsbl.2019.0649>
- National Park Service. (2000). Director's Order #47: Soundscape Preservation and Noise Management. Available at https://www.nps.gov/subjects/policy/upload/DO_47_12-1-2000.pdf
- National Park Service. (2006). Management Policies, 2006. Available at https://www.nps.gov/subjects/policy/upload/MP_2006.pdf
- National Park Service. (2011). Guidance for Non-Impairment Determinations and the NPS NEPA Process. Available at <https://www.nps.gov/subjects/nepa/>
- National Park Service (2011). Mount Rainier National Park: Acoustical monitoring report 2009. Natural Resource Technical Report NPS/NRSS/NRTR—2011/495. National Park Service, Fort Collins, Colorado. Available at https://www.nps.gov/mora/learn/nature/upload/MORA_AcousticalMonitoringReport_December_2011_nrss_access.pdf
- National Park Service. (2013). Directors Order #41. Wilderness Stewardship. Available at https://www.nps.gov/policy/DOrders/DO_41.pdf
- National Park Service. (2015). Foundation Document for Mount Rainier National Park. Available at https://home.nps.gov/mora/learn/management/upload/MORA_FD_Signatures_emailsize_10-2017_v2.pdf
- Shannon, G., McKenna, M.F., Angeloni, L.M., Crooks, K.R., Fristrup, K.M., Brown, E., Warner, K.A., Nelson, M.D., White, C., Briggs, G., McFarland, S., & Wittemyer, G. (2015). A synthesis of two decades of research documenting the effects of noise on wildlife. *Biological Reviews*, 91(4) 982-1005. Available at <https://doi.org/10.1111/brv.12207>
- U.S. Fish and Wildlife Service. (2020). Biological Opinion for Programmatic Forest Management Activities on the Olympic National Forest, 2020-2030. USFWS Reference: 13410-2009-F-0388-R001.
- The Wilderness Act, (1964), Public Law 88-577 (16 U.S.C. §§ 1131-1136) 88th Congress, Second Session (As amended).

APPENDIX H

Summary of Public Comments and Comment Analysis on the Draft Air Tour Management Plan for Mount Rainier National Park

**US Department of Transportation
Federal Aviation Administration**



**US Department of the Interior
National Park Service**



Mount Rainier National Park

Summary of Public Comments and Comment Analysis on the Draft Air Tour Management Plan

July 2022

CONTENTS

INTRODUCTION	3
COMMENT ANALYSIS METHODOLOGY	3
CONTENT ANALYSIS TABLES	4
SUMMARY OF COMMENTS	5
ADV100 Adverse Impacts: Soundscape Impacts	5
ADV200 Adverse Impacts: Wildlife/Biological Impacts	5
ADV300 Adverse Impacts: Endangered Species Impacts	6
ADV400 Adverse Impacts: Wilderness Character Impacts	7
ADV500 Adverse Impacts: Cultural Resource Impacts	8
ADV510 Adverse Impacts: Visual Impacts	8
ADV520 Adverse Impacts: Equity	9
ADV530 Adverse Impacts: Climate Change / Greenhouse Gases / Air Quality	9
ADV600 Adverse Impacts: Other	9
ELE100 ATMP Elements: Annual Number of Air Tours	10
ELE200 ATMP Elements: Routes and Altitudes	10
ELE300 ATMP Elements: Aircraft Type	13
ELE400 ATMP Elements: Day/Time	13
ELE500 ATMP Elements: Other	13
FAV100: Benefits of Air Tours	16
PRO100 Process Comments: Impact Analysis	16
PRO200 Process Comments: Public Review	17
PRO300 Process Comments: Alternatives Considered	17
PRO400 Process Comments: Other	17
PRO500 Process Comments: NEPA	18
TRIBE: Tribal Concerns	18
NS100 Non-Substantive Comment: Support Air Tours	19
NS150 Non-Substantive Comment: Other	19
NS200 Non-Substantive Comment: Oppose Air Tours Continuing	20
NS300 Non-Substantive Comment: Oppose Air Tours Introduction	20

INTRODUCTION

An Air Tour Management Plan (ATMP) would provide the terms and conditions for commercial air tours conducted over Mount Rainier National Park (Park) pursuant to the National Parks Air Tour Management Act (Act) of 2000. The Act requires that the Federal Aviation Administration (FAA) in cooperation with the National Park Service (NPS) (collectively, the agencies) establish an ATMP or voluntary agreement for each National Park System unit for which one or more applications to conduct commercial air tours has been submitted, unless that unit is exempt from this requirement because 50 or fewer commercial air tour operations are conducted over the park on an annual basis, 49 U.S.C. § 40128(a)(5). On September 15, 2015, NPS notified FAA that an ATMP was necessary to protect park resources and values and withdrew the exemption for the Park.

The objective of establishing an ATMP for the Park is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tours on natural and cultural resources, visitor experiences and tribal lands.

A notification of the public review period for the draft ATMP was announced in the Federal Register, and the draft ATMP was provided for public review and comment from July 28 through August 28, 2021. In addition, the agencies held a virtual public meeting for the Park's draft ATMP on August 16, 2021. The draft ATMP was published on the NPS Planning, Environment, and Public Comment (PEPC) website (PEPC ID: 102920).

Any comments entered into PEPC by members of the general public, as well as any written comments mailed or emailed to the NPS, were considered and included in the overall project record. This *Public Comment Summary Report* provides a summary of the substantive comments submitted during the public comment period.

COMMENT ANALYSIS METHODOLOGY

Comment analysis is a process used to compile and correlate similar comments into a usable format for the agencies' decision-makers and the program team. Comment analysis assists the agencies in organizing, clarifying, and addressing information and aids in identifying the topics and issues to be evaluated and considered throughout the ATMP planning process.

The process includes five main components:

- developing a coding structure
- employing a comment database for comment management
- reviewing and coding of comments
- interpreting and analyzing the comments to identify issues and themes
- preparing a comment summary.

A coding structure was developed to help sort comments into logical groups by topic and issue. The coding structure was designed to capture the content of the comments rather than to restrict or exclude any ideas.

The NPS PEPC database was used to manage the public comments received. The database stores the full text of all correspondence and allows each comment to be coded by topic and category. All comments were read and analyzed, including those of a technical nature, opinions, suggestions, and comments of a personal or philosophical nature.

Under each code, all comments were grouped by similar themes, and those groups were summarized with concern statements.

CONTENT ANALYSIS TABLES

In total, 3,990 correspondences were received providing 1,942 comments. The term “correspondence,” as used in this report, refers to each submission offered by a commenter. The term “comment,” as used in this report, refers to an individual issue and/or concern raised by a commenter that the agency coded by topic and category. A single commenter may have raised multiple comments within its correspondence. Similarly, multiple commenters raised many of the same comments. Of the correspondences received, eleven were identified as a form letter with minor variations, to which there were 3,156 signatories. The form letters expressed opposition to air tours and requested the consideration of a “no flight alternative.” These letters also noted impacts to wildlife, including endangered species, as well as disturbance to quiet, solitude, and the wilderness experience.

The following tables were produced by the NPS PEPC database and provide information about the numbers and types of comments received, organized by code, including form letters.

Code	Description	Comments	Percentage
ADV100	Adverse Impacts: Soundscape impacts	171	8.8%
ADV200	Adverse Impacts: Wildlife/biological impacts	131	6.7%
ADV300	Adverse Impacts: Endangered species impacts	249	12.8%
ADV400	Adverse Impacts: Wilderness character impacts	134	6.9%
ADV500	Adverse Impacts: Cultural resource impacts	2	0.1%
ADV510	Adverse Impacts: Visual impacts	16	0.8%
ADV520	Adverse Impacts: Equity	27	1.4%
ADV530	Adverse Impacts: Climate change / greenhouse gases / air quality	32	1.6%
ADV600	Adverse Impacts: Other	19	1.0%
ELE100	ATMP Elements: Annual number of air tours	23	1.2%
ELE200	ATMP Elements: Routes and altitudes	23	1.2%
ELE300	ATMP Elements: Aircraft type	10	0.5%
ELE400	ATMP Elements: Day/time	13	0.7%
ELE500	ATMP Elements: Other	42	2.2%
FAV100	Benefits of air tours	5	0.3%
NS100	Non-substantive comment: Support air tours	8	0.4%
NS150	Non-substantive comment: Other	61	3.1%
NS200	Non-substantive comment: Oppose air tours continuing	18	0.9%
NS300	Non-substantive comment: Oppose air tours introduction	583	30.0%
PRO100	Process Comments: Impact analysis	36	1.9%
PRO200	Process Comments: Public review	10	0.5%
PRO300	Process Comments: Alternatives considered	273	14.1%
PRO400	Process Comments: Other	14	0.7%
PRO500	Process Comments: NEPA	34	1.8%
TRIBE	Tribal concerns	8	0.4%

*In alphabetical order by code name

SUMMARY OF COMMENTS

The following text summarizes the comments received during the comment period and is organized by code. The summarized text is formatted into concern statements to identify the thematic issues or concerns represented by comments within the code. The focus on coding comments is on those comments with substantive content. Substantive comments raise, debate, or question a point of fact, or analysis of the impacts associated with the ATMP, or elements of the ATMP. Comments that merely support or oppose the ATMP are not considered substantive.

ADV100 Adverse Impacts: Soundscape Impacts

1. Commenters were concerned that commercial air tours would significantly disrupt the natural soundscape, wilderness, wildlife and critical animal habitat, and the visitor experience, and that air tours would have a major and detrimental impact on the ability to experience peace and solitude, serenity, tranquility, and restorative or contemplative moments.
2. Commenters were concerned that air tour noise would be in addition to the noise already associated with aircraft from the nearby naval air station, which uses Park airspace for training.
3. Commenters questioned the lack of data, analysis, or measurement of the soundscape and of the value of natural soundscapes and natural quiet, citing a Park website that addresses the threat of human-caused noise on natural soundscapes (<https://www.nps.gov/mora/learn/nature/soundscapes.htm>) and the NPS policy on soundscape management (https://www.nps.gov/policy/MP_2006.pdf; Section 4.9, pg. 56).
4. One commenter stated that tour aircraft should not be permitted unless aircraft noise levels are below 40 dBA at ground level.
5. One commenter stated that even at 3,000 feet (ft.) above ground level (AGL) the noise pollution for Park patrons will destroy the atmosphere.
6. One commenter stated that low-frequency noise (LFN) and vibration (infrasonic) from aircraft is extremely disturbing even at low-volume.
7. Commenters noted that natural sounds are vital for optimal mental and physical health, and that noise adversely affects human hearing and increases the level of stress hormones, which are related to many negative health outcomes, including metabolic disorders.
8. One commenter stated that the experience of having access to natural sounds is also of economic value to local communities.

ADV200 Adverse Impacts: Wildlife/Biological Impacts

1. Many commenters were concerned that wildlife would be adversely impacted by air tours stating that anthropogenic noise causes stress and fear, upsets wildlife communication, disrupts foraging and resting, interferes with the ability to hear predators and mating calls, disrupts reproductive cycles and the ability to raise offspring, lessens response to poachers/hunters, and changes migration patterns. One commenter noted in particular the adverse effects of aircraft exhaust and noise on wild creatures, especially birds, like owls and eagles. Commenters noted that these stressors are in addition to those caused by human recreational exposure, habitat loss, pollution, climate change, drought, wildfire, or other extreme weather events.
2. Commenters were concerned that a low flying plane can cause stampedes of caribou, deer, or other browsers and cause injury to the animals running, especially calves, or death from exertion, and that low flying aircraft can occasionally frighten wildlife off the edge of a cliff.

3. One commenter stated that hikers alone can distress and disturb wildlife within a 0.5-1 mile radius from trails, and that aircraft would be infinitely worse causing undue stress on already fragile wildlife populations.
4. Commenters referenced the following studies that show significant movement of wildlife away from human traffic corridors, asserting that aircraft flight paths will be at least as detrimental to wildlife as roads: 1) McClure, Christopher J. W., et al. "An Experimental Investigation into the Effects of Traffic Noise on Distributions of Birds: Avoiding the Phantom Road." *Proceedings of the Royal Society B: Biological Sciences*, vol. 280, no. 1773, 22 Dec. 2013, pp. 1-9 <http://wildlensinc.org/eoc-single/the-phantom-road/>; and 2) Caorsi VZ, Both C, Cechin S, Antunes R, Borges-Martins M (2017) Effects of traffic noise on the calling behavior of two Neotropical hyliid frogs. *PLOS ONE* 12(8): e0183342. <https://doi.org/10.1371/journal.pone.0183342>.
5. Commenters referenced the following studies showing adverse effects of noise on wildlife: 1) Lynch, E, D. Joyce, and K. Fristrup. 2011. An assessment of noise audibility and sound levels in U.S. National Parks. *Landscape Ecol* 26:1297-1309; and 2) "Protecting National Park Soundscapes", Reid and Steve Olson, Rapporteurs; National Park Services; John A. Volpe National Transportation Systems Center. 2013. ISBN 978-0-309-28542-1.
6. The following reference was provided as being relevant to wildlife impacts: Dooling, R.J., M. R. Leek, and A. N. Popper. 2015. Effects of noise on fishes: What we can learn from humans and birds. *Integr Zool*. 2015 January; 10(1): 29-37. doi:10.1111/1749-4877.12094.
7. Commenters recommended: seasonal limitations on tours to exclude mating season, hibernation season and other inappropriate times that can adversely affect wildlife, as determined by park specialists; aircraft operations above national park units known to be inhabited by eagles should not be permitted below 10,000 ft. AGL; limit machinery used to the quietest available.

ADV300 Adverse Impacts: Endangered Species Impacts

1. Many commenters noted that the Park is home to threatened and endangered species including northern spotted owl and marbled murrelet, and that noise pollution from air tours is likely to harass this wildlife in violation of the Endangered Species Act. The NPS has identified both listed species as likely to be disrupted by noise pollution, which will interfere with both 1) nesting and rearing young, causing the species to abandon their nests; and 2) foraging, which will cause the species to fail individually and to fail at feeding their young.
2. Commenters noted that habitat of both the northern spotted owl and marbled murrelet is already impacted by a) the State of Washington new timber harvest agreement for state forests; and b) the federal expansion of military training over the Olympics and consequent noise disruption over both federal and state forest lands. The cumulative effect of habitat loss from timber harvest and the noise disruption from these two activities, as well as human development, habitat loss, and climate change, will already create significant challenges for these species, and they cannot afford to lose any more critical habitat due to noise disruption from commercial air tours.
3. One commenter stated that stress induced by such overflight could negatively impact marbled murrelets and spotted owls, especially during nesting and egg incubation, and provided the following reference: Nelson, S.K. and T.E. Hamer. 1995. Nesting biology and behavior of the marbled murrelet. In: Ralph, C.J., G.L. Hunt, M.G. Raphael, J.F. Priatt, eds. *Ecology and conservation of the marbled murrelet*. Gen. Tech. Rep. PSW-512. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. pp. 57-67.
4. One commenter noted, if making reference to the endangered northern spotted owl and the marbled murrelets as reason for flight altitudes, the agencies should refer to a document by the

U.S. Fish and Wildlife Service (USFWS) office at Arcadia, CA: Revised Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. The commenter referenced the FAA document (UScert_Appendix_07) on certified aircraft noise limits, and that the noise of most air tour aircraft is likely to be in the Very Low category of the stated document at a flight altitude of 1,500 ft. AGL.

5. One commenter, in reference to the spotted owl and the marbled murrelet, noted that in "Annoyance Response to Helicopter Noise" by Sabine Janssen, Sander Heblj, and Theo van Veen in their paper at the 12th ICBEN Congress on Noise as a Public Health Problem humans are annoyed by helicopter noise, and that the LAX Community Noise Roundtable of September 20, 2010 found that low frequency sound from aircraft is propagated farther from the vicinity of the aircraft and can be annoying at farther distances from the source. These are human studies which highlight the effects of aircraft noise on humans, animals which may have a wider range of frequency response can be more harmed.
6. One commenter questioned what measures would be incorporated and implemented after the Section 7 consultation with the USFWS to adjust the time of day for flights, sound levels, harassment or take concerns for the listed species. The commenter noted that the USFWS issued Guidance for Northwestern California on estimating effects of auditory and visual disturbance to Northern Spotted Owl and Marbled Murrelet (Field Supervisor, Arcata, California Fish and Wildlife Office, July 31, 2006), and asked if similar guidance had been issued for Washington, and if so, has it been reviewed in the preparation of the draft ATMP.

ADV400Adverse Impacts: Wilderness Character Impacts

1. Many commenters expressed opposition to air tours over wilderness because they defy the definition of wilderness and represent an intrusion of human noise, are disruptive to the wilderness experience, are inconsistent with the backcountry experience, pollute, affect wildlife, and do not fit within the five qualities of wilderness character. Commenters referenced objectives listed in <https://www.nps.gov/features/wilderness/interactivewebfeature/files/>
2. Commenters noted that air tours constitute a commercial use of public resources (airspace) that is not a traditional/historic use and that Section 4.c of the Wilderness Act lists "commercial enterprise" as a prohibited use. Additionally, commenters noted the prohibition of mechanized, motorized uses in wilderness areas, which the commenters stated also includes no motorized units above where they can be heard below. Commenters stated that NPS does not allow chainsaws for backcountry trail work and prohibits drones over the Park, and that low-level aircraft flights are potentially more intrusive over a much wider area.
3. Commenters asserted that the noise violates the Wilderness Act and with 97% of the Park being congressionally designated wilderness, there are no areas where flights could occur and not violate the sound threshold limits.
4. Commenters stated that the agency's own guidance on monitoring wilderness character recognizes the negative impact to natural soundscapes: Keeping it Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System (Landres et al. 2015, RMRS GTR-340).
5. Commenters were concerned about the lack of justification, data, or disclosure of impacts to indicate that Park values would be properly protected, noting absence any sound level numbers in the plan and given that experiencing the natural soundscape is a fundamental element of enjoying designated wilderness areas. Commenters noted that the plan dismisses the NPS-Pacific West Region (PWR) Wilderness Air Tour Noise Assessment Strategy.

6. Commenters questioned how the ATMP could improve preservation of wilderness character and visitor experiences when there have been no flights, based on reporting data, and thus no noise impacts.
7. Commenters stated 14 CFR Part 93 determines that aircraft noise impacts are eliminated by mandating that aircraft not overfly urban communities, and therefore this same approach should be applied to national park designated wilderness areas, citing https://www.faa.gov/regulations_policies/rulemaking/media/NYNShoreHelicopterFinalRule.pdf; and <https://www.planenoise.com/docs/12-1335-1446255.pdf>.
8. Commenters recommended that aircraft be limited to the quietest available to limit noise impact on wilderness ecosystems.
9. Commenters stated that NPS Management Policy 6.3.7 is clear on wilderness management guidelines on unimpairment and the principle of non-degradation, and noted that in 2014 the PWR Regional Director requested that the Park be withdrawn from exemption based on the responsibility under the Wilderness Act to preserve and protect wilderness character.
10. Commenters stated that the interconnected actions based on the General Management Plan decisions, the Foundation Document and a draft revised Wilderness Stewardship Plan (suspended in 2016) cannot be overstated when managing future visitor use and preserving wilderness character. Commenters suggest that the ATMP should have tiered off of a Wilderness Stewardship Plan.
11. One commenter noted that the quiet technology incentive, while not available from March 15 through September 30 due to protections necessary for northern spotted owl and marbled murrelet, does not consider wilderness values year-round.
12. One commenter provided the following reference: Interagency stewardship priorities for America's National Wilderness Preservation System, https://www.nps.gov/orgs/1981/upload/Interagency-2020-Vision_508.pdf
13. One commenter questioned why there is no mention of analyzing impacts specifically in relation to the Wilderness Act, noting that in addition to the Mount Rainier Wilderness, the U.S. Forest Service manages the adjacent Glacier View, Clearwater, Norse Peak, William O. Douglas, Tatoosh, and Goat Rock wilderness areas. The commenter expressed concern about the various degrees of associated and interconnected impacts to these wilderness areas.

ADV500 Adverse Impacts: Cultural Resource Impacts

1. Commenters stated that the process appears to be lacking in the NEPA analysis required under 49 USC 20128 and the National Historic Preservation Act (NHPA) and requested that the public comment process for these ATMPs be extended or postponed until the proper NEPA analysis and public process has been conducted, consultations have been completed, and the information is incorporated into the ATMP's, so it is available for the public review process.

ADV510 Adverse Impacts: Visual Impacts

1. Commenters were concerned that the noise and sight of sightseeing planes and helicopters would impair the experience of seeing pristine nature, the striking landscape, unfettered views, and the iconic promontory, and that aircraft should not interfere with natural sights. Commenters also noted the ATMP ignores the fundamental requirement of the Organic Act as it relates to visual qualities.
2. One commenter stated that there is no unobtrusive air tour route, and that all air tours allowed at less than 5,000 ft. AGL would unavoidably intrude on visitors viewing the mountain, which is the quintessential park experience.

ADV520 Adverse Impacts: Equity

1. Commenters stated that air tours add to inequity by putting the interests of those who can afford the experience over the many who prefer the quiet, which means that a few wealthy individuals are creating unwanted visual impacts and unwelcomed noise. The commenter added that our parks should be able to be equally enjoyed by all, regardless of income and that this is an environmental justice issue.

ADV530 Adverse Impacts: Climate Change / Greenhouse Gases / Air Quality

1. Commenters noted that air tours adversely affect air quality and contribute to pollution, haze, climate change through carbon emissions, and respiratory illness, and that it is a violation of the wilderness to allow airplanes that would pollute, create constant loud noise and disrupt the whole experience of being in nature.
2. Commenters stated that planes are still using leaded fuel; that toxic fuels and aircraft exhaust have a negative impact on the environment and wildlife including birds such as marbled murrelets, spotted owls, and eagles; and expressed concern about discharging pollutants or unsafe substances into the air space above waterways.
3. Commenters were concerned that there is no mention of the carbon footprint associated with air tours and that the impacts of the proposal have not been analyzed sufficiently, and requested an examination of the threats including the risk of fires and the loss of glaciers.
4. Commenters stated that the Biden Administration has made climate and cutting carbon in the atmosphere a top priority and increasing flights over our national parks is in opposition of this priority.

ADV600 Adverse Impacts: Other

1. Commenters were concerned that commercial flights may cause airspace conflicts during search and rescue operations.
2. Commenters were concerned about the health effects of noise, stating that noise increases cognitive impairment and stress hormones which are related to many negative health outcomes, including metabolic disorders. One of the main reasons humans seek out parks and wilderness is to experience the quiet and peacefulness; heart rate, blood pressure, and other cardiovascular risk indicators decrease in these places.
3. Commenters were concerned about safety, stating that quickly changing weather can create dangerous flying conditions and an airplane crash would put many lives at risk and potentially result in a wildfire. In addition, the Park is understaffed and cannot handle such a tragedy, and many areas are not accessible by air rescue due terrain and unpredictable weather. Further, Ashford, WA, is not equipped to handle such a disaster with only having a volunteer fire department.
4. Commenters raised other safety issues, such as the noise and vibration caused by low-flying aircraft triggering avalanches, or the surprise of a sudden loud plane potentially causing visitors to fall.
5. Commenters were concerned about the economic and environmental impacts of allowing flights, stating that noise might discourage Park visitors who will no longer support the local lodges, hotels, restaurants and stores, and that the noise pollution would decay the natural setting and spearhead more development. Commenters stated that there is not a thriving air tour business that would be adversely impacted by prohibiting air tours, and that natural quiet is key factor to be considered by the travel industry.

6. Commenters were concerned about the economic impacts of limiting flights, stating that the surrounding businesses depend on visitors, and that flight limits will deter potential businesses from investing in the area and deny opportunities for customers to experience the mountain from the air or patronize other areas of the county and state. Commenters stated that Eatonville has a small airport that should be afforded the opportunity to grow and develop, and that limiting tour flights would not be helpful to the small businessman trying to compete with larger organizations. Businesses may be created out of the local airport someday, such as companies that might offer flight training, educational opportunities, mechanics training, sales, etc.

ELE100 ATMP Elements: Annual Number of Air Tours

1. Commenters suggested including a cap in each ATMP imposing a conservative limit on the number of air tour trips over a park that may occur within a given time period (e.g., annually, monthly, daily). One commenter suggested adding a requirement that no more than two of the authorized flights annually may be operated in any one day.
2. Commenters suggested the authorized number of air tours should be no more than the lesser of actual usage in 2000 or the recited more recent three-year window average to maintain consistency with the Act's legislative history, which provided that: "In determining the number of authorizations to issue to provide commercial air tour operations over a national park, the Administrator, in cooperation with the Director, shall take into consideration the provisions of the air tour management plan, the number of existing commercial air tour operators and current level of service and equipment provided by any such operators, and the financial viability of each commercial air tour operation." (106th Congress, H.R. 717, H.Rept. 106-273).
3. Commenters stated there should be no right at all to amend the ATMP to increase the total number of annual air tours, in reference to Section 9.0, third paragraph.
4. Commenters stated that a single flight per year is an unreasonable restriction upon air commerce and not supported by the 2013 USFWS biological opinion cited in line 152 or previous NPS reports to Congress regarding noise impacts upon visitor satisfaction. The draft plan does not appear to provide a process for a vendor to reasonably expand the number of annual air tours consistent with future business operations and Park resource protection requirements.
5. One commenter stated that because the operator has not reported any recent air tours does not constitute sufficient cause for removing the authorization to do so or to advertise that experience to the general public.
6. One commenter requested that NPS and FAA clarify the number of flights allowed per day, stating that the ATMP was confusing because it referenced one air tour per year in Section 3.1 but then 1 daily operation in Appendix A. The commenter asked if this meant that the operator could only operate 1 flight per day, or unlimited flights per day. The commenter noted that this should be made clear for individuals who are monitoring the number of flights for compliance with ATMP conditions.

ELE200 ATMP Elements: Routes and Altitudes

1. Commenters stated that the minimum altitude should be 2,000 ft. AGL consistent with "noise sensitive areas" described in FAA Advisory Circular (AC) No. 91-36D. Commenters also suggested a higher AGL may be necessary and appropriate in mountain parks where the primary scenic feature is the mountain(s); in such cases, the AGL requirement in the ATMP should also include a minimum horizontal setback distance from the mountain peak.
2. In reference to line 83 of the draft ATMP, one commenter stated that the 3,000 ft. AGL minimum altitude is not supported by the 2013 USFWS Biological opinion which states that "significant

disturbance ... can occur" when noise or project activity occurs within 65 yards (195 ft.) to 1/4 mile (1,320 ft.) of the noted sensitive species. The opinion specifically notes that there is no adverse impact from small fixed-wing aircraft sources, such as those used by Rios, at distances greater than 0.25 mile (1,320 ft.). FAA Advisory Circular 91-36D, which requests 2,000 ft. of clearance (AGL) is the current national voluntary standard for protecting noise sensitive areas, including sensitive species habitat and wilderness areas. Absent definitive scientific evidence to the contrary, the precedent of allowing the NPS to establish its own standards within the national airspace can lead to pilot confusion, accidental airspace violations, and reduced aviation safety especially in less than "clear and visibility unlimited" weather conditions. The voluntary 2,000 ft. AGL standard would provide the NPS with a 34% increase over the maximum affected distance identified by the USFWS and should be adopted as the mandatory air tour floor under this plan.

3. Commenters requested information on the actual minimum and maximum altitudes of the flights and distances horizontal to the mountain, or if there is any modeling on prescriptive distance based on actual altitude to maintain 3,000 ft. AGL throughout a tour, given that the flights circle the mountain. The commenter also stated that the proposed corridor for entering and exiting the Park is arguably the wildest section of the Park due to minimal roads (Westside, Mowich and Carbon River) and the quietest for natural sounds in the Park.
4. One commenter recommended limitations on the minimum altitude and required distance from natural sites or physical structures of at least 3,000 ft.
5. One commenter stated that the minimum AGL altitude of 2,000 to 3,000 ft. is insufficient to prevent disruption on the ground; it should be at least the 5,000 ft. recited in Section 2.0(1) and with the qualifications on no deviations as discussed there. The commenter also stated that there is no reason to adopt varying altitude requirements for various parts of the Park, as all parts of the Park should be valued and protected. Finally, the commenter identified Section 3.2, last sentence ("Except in an emergency or to avoid unsafe conditions") stating "Same comment as to Section 2.0(1) above." Other reasons cited included minimizing impacts on wildlife, visitor experiences, or wilderness values. Commenters stated that the peaks, unbroken forests and other scenic views can be viewed equally well from outside of that airspace.
6. One commenter stated that flights should not be permitted below 7,500 ft. AGL; another commenter stated that anything below 14,000 ft. is a distraction.
7. One commenter stated that aircraft operations above national park units known to be inhabited by eagles should not be permitted below 10,000 ft. AGL.
8. One commenter stated that the justification for the 2,000 to 3,000 ft. minimum AGL altitude in Section 4.0 is not sufficient. The commenter noted that the measure against the actual physical injury threshold for animal life does not account for disruption of natural habitat and does not address at all the disruption to the visitor experience. The commenter also noted that the noise from helicopters/rotary aircraft which are the bulk of commercial air tour operations are far louder and far more disruptive than fixed wing aircraft, both in general cruise mode and especially in altitude adjustment mode, and are more impactful at any altitude, approaching if not exceeding the cited 92 decibel (dB) injury level.
9. Regarding Section 3.2 of the draft ATMP, first sentence (authorized route), one commenter questioned the basis for this specific route, whether to maximize the scenic opportunities of the commercial air passengers and profit of the operator, or to minimize actual ground disruptions to the natural habitat and visitor experience. The commenter stated that it should be the latter, and if not, then the approved route should be modified to that effect.

10. One commenter referenced that in Section 2.0(1), with respect to the phrase "or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft," that the FAA has used similar language elsewhere to allow for aircraft operation at less than 5,000 ft. (or other purported minimum altitude requirement) above actual ground level, under visual flight rules or otherwise, (1) where cloud cover is lower than the otherwise minimum altitude, or (2) where terrain is uneven as in ridges and valleys and the aircraft is flying over the higher terrain. These exceptions gut the rule and allow for much if not most of flight operations to occur at less than stated minimum altitude, right down to very low altitudes, with resultant significantly amplified ground disturbances. This and all other minimum altitude requirements should eliminate the exception and replace it with requirements that (a) flights will operate at all times at the stated minimum altitude over any part of the terrain, and (b) flights will not operate or, if in operation, will discontinue operations where cloud cover or other conditions are expected to require them to deviate below the stated altitude.
11. In reference to line 201 of the draft ATMP, one commenter stated that geometric altitude differs from barometric altitude by up to 10% and will almost always be different than the barometric altitude commonly utilized in aviation operations. If the Park intends the above referenced air tour operator minimum altitude to be geometric it needs to be clearly noted in lines 26, 83, and elsewhere as applicable.
12. In reference to line 157 of the draft ATMP, one commenter stated that the NPS seeks to justify the 3,000 ft. AGL limitation as necessary to protect the experience of backcountry/wilderness users. However the NPS has reported to Congress that it is not the level of a noise event that irritates most of users but rather the repetitive nature of the noise even at low auditory levels. Given that NPS proposes to allow only one air tour over flight per year there is no basis to use backcountry/wilderness visitor experience to support the 3,000 ft. AGL limitation.
13. In reference to lines 149-151 of the draft ATMP, one commenter stated that the 3,000 ft. AGL limitation is not consistent with the limitations noted in the referenced USFWS Biological opinion. The 57.4 dB noise number for the Cessna 206B at 2,000 ft. AGL is well below the 92 dB threshold quoted by the NPS for the northern spotted owl. Further, the AGL limitation as presented only applies to vertical altitude over a specific spot and does not limit horizontal clearances. This would allow an air tour to come within horizontal distance to sensitive species when near the mountain yet still maintain the specific vertical clearance. The commenter requested that this be clarified.
14. One commenter requested that routes be defined and analyzed to keep the sight and sound of air tour noise away from designated wilderness, including the Wonderland trail. Another commenter requested that flights over designated wilderness be prohibited in order to preserve the wilderness experience for humans and to protect wildlife.
15. One commenter recommended that the flight route remain some distance south of the Paradise area and some distance east/ northeast of the Sunrise Visitor Center. (Note: the comment in PEPC included a replacement character symbol used to replace an unknown, unrecognized, or unrepresentable character, which in this case was assumed to be a quantified distance; e.g., "1/2 mile.")
16. One commenter was concerned that dictating the specific routes to be flown to Visual Flight Rules completely removes the pilot's ability to plan a route based on not only their customer's specifications, but more importantly it limits their ability to plan a route based on safety and weather concerns. The commenter shared that not all aircraft possess the same characteristics as

it pertains to glide distance, area needed for a precautionary or emergency landing, etc., and to limit and specify a specific route limits a pilot's options and compromises safety.

ELE300 ATMP Elements: Aircraft Type

1. Several commenters opposed helicopters specifically, while others recommended that only helicopters with quiet technology be allowed. One commenter recommended that any future changes (e.g., new entrants and/or competitive bidding) prohibit helicopters and only consider Cessna single-engine aircraft types.
2. Commenters recommended that aircraft be limited to the quietest available to limit noise impact on wilderness ecosystems, or that only electric powered aircraft be allowed to provide air tours.
3. Regarding Section 3.3 of the draft ATMP, one commenter noted that noise-reducing technology currently exists in next generation commercial air tour aircraft, and that any authorized new or replacement aircraft should be required to utilize the maximum noise-reducing technology and models available, and this should be an express requirement for any FAA/NPS concurrence.
4. One commenter suggested that aircraft be required, not incentivized, to use quiet technology aircraft.

ELE400 ATMP Elements: Day/Time

1. Commenters questioned whether the operating hours allow for opportunities for visitors to enjoy natural sounds and align with objectives for areas managed as wilderness since users recreate during these hours. Because of this, one commenter requested a window of operation from 11:00 AM to 1:00 PM, and that any limitation should be stated as the more restrictive, as in "may operate from the later of four hours after sunrise or 11am to the earlier of four hours before sunset or 1pm". One commenter recommended that flights should not be allowed prior to and up to 1 hour after dawn and 1 hour prior and to 1 hour after sunset. Another commenter recommended that tours occur from 10:00 AM to one hour before sunset local time, posted in advance by the department.
2. Commenters recommended seasonal restrictions, such as limiting tours based on previous recorded use between October and December or January and March or flights only October-March with no flights April–September, or limiting tours to exclude mating season, hibernation season and other inappropriate times that can adversely affect wildlife.
3. One commenter suggested that the date of the tour be a distinctly identified special event. Other commenters suggested that the one flight should not be allowed on the busy summer weekends, or that there be at least two no fly days per week.

ELE500 ATMP Elements: Other

1. Regarding Section 3.7B of the draft ATMP, one commenter stated that the meeting should be fully open to the public for participation.
2. Regarding Section 3.6 of the draft ATMP, one commenter stated that the required reporting should be fully accessible to the public, that there is no proprietary claim by any operator to information on operations.
3. Regarding Section 3.8 of the draft ATMP, one commenter stated there should be no enhanced operation incentive for quieter aircraft, as they will still have a negative impact during hours of operation. The commenter stated that the quiet technology incentive should instead apply solely to the ability to replace aircraft.
4. Commenters noted there is no definition provided for "quiet technology aircraft," suggesting a definition that quantifies the maximum noise standards that qualify and that there should be a

- significant reduction of at least 50% to qualify for replacement, suggesting that if the intent is to adopt FAA Advisory Circular No. AC-93-2 (or other appropriate guidance) as the basis then this should be made clear, and suggesting that equipment/performance specifications be provided.
5. Regarding Section 5.0 of the draft ATMP, first sentence, one commenter stated there should be a date by which the operator must modify the OpSpecs to comply with the ATMP or cease any operations, and that deadline should be a matter of a few months.
 6. Regarding Section 5.1 of the draft ATMP, one commenter stated that all aircraft should be required to install Automatic Dependent Surveillance-Broadcast Out (ADS-B OUT) technology and to operate from the beginning to the end of any flight under the ATMP in full transmit mode, because it is critical to adequate enforcement of and public confidence in the ATMP that all such operations be public and subject to public review and complaint in real time by specific identification of the aircraft, operator, time, altitude and location. The commenter stated that while operators have sometimes taken the position that such information is private, that this is not acceptable; there is no expectation of privacy by any operator in such operations.
 7. Regarding Sections 6.0 and 7.0 of the draft ATMP, one commenter stated there is no provision setting forth requirements for any operator sale of its business or transfer of its temporary license to overfly the Park under this ATMP, and that one should be added that at a minimum requires quiet technology. In addition, the commenter stated that reasonable operator licensing, certification, insurance and bond requirements should be included as a condition of authorized operations under the ATMP to ensure maximum safety and compliance.
 8. Regarding Section 8.0 of the draft ATMP, one commenter stated adaptive management should not be authorized in the event it would increase the number of commercial air tours allocated or decrease minimum altitude or other mitigation requirements or otherwise increase noise emission or other negative impacts on the natural habitat and visitor experience, and that any proposed modifications under adaptive management should be available to the public for advance comment.
 9. One commenter questioned the use of frequency 122.8, in reference to line 123 of the draft ATMP, stating that the plan does not specify who the operator is to contact on UNICOM frequency 122.8 for situational awareness. The commenter stated that transmission to other aircraft is an unapproved use of this frequency and would violate Federal Communications Commission (FCC) licensing (see AIM 4-1-11, 4-1-12, and advisory circular 90-50D). Further, the commenter noted that frequency 122.8 can be a very congested general aviation frequency and it is often difficult to get a word in, and frequency 122.750 would be the correct choice for approved fixed wing air to air communication. The commenter added that if intended to communicate to a ground user, the use of 122.8 could be appropriate if the NPS obtains a use license, but questioned who in the Park would monitor this frequency and to what purpose.
 10. Regarding line 118 of the draft ATMP, one commenter stated that most of the Park, and the entire proposed air tour route falls geographically within the Seattle Flight Standards District Office (FSDO) boundary. The commenter suggests to remove vagueness from the plan and identify the FSDO.
 11. One commenter recommended that air tour operators be required to provide passengers with an educational brochure or rack card that informs the public they will be flying over a noise sensitive area and special restrictions (e.g., AGL requirements) are in effect to minimize the adverse impact of aircraft noise on the environment below, and that this is especially important when considering a park's wilderness boundaries.
 12. Commenters requested that the pilot training and education, and annual meeting, be mandatory.

13. One commenter asked why there are sections for New Entrants (Section 6.0) and Competitive Bidding (Section 7.0) if the FAQs state that this AMTP eliminates any future increases. Another commenter stated that Section 6.0 should clarify that the maximum total number of annual flights would remain the same as stated in Section 3.1.
14. One commenter requested that Section 6.0, which allows new entrants, be eliminated altogether, and that consideration of any new entrant or additional air tours should fall within the public amendment process of Section 9.0.
15. One commenter requested that the provisions of Section 8.0 of the draft ATMP be limited only to minor issues that do not change any conditions within Section 3.0 of the ATMP, and that changes to routes, altitudes and other operating parameters of this ATMP that were submitted for public input should not be allowed without additional public comment.
16. One commenter suggested that adaptive management allow the NPS to close airspace in critical habitat areas.
17. One commenter recommended that every ATMP include a detailed competitive bidding process to prevent a monopoly, citing 49 U.S.C. § 40128(a)(2)(B), 14 CFR 136.41(c), Federal Register Vol. 72/No. 29, FAA Order 8900.1, FAA N8900.312 and FAA AC 136-1.
18. In reference to line 232 (Section 7.0) of the draft ATMP, one commenter stated that the phrase "when appropriate" is ambiguous, subject to agency abuse, and therefore unfair to potential air tour operators. The commenter stated that the Park needs to specify what these conditions are.
19. Commenters suggested limits to air tours noise levels, including: below 40 dBA at ground level, 60 dBA (per the Zion National Park 2010 Soundscape Management Plan) along the flight track, and annual aircraft certification to levels of less than 100 decibels within 10 ft. of the aircraft.
20. One commenter stated that the requirement to outfit aircraft with special data monitoring systems is extremely expensive and burdensome, and is not aware of any such equipment that is FAA approved for the aircraft Classic Helicopters operates which makes it impossible to comply with that requirement.
21. One commenter suggested the following compliance and enforcement provisions:
licensing/certification fees to tour operators to cover costs of monitoring and enforcement of the program; stiff penalties for violations; stringent enforcement; and an easy and prompt method for the public to report violators, including a phone number capable of receiving text messages for each park directly to the park authorities, and requiring that the messages are immediately responded to by the Park.
22. One commenter stated that while there are provisions to amend the plan for new entrants, which can be either more flights by an existing operator or a new operator altogether, including helicopters, that this is not balanced by any provision for actual park visitors to initiate consideration of reducing air tour use to lessen aircraft noise.
23. One commenter suggested that the annual tour be preceded by an advance public advisement so individuals may assess for themselves the noise/visual impacts of any given annual Park flyby as observed from ground level. The agencies each should require three days' advance notice of any such flight to enable positioning of interested agency personnel along the route, to qualitatively experience and or actually measure sound impact at location points of interest.
24. One commenter suggested that the single flight be specifically provided for disabled persons, and that agencies should consider adding a maximum price/hour limitation; e.g., "price not to exceed the average price/hour of a non-Rainier charter flight in WA State."

FAV100: Benefits of Air Tours

1. One commenter stated that the dollars generated are needed to maintain the tax base that provides funding to care for the environment and support families, and therefore, requested that the number of tours be increased to a reasonable number to enhance the tourism industry and supports our small businesses.
2. One commenter stated that it is exciting to go up in a plane or helicopter.

PRO100 Process Comments: Impact Analysis

1. Commenters stated that the draft ATMP lacks scientific information and impact analysis (i.e., NEPA review) to support the proposed action, and commenters found no justification or data presented which indicates that park values will be properly protected from commercial air tour noise.
2. One commenter recommended that the Park should first conduct an environmental impact study outlining the effects of air tours on wildlife (especially the spotted owl), old-growth forests, streams, air quality, noise pollution, as well as the surrounding community.
3. One commenter stated that NPS is developing a Lahar Detection and Monitoring System that requires the use of additional helicopter flights for the installation and maintenance within Park wilderness and should be considered when deciding whether any commercial air tours in the Park wilderness can be justified.
4. One commenter requested the analysis of impacts of flights from a reasonable past time period, noting that COVID may have impacted tourism, and thus 2020 is not a reasonable time period. The commenter requested a review of the past decade to define the number of annual tours to analyze.
5. One commenter noted the availability of the NPS Natural Sounds Office, Natural Sounds Acoustic Monitoring Reports for many of the Parks required to issue ATMPs (https://www.nps.gov/subjects/sound/acousticmonitoring_reports.htm), yet none of the ATMPs issued thus far contain any such analysis; even though NPS has baseline data for ambient sound levels at many of the air tour parks.
6. One commenter noted that there is a considerable amount of scientific analysis and explanation of aircraft noise in FAA Advisory Circular AC No. AC-93-2 and its associated appendices (https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC-93-2.pdf), but that there is no such information or analysis provided in the ATMPs to explain and support any of the noise-related provisions in the ATMPs.
7. One commenter asked which agency is making the determination on park impacts, and advised that determinations be based on the available science, such as acoustical data, and an assessment of impacts.
8. One commenter stated that NPS Management Policy 8.2 should also apply to air tours.
9. One commenter noted that each plan permits some number of air tours to fly over Wilderness, but fails to disclose the impacts of such flights on the wildlife or park visitors. This commenter cited to the following literature: a) Gladwin, D.N., D.A. Asherin, and K.M. Mancini. 1987. Effects of aircraft noise and sonic booms on fish and wildlife: results of a survey of USFWS Endangered Species and Ecological Services Field Offices, Refuges, Hatcheries, and Research Centers. NERC-88/30. U.S. Fish Wildl. Serv., National Ecology Research Center, Fort Collins, CO. 24 pp.; b) Gladwin, D.N., K.M. Mancini, and R. Vilella. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: bibliographic abstracts. U.S. Fish Wildl. Serv. National Ecology Research Center, Ft. Collins, CO. NERC-88/32. 78 pp. Accessed August 27,

2021. <https://www.nonoise.org/library/animbib/animbib.htm>; c) Mancini, K.M., D.N. Gladwin, R. Vilella, and M.G. Cavendish. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: a literature synthesis. U.S. Fish and Wildl. Serv. National Ecology Research Center, Ft. Collins, CO. NERC-88/29. 88 pp. Accessed August 27, 2021, <https://www.nonoise.org/library/animals/litsyn.htm>; d) National Park Service. September 12, 1994. Report on effects of aircraft overflights on the National Park System. Report to Congress. Prepared pursuant to Public Law 100-91, The National Parks Overflights Act of 1987. Accessed August 27, 2021. <https://www.nonoise.org/library/npreport/intro.htm>.

PRO200 Process Comments: Public Review

1. One commenter stated that the Park collected soundscape data and modeling prepared, and that this information should be available to the public now along with the summary public comments from 2010 and 2011. The commenter expressed that while the FAA and NPS terminated the earlier ATMP process on September 4, 2020, both agencies should make available a summary of public comments from that time.
2. One commenter stated that the Town of Eatonville should have been contacted for comments on the ATMP.

PRO300 Process Comments: Alternatives Considered

1. Many commenters requested the inclusion, analysis, and adoption of a “no flight alternative”, expressing concerns related to the protection of wilderness, natural sounds, wildlife habitat, places of quiet, and the cultural values of First Nations. Commenters noted that a no flight alternative would serve as a baseline for comparing other choices and that NEPA requires that all “reasonable alternatives” be considered and given equal weight. One commenter noted that a “No Air Tours” resolution is consistent with the same resolution in place for Rocky Mountain National Park and the Crater Lake National Park, and now also possible for Death Valley National Park, among others. It also simplifies reporting and monitoring and thus creates considerable cost savings for the federal government.
2. One commenter requested an alternative that allows more air tours in order to expand access to those with mobility and other deficits.
3. One commenter requested an alternative that includes at least two no fly days per week.

PRO400 Process Comments: Other

1. Commenters stated that NPS should also prepare an appropriate use analysis as described in NPS Management Policies 2006, Sections 1.5 and 8.1.2.
2. One commenter stated it is vague regarding when and whether the FAA will release a supplemental notice indicating what compliance, if any, has been completed. These two processes should be reviewed together for the benefit of coordination, full disclosure, and public review.
3. One commenter requested that NPS should withdraw all ATMPs from further public review until such time that the FAA and/or NPS can provide the scientific information and analysis, presumably in an appropriate level NEPA document, to explain and support the noise-related provisions in the ATMPs.

PRO500 Process Comments: NEPA

1. Commenters stated that the process lacks the NEPA analysis required under the NHPA and the ESA and does not disclose the environmental impacts of those actions as required under NEPA regulations and related NPS and FAA NEPA policies, citing 40 CFR §1501.2(b)(2); NPS NEPA policies in NEPA Handbook 2015, Section 1.4.A and FAA's NEPA policies in Order 1050.1F. Section 1-8.
2. Commenters requested that the public comment process be extended or postponed until the proper NEPA analysis and public process has been conducted, the consultations with the USFWS and the NHPA have been completed, and this information is incorporated into the ATMPs, so it is available for public review.
3. One commenter stated that the NPS process for coming up with the ATMPs is unclear, and noted that the website <https://www.nps.gov/subjects/sound/airtours.htm> mentions NEPA, but does not explain whether these ATMPs are considered NEPA documents. The commenter noted that the absence of no flight options in each of the ATMPs (or any other alternative) suggests that the ATMPs are not NEPA documents, and thus it is unclear what the NPS intends to do regarding NEPA compliance while meeting certain timeframes.
4. One commenter stated that an environmental impact statement (EIS) is required to account for ongoing impacts of commercial and military air traffic over and near the parks, impacts from which are cumulative and pursuant to NEPA must be considered in the evaluation of new impacts. In particular, the impact of Navy jets from NAS Whidbey on Olympic National Forest and Park is already significant.
5. Commenters stated that the actions being proposed for the ATMPs do not fall under those listed for "Actions categorically excluded from further NEPA review" under 43 CFR Part 46 Part 516 Chapter 12; as such, an environmental assessment (EA) would need to be conducted. A programmatic EA with Tiered analysis for each of the park units, would be an appropriate approach in the NEPA review process for this type of action. If the FAA analysis is exempt from the NEPA process, this must be disclosed in a supplemental Notice of Availability. The commenter questioned whether the NPS has been included as a Cooperating Agency and if so, the agency's NEPA requirements would apply here.
6. One commenter stated that an EA should evaluate the impacts of an airplane crash on national park resources and visitor experience.
7. One commenter concluded that no NEPA compliance (categorical exclusion (CE) or EA) has ever been done on any of the existing Interim Operating Authorities (IOAs) across the NPS since it is not required because it was a Congressional act under the Act (referencing 70 FR 36456-36463, June 23, 2005, pg. 36457, footnote 1); therefore, preparation of an ATMP should have a higher compliance bar, especially after the initial Park public scoping and draft ATMP public comments for EA (2011/2012) included significant concerns over air tours.
8. Commenters questioned whether the process followed by the agencies is consistent with representations made to the D.C. Circuit in court filings.
9. Commenters were uncertain what a future environmental review would be for competitive bidding.

TRIBE: Tribal Concerns

1. One commenter questioned how the ATMP would affect traditional uses by the Nisqually Indian Tribe, the Puyallup Tribe of Indians, the Squaxin Island Tribe, the Muckleshoot Indian Tribe, the Confederated Tribes and Bands of the Yakama Nation, and the Cowlitz Indian Tribe.

2. One commenter stated that the proposed ATMP documents provide no information regarding compliance with Section 106 of the National Historic Preservation Act (NHPA), which should include consultation with potentially affected Native American Tribes, citing Council of Environmental Quality (CEQ) regulation 40 CFR 1502.25 (a); FAA Order 1050.1F, Section 2-4.4; FAA Order 1210.20; and Section 4.14 of the NPS NEPA Handbook 2015. The commenter recommended that NPS withdraw proposed ATMP(s) from further public review until each proposal and related Tribal consultation can be described, analyzed and consolidated into an appropriate level NEPA document, and then the fully integrated ATMP/NEPA/NHPA compliance document be released for public review.
3. One commenter supported the provision that allows temporary no-fly periods, where events may include tribal ceremonies or other similar events. The same language pertaining to tribal ceremonies or events should be included in all ATMPs, and ATMPs should be expanded to include Tribal lands and sacred sites. The commenter urged the inclusion of additional protections for Tribal cultural resources impacted by ATMPs, including the requirement of ongoing meaningful consultation with tribes whose lands and/or sacred sites fall within or near an ATMP, noting that it is critical that the NPS and FAA strictly protect Tribal sacred sites.
4. One commenter strongly endorsed Congress' determination that "the protection of tribal lands from aircraft overflights is consistent with protecting the public health and welfare and is essential to the maintenance of the natural and cultural resources of Indian tribes" and that this protection is particularly critical for Tribal lands and sacred sites located within, and even more so outside of, national parks. The commenter urged the Department of the Interior, the Department of Transportation, the Bureau of Indian Affairs, and the FAA to champion Congress' determinations and implement ATMPs for all Tribal sacred sites, many of which, like national parks, are being harmed by unregulated air tours, and all of which must be protected for current and future generations.

NS100 Non-Substantive Comment: Support Air Tours

1. Several commenters recommended that NPS improve and expand access as a means to experience wilderness, including, for example, access for the handicapped. One commenter did not believe it is reasonable to attempt to dictate to the public how they will experience their own national parks, and if the general public would like to experience the Park from the air then they should have the opportunity to do so.
2. One commenter stated that the draft ATMP proposes reasonable conditions that support the wilderness goals, while also permitting air tours to occur.

NS150 Non-Substantive Comment: Other

1. One commenter questioned the purpose of enacting an ATMP for the Park given that it doesn't appear there is any risk to wildlife or visitors based on the current frequency of flights.
2. One commenter requested that all existing exemptions to the ATMP requirement should be withdrawn by the NPS Director, and that no further voluntary agreements should be adopted which have the effect of providing fewer restrictions on commercial air tour overflights than an otherwise-applicable ATMP.
3. One commenter requested that the FAA to adopt best practices for overflights. Another commenter requested policies and enforceable rules to limit noise in the Park.
4. One commenter suggested increasing that 1/2 mile buffer to a much larger buffer so that no noise from the tours leak into the Park.

NS200 Non-Substantive Comment: Oppose Air Tours Continuing

1. Many commenters opposed the continuation of air tours, citing the noise pollution, wildlife impacts, and that commercial aviation use is incompatible with the Park's mandate to preserve unimpaired the natural and cultural resources and values of the NPS for the enjoyment, education, and inspiration of this and future generations.
2. One commenter stated that, based on the three-year average of reporting data from 2017 to 2019, Rite Bros Aviation, Inc. conducts an average of one commercial air tour at the Park each year and Classic Helicopter Corp. has not reported any flights since 2013. This demonstrates a lack of interest on the part of the operators to advocate for their business and no significant demand for the service. A ban on air tours based on this information would not appear to cause any of these operators an economic impact.

NS300 Non-Substantive Comment: Oppose Air Tours Introduction

1. Many commenters opposed the introduction of air tours, citing the effects of noise on visitor experience and wildlife, air pollution, and that air tours are at odds with experiencing the quiet and solitude of wilderness.
2. One commenter stated that air tours of our national parks and other sensitive lands offer no appreciable competing public benefit and in fact are inherently contradictory, and that national parks were never intended for profit extraction at the expense of preservation of the natural habitat and visitor experience.
3. One commenter stated that there numerous air tours of the Park not falling within the parameters of an ATMP are already available to Pacific Northwest visitors. Prohibition by the ATMP of commercial air tours within less than 5,000 ft. of the ground or within the Park boundaries will thus have no major impact on those who can best enjoy the Park from the air or on those aviation companies currently providing such tour opportunities.
4. Commenters stated that overflights of a national park at any altitude should be forbidden because the mission of the NPS includes the preservation of "the natural soundscapes" that are "inherent components of the scenery and the natural and historic objects and the wild life protected by the NPS Organic Act" (Director's Order #47).