

**Exhibit 4 – Finding of Effects Letter, dated
April 20, 2023, and Concurrences**



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 20, 2023

Re: Continuing 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 Bandelier National Monument

Michelle Ensey
Deputy State Historic Preservation Officer
New Mexico State Historic Preservation Office
407 Galisteo Street, Suite 236
Santa Fe, NM 87501

Dear Michelle Ensey:

Introduction

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS) (together, the agencies), 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 Bandelier National Monument (the 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 provides: a description of the undertaking - an ATMP that would not permit commercial air tours in the planning area (the preferred alternative under the National Environmental Policy Act (NEPA)); the Area of Potential Effects (APE); a description of steps taken to identify historic properties; a description of historic properties in the APE and the characteristics that qualify them for listing in the National Register of Historic Places (National Register); and an explanation of why the criteria of adverse effect do not apply to this undertaking. 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 August 27, 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. In a letter dated January 26, 2023, we provided an updated list of historic properties identified within the APE for

review and comment. Similar letters were sent to all consulting parties listed in **Attachment A**. Section 106 consultation with tribes is further described below.

Public participation for this undertaking was integrated with the National Parks Air Tour Management Act (NPATMA) process. The agencies published a notice of availability of the draft ATMP in the Federal Register on September 3, 2021. The public comment period on the draft ATMP was from September 3, 2021, through October 3, 2021. A public meeting was held on September 15, 2021. The draft ATMP authorized the same number of annual flights as the average number of flights from 2017-2019 and maintained routes and altitudes similar to what is currently flown under existing conditions. The agencies received 2,237 discrete comments, of which 197 were about potential effects on cultural resources and 348 were about tribal concerns. The rest of the comments were not relevant to Section 106. Some of the relevant comments noted the draft ATMP did not acknowledge compliance with the NHPA and should not be signed by the NPS until it does. Many commenters expressed opposition to the draft ATMP due to impacts to the cultural landscape. Commenters also referenced the sacred importance of the Park to tribal culture. Since the publication of the draft ATMP, and in response to objections from the public and tribes to continuing air tours at existing conditions, the agencies changed the draft ATMP to eliminate air tours within the planning area (see description of undertaking below).

Description of the Undertaking

The undertaking for the purposes of Section 106 compliance is implementing an ATMP that applies to all commercial air tours over the Park and within ½ mile outside the Park's boundary. Under NPATMA and its implementing regulations, 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 its 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 area regulated by the ATMP is referred to as the ATMP planning area. Overflights that do not meet the definition of a commercial air tour above are not subject to NPATMA and are thus outside the scope of the ATMP.

The agencies have documented the existing conditions for commercial air tour operations over the Park. One commercial air tour operator, Southwest Safaris, currently conducts tours over the Park. The agencies consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 101 air tours that occurred, on average, 99 days per year (thus, a single tour occurred on most days). A three-year average is used because it reflects the most accurate and reliable air tour conditions, and accounts for variations across multiple years. Under existing conditions, commercial air tours over the Park are conducted using a fixed wing aircraft, CE-182-R. The fixed-wing operator flew 101 tours in 2017, 76 tours in 2018, and 125 tours in 2019. Southwest Safaris conducts commercial air tours on the nine routes depicted in **Attachment B**. Reported minimum altitudes range

from 800 ft. to 1,000 ft. AGL, depending on the route¹. Under existing conditions, the operators are not required to use these routes and may change the routes without notice to the agencies.

The proposed undertaking would prohibit commercial air tour operations within the ATMP planning area. A summary of the undertaking elements is shown in the table below:

SUMMARY OF ATMP ELEMENTS

General Description and Objectives	Prohibits air tours within the ATMP planning area to maximize achievement of Park management objectives. Air tours could continue to fly outside the ATMP planning area (i.e., at or above 5,000 feet AGL or more than ½-mile outside of the Park's boundary).
Annual/Daily Number of Flights	None in ATMP planning area.
Routes	None in ATMP planning area.
Minimum Altitudes	Flights over the Park at or above 5,000 feet AGL could occur as they are outside the ATMP planning area. Flights more than ½-mile outside the Park boundary could similarly still occur as they are also outside the ATMP planning area.
Time of Day	N/A
Day of Week	N/A
Seasonal	N/A
Quiet Technology (QT) Incentives	N/A
Annual Meeting, Operator Training and Education	N/A
Restrictions for Particular Events	N/A
Adaptive Management	N/A
Initial Allocation, Aircraft Type, Competitive Bidding, and New Entrants	N/A
Monitoring and Enforcement	Monitoring would occur to ensure operators are complying with the terms and conditions of the ATMP.
Interim Operating Authority²	Terminates 180 days from the effective date of the ATMP.

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.

² Commercial air tours over the Park are currently conducted under interim operating authority (IOA) that the Act required the FAA to grant air tour operators. Interim operating authority does not provide any operating parameters (routes, altitudes, etc.) for commercial air tours other than an annual limit. Under the Act, IOA for a park terminates by operation of law 180 days after an ATMP is established for that park.

Area of Potential Effects (APE)

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 that may take place under any of the selectable draft alternatives, including those over the Park or those that are reasonably foreseeable to take place adjacent to the ATMP planning area. 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, or elimination of, noise levels that may result in alteration of the characteristics of historic properties qualifying them for listing in the National Register.

The APE was delineated based on the undertaking's potential effects in consultation with the SHPO and in consideration of input by consulting parties. The APE for this undertaking comprises the Park plus ½ miles outside the boundary of the Park, excluding the Tsankawi Unit, which is currently not overflown by commercial air tours, as depicted in **Attachment B** below.

The APE for the undertaking was proposed in the Section 106 consultation letter dated August 27, 2021, which was sent to all consulting parties. Your office concurred with the proposed APE in a letter dated September 1, 2021. The agencies also received a comment from Pueblo de San Ildefonso in a letter dated September 23, 2021, noting concerns that the APE did not include additional lands that are managed by other jurisdictions beyond the Park and adjacent tribal lands. The agencies met with the Pueblo de San Ildefonso to discuss their concerns. No additional comments were received regarding the APE. Therefore, the APE has not changed.

Summary of Section 106 Consultation with Tribes

The FAA contacted 27 federally recognized tribes via letter on March 26, 2021, inviting them to participate in consultation and requesting their expertise regarding historic properties, including TCPs that may be located within the APE. On August 27, 2021, the FAA sent the identified federally recognized tribes a Section 106 consultation letter describing the proposed undertaking in greater detail in which an APE was proposed and the results of the preliminary identification of historic properties were provided. On December 3, 2021, and December 9, 2021, the FAA sent follow up emails to the federally recognized tribes once again inviting them to participate in Section 106 consultation.

On December 15, 2021, and December 20, 2021, the FAA followed up with phone calls to those tribes that did not respond to prior consultation requests. The FAA received responses from six tribes expressing interest in participating in the Section 106 consultation process: Pueblo of Acoma, Pueblo of Isleta, Pueblo de San Ildefonso, Pueblo of Tesuque, Pueblo of Picuris, and Pueblo of Santa Clara. Two tribes asked to opt out of additional consultation for the undertaking: Pueblo of Sandia and Pueblo of Santa Ana.

On September 15, 2021, the FAA received comments from the Pueblo of Pojoaque via email informing the FAA that there are 5,000 Ancestral sites in the region, over 2,000 of which are within the Park. They also noted that TCPs and ancestral sites and shrines located throughout the region continue to be in use by the community. Pueblo of Pojoaque expressed that air tours should not be allowed at Bandelier National Monument because they would violate the sacred landscape of the area and its continued use by Pueblo communities and people. They also noted that air tours would affect the use of TCPs and ancestral sites and shrines located throughout the region.

The FAA received comments from Pueblo de San Ildefonso Governor Christopher A. Moquino in a letter dated September 23, 2021, which notes that the Pueblo de San Ildefonso considers the Park to lie within the ancestral domain of the Pueblo de San Ildefonso and considers the documented historic properties within the Park to be the material evidence of the occupation of the monument by their ancestors, whose spiritual presence continues to reside within this domain. The letter further points out that there are extensive resources within the Park that are not documented and are associated with traditional and ceremonial practices conducted since time immemorial into the present. The Pueblo de San Ildefonso considers the lands of the Park, as well as lands beyond the Park boundary, to be a traditional cultural landscape of which the archaeological resources form only a part. Additionally, Pueblo de San Ildefonso expressed that air tours within the boundaries of Bandelier National Monument and its surrounding area has the potential to affect traditional and ceremonial practices by the Pueblo de San Ildefonso. The tribe also noted that there is a potential for air tours to affect the spiritual domain and presence of the Pueblo de San Ildefonso's ancestors.

The FAA received comments from Acoma Tribal Historic Preservation Officer (THPO) Steven Concho of the Pueblo of Acoma in a letter dated December 9, 2021. In those comments, the Pueblo of Acoma noted they continue to claim cultural affiliation to many areas in New Mexico, Arizona, Colorado, and Utah. The THPO recognized each of these places contains the cultural and archaeological "footprints" of their ancestors, along with cultural landscapes, shrines, and gathering places. In their comments, the Pueblo of Acoma informed the FAA that there are TCPs within the Park. The Pueblo of Acoma also expressed concerns about the impacts of air tours on fragile historic structures and sensitive cultural areas in and around the Pueblo. Pueblo of Acoma stated that although they have "no-fly" periods for tribal ceremonies, unauthorized flights still occur and have lasting consequences on tribal members as they continue to mark cultural observances and practice with sensory intrusions from flights. The Pueblo additionally expressed concern about cumulative effects that occur from direct flyovers. The FAA invited the Pueblo to engage in Government-to-Government consultation with FAA and NPS leadership at the Park pursuant to Executive Order 13175.

In a letter dated January 18, 2022, the FAA received comments from the Pueblo of Santa Clara's Governor, Michael Chavarria. The letters explain that the Pueblo of Santa Clara has deep ties to the Park and its surrounding cultural landscape. The letter notes that the Park is part of their ancestral migration history and holds a pivotal role in the expression of the Pueblo of Santa Clara's identity today. The letter also informed the FAA that there are thousands of documented tribal cultural properties within the Park, as well as countless unregistered sacred and culturally significant sites.

The FAA also received comments from Governor Phillip Quintana of the Pueblo de Cochiti in a letter dated February 21, 2022. In those comments, the Pueblo de Cochiti expressed concern regarding the level of consultation the FAA and NPS have provided for the Pueblo. They mention that the two consultation letters they received in March and August of 2021 do not constitute meaningful consultation. The Pueblo de Cochiti also expressed that Bandelier National Monument is an invaluable cultural landscape and a place of retreat and prayer to ensure the strength of their community and continued way of life. The letter mentions that the Pueblo de Cochiti maintains a strong cultural affinity in ongoing interactions including through story, song, prayer, ceremony, and pilgrimage with this landscape and the gifts considered by the Pueblo de Cochiti to be both cultural and natural resources - plants, animals, air, soil, and water. The entirety of this area, including individual sites, is central to the maintenance and revitalization of their cultural knowledge, histories, and practices. The Pueblo de

Cochiti notes that allowing the continuation of commercial air tours will exacerbate the existing challenges NPS and tribes continue to experience in protecting cultural resources and tribal religious use by enabling continued viewing access to the Park's visitors, noise pollution, and wildlife disruption. Commercial air tour operations also result in noise-induced vibration that can cause significant short-term and long-term adverse effects on the integrity of natural and man-made structures, objects, and sites.

As a result of comments received asking for more meaningful consultation, the FAA has held meetings under Executive Order 13175 and Section 106 with Pueblo de Cochiti, Pueblo of Pojoaque, Pueblo de San Ildefonso, and Pueblo of Santa Clara. Through this consultation, the tribes have repeatedly stated that they consider the entire landscape of the Pajarito Plateau to be sacred and believe air tours are inappropriate and adversely impact the cultural landscape and TCPs throughout.

The tribes whom the FAA contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment A**.

Identification of Historic Properties

In accordance with 36 CFR 800.4, the FAA has made a reasonable and good faith effort to identify historic properties 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 National Register 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, and outdoor spaces designed for meditation or contemplation. The FAA is specifically considering whether air tours could affect the use of TCPs associated with cultural practices, customs or beliefs that continue to be held or practiced today. 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).

The initial identification of historic properties relied upon data submitted by the NPS regarding known historic properties in the Park. The FAA also coordinated with the New Mexico Historic Preservation Division (State Historic Preservation Office) to collect data for previously identified properties that may be listed in or eligible for listing in the National Register. Data from the New Mexico Preservation Division was received on February 10, 2022 and updated on December 16, 2022. The FAA also consulted with the federally recognized tribes among the list of consulting parties enclosed as **Attachment A** regarding the identification of any other previously unidentified historic properties that may be located within the APE. In a letter dated September 23, 2021, the Pueblo de San Ildefonso expressed that air tours would adversely affect the qualities that make historic properties eligible for the National Register, without accounting for certain kinds of historic properties that might not be captured during archaeological survey. The Pueblo de San Ildefonso noted that the inventory of historic properties based upon archaeological survey is currently incomplete and would benefit from additional inventory documenting ethnographic use within the APE.

In addition to the previously identified historic properties, Park staff and affiliated tribes have informed FAA there are TCPs located within the APE. While the TCPs are noted in **Attachment C** in a general manner, these are not mapped in **Attachment B** to ensure confidentiality.

A preliminary list of historic properties was provided to all consulting parties for their review and comment in a letter dated August 27, 2021. A letter dated January 26, 2023, sent to all consulting parties, described FAA's further efforts to identify and evaluate historic properties within the APE and provided results of those efforts. Your office provided a response in a letter dated February 10, 2023, in which you agreed that several Native American tribes consider Bandelier National Monument to be a traditional cultural landscape. You also recommended that the agencies replace the word "several" with "many" when referring to the contributing sites within the Bandelier National Monument Archaeological and Historic District. The agencies have made that change in the description of significant characteristics in **Attachment C**. The agencies did not receive comments from other consulting parties identifying additional historic properties within the APE.

The effort described resulted in the identification of four historic properties within the APE for which feeling and setting are characteristics that make the properties eligible for listing on the National Register, which are listed in **Attachment C**. Those historic properties identified with available non-restricted location data are shown in the APE map provided in **Attachment B**. There are thousands of additional below-ground archaeological sites within the APE; however, these below-ground archaeological resources are not further described in this letter because feeling and setting are not characteristics that make these properties eligible for listing on the National Register and there is no potential for the undertaking to affect these resources.

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 National Register. The characteristics of the historic properties within the APE that qualify them for inclusion in the National Register are described in **Attachment C**. 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

To assess the potential for the introduction of audible elements, including changes in the character of aircraft noise, the agencies considered whether there would be a change in the annual number, daily frequency, routes, or altitudes of commercial air tours, as well as the type of aircraft used to conduct those tours. The level of commercial air tour activity under the ATMP is expected to improve the protection of cultural resources within the APE.

The ATMP prohibits commercial air tours within the ATMP planning area and would reduce noise effects to historic properties. Therefore, the undertaking would not alter the characteristics of historic properties within the APE in comparison to existing conditions. The elimination of air tours within the ATMP planning area will reduce maximum noise levels at sites directly below commercial air tour routes compared to existing conditions. All historic properties within the APE would experience a reduction in noise from air tours.

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 Yearly³ Day Night Average Sound Level (L_{dn} or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the undertaking would not result in any noise impacts that would be “significant” or “reportable” under the FAA’s policy for NEPA.⁴

As part of the ATMP noise analysis, the NPS provided supplemental metrics to further assess the impact of commercial air tours in quiet settings: time above 35 dBA and time above 52 dBA. These metrics account for the amount of time in minutes that aircraft sound levels are above a given threshold (i.e., 35 dBA and 52 dBA). In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007). Interference with Park interpretive programs would reasonably occur at 52 dBA. **Attachment D** provides further information about the supplemental noise metrics and presents the results of modeling.

Attachment D presents noise contours (i.e. graphical illustration depicting noise exposure) for existing conditions and the representative location point analysis. Under existing conditions, noise related to commercial air tours is greater than 35 dBA for less than 1 minute a day within the ATMP planning area. All historic properties within the APE will experience the elimination of noise related to commercial air tours within the ATMP planning area. Because noise is modeled using conservative assumptions (see **Attachment D**) and implementing the ATMP would eliminate flights and routes within the ATMP planning area, noise is expected to be reduced within the ATMP planning area. The elimination of air tours within the ATMP planning area will also reduce the likelihood that an air tour would interrupt traditional practices such as ceremonies, as compared to existing conditions. Therefore, the undertaking would not diminish the integrity of any historic property’s significant historic features.

Assessment of Visual Effects

Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the agencies considered the potential for the introduction of visual elements that could alter the characteristics of a historic property that qualify it for inclusion in the National Register. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The elimination of flights within the ATMP planning area make it unlikely a historic property within the ATMP planning area would experience a visual effect from the undertaking. The agencies also considered the experience of tribal members who may be conducting ceremonies or practices that could involve looking toward the sky. The elimination of air tour aircraft overhead represents an improvement over existing conditions.

The ATMP prohibits commercial air tours within the ATMP planning area and would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the National Register. All historic properties within the APE would experience a reduction in visual intrusions from air tours, therefore the undertaking would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the National Register.

³ Yearly conditions are represented as the Average Annual Day (AAD)

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.

Indirect Effects

Because the undertaking would eliminate air tours within the ATMP planning area, the agencies also considered the potential for indirect effects on historic properties within the APE that could occur from air tours displaced outside the ATMP planning area as a result of the undertaking. It is unlikely that the operator would continue to conduct commercial air tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area. Since the operator cannot fly on the north side of the Park due to restricted air space, it is unlikely there would be new or different impacts in that area. Flights at or above 5,000 ft. AGL are unlikely due to the Park's elevation and safety requirements for unpressurized aircraft flying over 10,000 ft. MSL for more than 30 minutes. If air tours are conducted at or above 5,000 ft. AGL over the ATMP planning area, the increase in altitude would likely decrease impacts on ground level resources as compared to current conditions because the noise would be dispersed over a larger geographical area. Noise from air tours conducted at or above 5,000 ft. AGL would be audible for a longer period, but at lower intensity. Similarly, aircraft are transitory elements in a scene and visual impacts tend to be relatively short, especially at higher altitudes.

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 would not result in any alteration or physical modifications to historic properties. 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 auditory 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

FAA and NPS approval of the undertaking would not alter the characteristics of any historic properties located within the APE in a manner that would diminish its integrity as there would be a reduction in audible or visual effects from existing conditions. Based on the above analysis, the FAA proposes 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 30 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 long horizontal flourish extending to the right.

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

Attachments

- A. List of Consulting Parties
- B. APE Map including existing Commercial Air Tour Routes
- C. List of Historic Properties in the APE and Description of Historic Characteristics
- D. Summary of Noise Technical Analysis from NEPA Review

ATTACHMENT A
List of Consulting Parties

Adams, Bruce M. (Southwest Safaris)
Apache Tribe of Oklahoma
Comanche Nation, Oklahoma
Fort Sill Apache Tribe of Oklahoma
Hopi Tribe of Arizona
Jicarilla Apache Nation, New Mexico
Kewa Pueblo, New Mexico
Los Alamos National Laboratory*
National Trust for Historic Preservation
Navajo Nation, Arizona, New Mexico & Utah
New Mexico State Land Office
Ohkay Owingeh, New Mexico
Pueblo de Cochiti, New Mexico
Pueblo de San Ildefonso, New Mexico
Pueblo of Acoma, New Mexico
Pueblo of Isleta, New Mexico
Pueblo of Jemez, New Mexico
Pueblo of Laguna, New Mexico
Pueblo of Nambe, New Mexico
Pueblo of Picuris, New Mexico
Pueblo of Pojoaque, New Mexico
Pueblo of San Felipe, New Mexico
Pueblo of Sandia, New Mexico*
Pueblo of Santa Ana, New Mexico*
Pueblo of Santa Clara, New Mexico
Pueblo of Taos, New Mexico

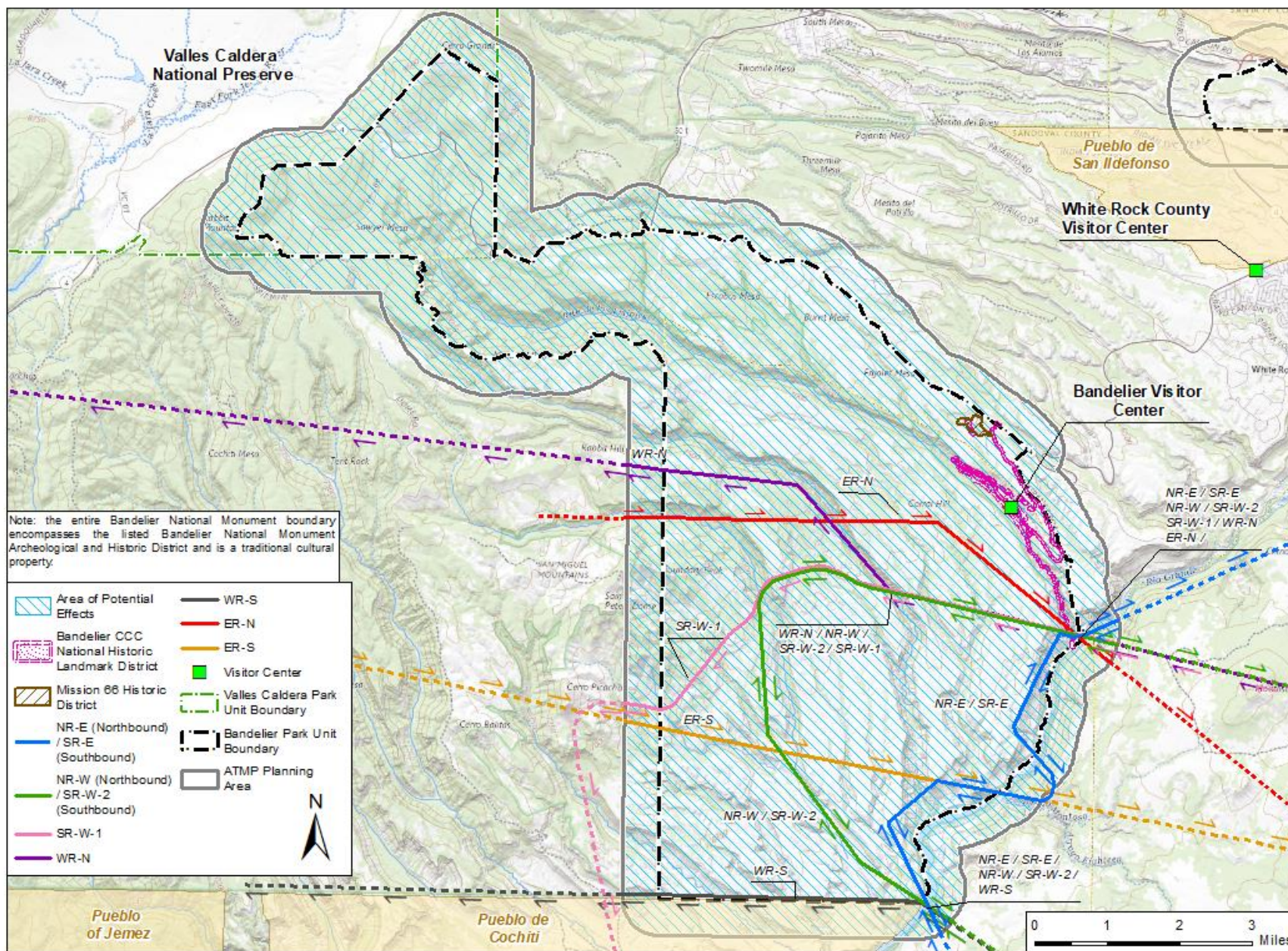
Pueblo of Tesuque
Pueblo of Zia, New Mexico
Santa Fe National Forest
Standing Rock Sioux Tribe of North & South Dakota
Tewa Women
Ysleta Del Sur Pueblo
Zuni Tribe of the Zuni Reservation, New Mexico

*Consulting party has opted out of further Section 106 consultation for the undertaking.

ATTACHMENT B

**Area of Potential Effects Map
Including
Existing Commercial Air Tour Routes**

Area of Potential Effects Map for ATMP at Bandelier National Monument



ATTACHMENT C

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

Property Name	Property Type	Eligibility Status	Significant Characteristics
Bandelier CCC National Historic Landmark District	National Historic Landmark and Historic District	Listed	The Bandelier CCC National Historic Landmark was designed by NPS architects and landscape architects and built by the CCC (Civilian Conservation Corps) between 1933 and 1942. The district contains 31 buildings of Pueblo Revival design that serve as office space, residences for employees, and lodging for guests. It is significant for its association with the New Deal era in the areas of Social History and Art. It is also significant for its rustic Pueblo Revival architectural style and the careful design of the entrance road and other non-building elements. As a result of the application of rustic design principles, the cultural landscape today blends with its natural setting and conveys a strong sense of place. The rustic, pueblo revival architecture, the natural canyon setting, views and the experience of archeological sites and the riparian corridor all contribute to the unique feeling that the district conveys.
Bandelier National Monument Archeological and Historic District	Historic District	Listed	<p>The Bandelier National Monument Archeological and Historic District encompasses the entire park boundary and is significant for its association with the Archaic use of the Pajarito Plateau (5500 BCE-600 CE); Ancestral Pueblo occupation of the Pajarito Plateau (600-1600 CE); early historic use of the Pajarito Plateau (1600-1848); early scientific investigations and development of archaeology (1848-1932); early Native Arts revival efforts (1848-1932); homestead-era ranching, farming, and timber extraction (1848-1932); and the New Deal era and the CCC (1932-1942).</p> <p>The district contains 32 contributing buildings, 90 contributing structures, and 2,974 contributing sites⁵. Many of the archaeological sites in the park are in good condition and retain a high level of integrity, but there are a series of natural and</p>

⁵ This number include the archaeological sites that exist within the boundary nominated to the National Register in 1970 and archaeological sites within the post-1970 expanded boundaries of the monument.

Property Name	Property Type	Eligibility Status	Significant Characteristics
			<p>cultural disturbances that have affected them. The pre-Hispanic sites are associated with habitation of the area by Ancestral Pueblo peoples. The area saw limited occupation in historic times by historic Pueblo groups, nomadic Athabascan groups, Hispanos, and Euro-Americans.</p> <p>During the New Deal era and CCC construction, there was great emphasis on the visual impacts of development. Landscape architects took great care to provide pleasant surroundings in the built-up area to promote spectacular and unobstructed views of archaeological sites that contribute to the Park's history. A trail system was also constructed to direct visitors to scenic overlooks and to enhance their access to various archaeological sites.</p> <p>Areas of significance include archeology (prehistoric, historic), science, conservation, social history (exploration/settlement), commerce, industry, architecture, landscape architecture, art, Native American ethnic heritage, military, and entertainment/recreation.</p>
Mission 66 Historic District	Historic District	Eligible	<p>Bandelier National Monument's staff and public-use village on Frijoles Mesa is a Mission 66 Historic District comprised of a park employee housing area (4 buildings) and the Juniper Family Campground and associated roads and interpretive service structures. The Mission 66 Historic District is significant for its association with the unique Frijoles Mesa land swap between the National Park Service and the Atomic Energy Commission, through a 1961 executive order from President Dwight Eisenhower that made the village and park-services expansion possible. The village also represents a well-considered and largely intact 1963–1964 application of the national NPS Mission 66 program to the unique management challenges at the monument and upon the landform of Frijoles Mesa.</p> <p>The Mission 66 designers carefully sited the Bandelier Mission 66 Village for minimum disturbance of natural Frijoles Mesa vegetation, resulting in desirable privacy for campsites, and screening of the amphitheater and the residential area from campers and automobiles. In addition, siting of the Mission 66 houses in the residential area took advantage of topography and spacing of large pine</p>

Property Name	Property Type	Eligibility Status	Significant Characteristics
			trees to allow stunning views of St. Peter's Dome and the San Miguel Mountains to the west.
Bandelier National Monument Traditional Cultural Properties ⁶	TCP	Eligible	Many contributing sites within the Bandelier National Monument Archeological and Historic District are Ancestral Pueblo sites that are considered TCPs. Several tribes have informed the FAA that there are TCPs within the Park boundary and that extend beyond to the larger landscape of the area.

⁶ Location is restricted and therefore cannot be shown on the APE map.

ATTACHMENT D

Summary of Noise Technical Analysis from NEPA Review

There are numerous ways to measure the potential impacts 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 ATMPs are shown in the table below.

Metric	Relevance and citation
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 selected to represent typical daytime commercial air tour operating hours.
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 10 dB penalty between 10 PM and 7 AM local time.</p> <p>Note: Both $L_{Aeq, 12\text{hr}}$ and DNL 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>If there are no nighttime events, then $L_{Aeq, 12\text{hr}}$ is arithmetically three dBA higher than DNL.</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>
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). This level is also shown to cause blood pressure increases in sleeping humans (Haralabidis et al., 2008); as well as exceeding recommended maximum background noise level inside classrooms (ANSI S12.60/Part 1-2010).</p>

⁷ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μPa . 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 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.

Metric	Relevance and citation
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>

Aircraft, Routes and Number of Operations Modeled

Route	Aircraft	Existing Conditions
ER-S (Orange) 1,000 ft. AGL	Cessna 182	1
ER-N (Red) 10,000 ft. MSL	Cessna 207	
ER-S (Orange) 10,000 ft. MSL	Cessna 182	
	Total	1

Two types of analyses were performed using FAA’s AEDT, Version 3e: 1) contour analysis and 2) representative location point analysis. A noise contour presents a graphical illustration or “footprint” of the area potentially affected by the noise. Location point results present the metric results at specific points of interest. The NPS provided a list of 13 location points, geographically located across the ATMP planning area, where noise levels were to be evaluated. These locations are geographically shown in Figure 1 and listed in Figure 2.

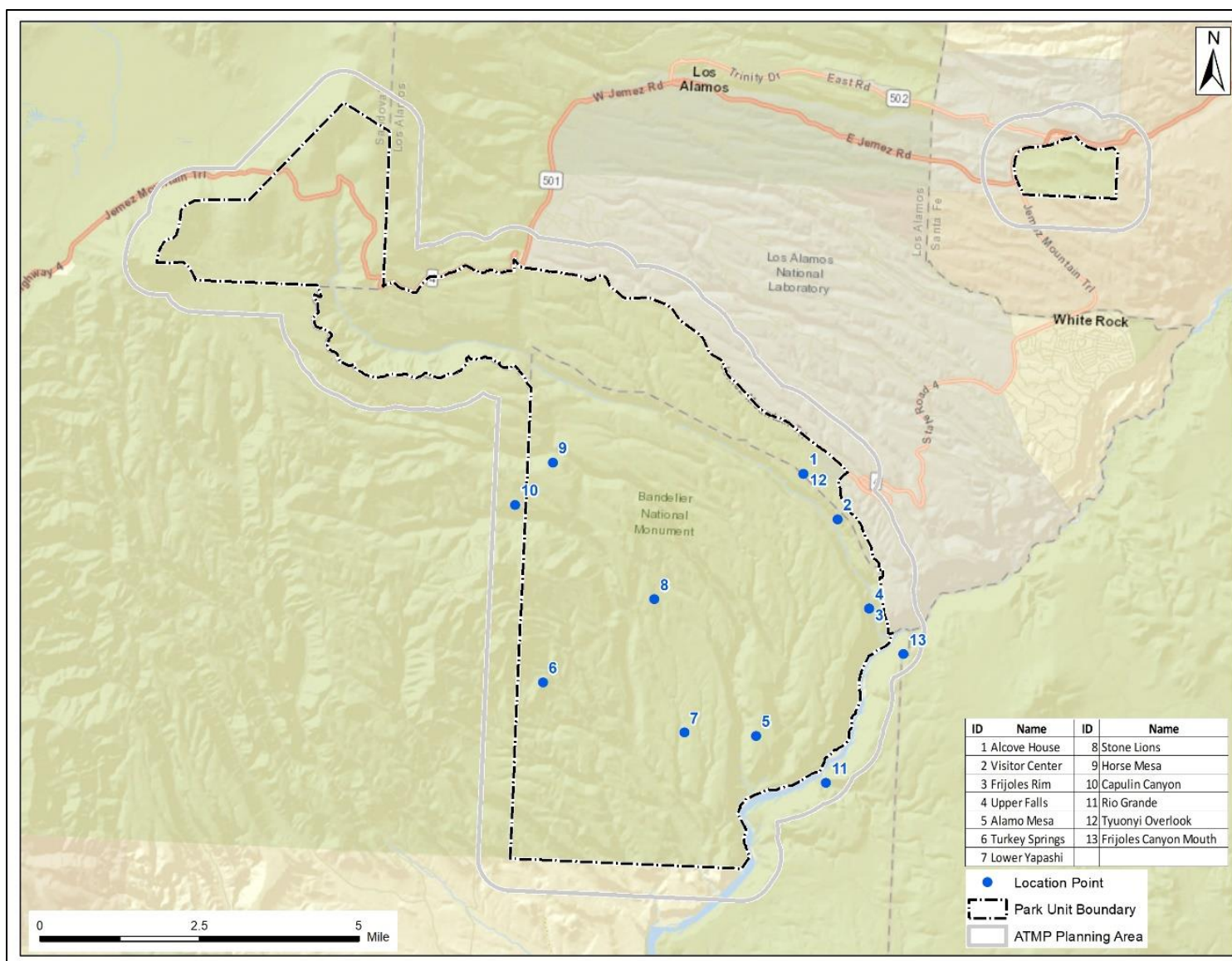


Figure 1. Location Points Modeled

Figure 2. Location point results – Existing Conditions

Location	12-Hour Equivalent Sound Level (dBA)*	Time Above 35 dBA (minutes)	Time Above 52 dBA (minutes)
1. Alcove House	0	0.0	0.0
2. Visitor Center	0	0.0	0.0
3. Frijoles Rim	6.9	0.3	0.0
4. Upper Falls	0	0.0	0.0
5. Alamo Mesa	15.9	0.6	0.0
6. Turkey Springs	16.2	0.6	0.0
7. Lower Yapashi	14.7	0.6	0.0
8. Stone Lions	3.6	0.0	0.0
9. Horse Mesa	0	0.0	0.0
10. Capulin Canyon	0	0.0	0.0
11. Rio Grande	19.3	0.6	0.1
12. Tyuonyi Overlook	0	0.0	0.0
13. Frijoles Canyon Mouth	0	0.0	0.0

* As there are no nighttime events, DNL would be 3 dB less than the 12-hour equivalent sound level.

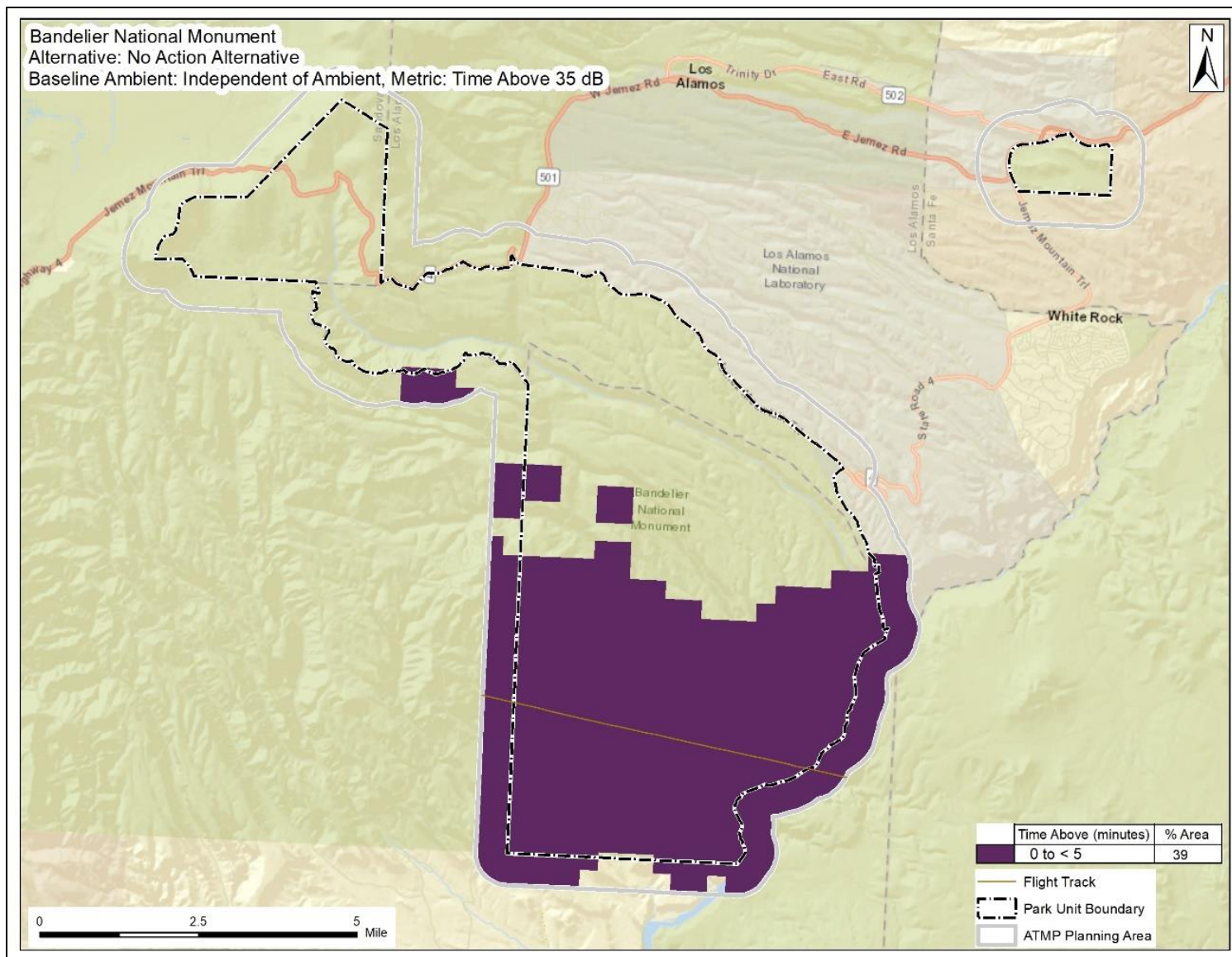


Figure 3. Time Above 35 dBA map for existing conditions



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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 20, 2023

Re: Continuing 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 Bandelier National Monument

Michelle Ensey
Deputy State Historic Preservation Officer
New Mexico State Historic Preservation Office
407 Galisteo Street, Suite 236
Santa Fe, NM 87501

Dear Michelle Ensey:

Introduction

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS) (together, the agencies), 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 Bandelier National Monument (the 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 provides: a description of the undertaking - an ATMP that would not permit commercial air tours in the planning area (the preferred alternative under the National Environmental Policy Act (NEPA)); the Area of Potential Effects (APE); a description of steps taken to identify historic properties; a description of historic properties in the APE and the characteristics that qualify them for listing in the National Register of Historic Places (National Register); and an explanation of why the criteria of adverse effect do not apply to this undertaking. 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 August 27, 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. In a letter dated January 26, 2023, we provided an updated list of historic properties identified within the APE for

review and comment. Similar letters were sent to all consulting parties listed in **Attachment A**. Section 106 consultation with tribes is further described below.

Public participation for this undertaking was integrated with the National Parks Air Tour Management Act (NPATMA) process. The agencies published a notice of availability of the draft ATMP in the Federal Register on September 3, 2021. The public comment period on the draft ATMP was from September 3, 2021, through October 3, 2021. A public meeting was held on September 15, 2021. The draft ATMP authorized the same number of annual flights as the average number of flights from 2017-2019 and maintained routes and altitudes similar to what is currently flown under existing conditions. The agencies received 2,237 discrete comments, of which 197 were about potential effects on cultural resources and 348 were about tribal concerns. The rest of the comments were not relevant to Section 106. Some of the relevant comments noted the draft ATMP did not acknowledge compliance with the NHPA and should not be signed by the NPS until it does. Many commenters expressed opposition to the draft ATMP due to impacts to the cultural landscape. Commenters also referenced the sacred importance of the Park to tribal culture. Since the publication of the draft ATMP, and in response to objections from the public and tribes to continuing air tours at existing conditions, the agencies changed the draft ATMP to eliminate air tours within the planning area (see description of undertaking below).

Description of the Undertaking

The undertaking for the purposes of Section 106 compliance is implementing an ATMP that applies to all commercial air tours over the Park and within ½ mile outside the Park's boundary. Under NPATMA and its implementing regulations, 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 its 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 area regulated by the ATMP is referred to as the ATMP planning area. Overflights that do not meet the definition of a commercial air tour above are not subject to NPATMA and are thus outside the scope of the ATMP.

The agencies have documented the existing conditions for commercial air tour operations over the Park. One commercial air tour operator, Southwest Safaris, currently conducts tours over the Park. The agencies consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 101 air tours that occurred, on average, 99 days per year (thus, a single tour occurred on most days). A three-year average is used because it reflects the most accurate and reliable air tour conditions, and accounts for variations across multiple years. Under existing conditions, commercial air tours over the Park are conducted using a fixed wing aircraft, CE-182-R. The fixed-wing operator flew 101 tours in 2017, 76 tours in 2018, and 125 tours in 2019. Southwest Safaris conducts commercial air tours on the nine routes depicted in **Attachment B**. Reported minimum altitudes range

from 800 ft. to 1,000 ft. AGL, depending on the route¹. Under existing conditions, the operators are not required to use these routes and may change the routes without notice to the agencies.

The proposed undertaking would prohibit commercial air tour operations within the ATMP planning area. A summary of the undertaking elements is shown in the table below:

SUMMARY OF ATMP ELEMENTS

General Description and Objectives	Prohibits air tours within the ATMP planning area to maximize achievement of Park management objectives. Air tours could continue to fly outside the ATMP planning area (i.e., at or above 5,000 feet AGL or more than ½-mile outside of the Park's boundary).
Annual/Daily Number of Flights	None in ATMP planning area.
Routes	None in ATMP planning area.
Minimum Altitudes	Flights over the Park at or above 5,000 feet AGL could occur as they are outside the ATMP planning area. Flights more than ½-mile outside the Park boundary could similarly still occur as they are also outside the ATMP planning area.
Time of Day	N/A
Day of Week	N/A
Seasonal	N/A
Quiet Technology (QT) Incentives	N/A
Annual Meeting, Operator Training and Education	N/A
Restrictions for Particular Events	N/A
Adaptive Management	N/A
Initial Allocation, Aircraft Type, Competitive Bidding, and New Entrants	N/A
Monitoring and Enforcement	Monitoring would occur to ensure operators are complying with the terms and conditions of the ATMP.
Interim Operating Authority²	Terminates 180 days from the effective date of the ATMP.

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.

² Commercial air tours over the Park are currently conducted under interim operating authority (IOA) that the Act required the FAA to grant air tour operators. Interim operating authority does not provide any operating parameters (routes, altitudes, etc.) for commercial air tours other than an annual limit. Under the Act, IOA for a park terminates by operation of law 180 days after an ATMP is established for that park.

Area of Potential Effects (APE)

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 that may take place under any of the selectable draft alternatives, including those over the Park or those that are reasonably foreseeable to take place adjacent to the ATMP planning area. 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, or elimination of, noise levels that may result in alteration of the characteristics of historic properties qualifying them for listing in the National Register.

The APE was delineated based on the undertaking's potential effects in consultation with the SHPO and in consideration of input by consulting parties. The APE for this undertaking comprises the Park plus ½ miles outside the boundary of the Park, excluding the Tsankawi Unit, which is currently not overflown by commercial air tours, as depicted in **Attachment B** below.

The APE for the undertaking was proposed in the Section 106 consultation letter dated August 27, 2021, which was sent to all consulting parties. Your office concurred with the proposed APE in a letter dated September 1, 2021. The agencies also received a comment from Pueblo de San Ildefonso in a letter dated September 23, 2021, noting concerns that the APE did not include additional lands that are managed by other jurisdictions beyond the Park and adjacent tribal lands. The agencies met with the Pueblo de San Ildefonso to discuss their concerns. No additional comments were received regarding the APE. Therefore, the APE has not changed.

Summary of Section 106 Consultation with Tribes

The FAA contacted 27 federally recognized tribes via letter on March 26, 2021, inviting them to participate in consultation and requesting their expertise regarding historic properties, including TCPs that may be located within the APE. On August 27, 2021, the FAA sent the identified federally recognized tribes a Section 106 consultation letter describing the proposed undertaking in greater detail in which an APE was proposed and the results of the preliminary identification of historic properties were provided. On December 3, 2021, and December 9, 2021, the FAA sent follow up emails to the federally recognized tribes once again inviting them to participate in Section 106 consultation.

On December 15, 2021, and December 20, 2021, the FAA followed up with phone calls to those tribes that did not respond to prior consultation requests. The FAA received responses from six tribes expressing interest in participating in the Section 106 consultation process: Pueblo of Acoma, Pueblo of Isleta, Pueblo de San Ildefonso, Pueblo of Tesuque, Pueblo of Picuris, and Pueblo of Santa Clara. Two tribes asked to opt out of additional consultation for the undertaking: Pueblo of Sandia and Pueblo of Santa Ana.

On September 15, 2021, the FAA received comments from the Pueblo of Pojoaque via email informing the FAA that there are 5,000 Ancestral sites in the region, over 2,000 of which are within the Park. They also noted that TCPs and ancestral sites and shrines located throughout the region continue to be in use by the community. Pueblo of Pojoaque expressed that air tours should not be allowed at Bandelier National Monument because they would violate the sacred landscape of the area and its continued use by Pueblo communities and people. They also noted that air tours would affect the use of TCPs and ancestral sites and shrines located throughout the region.

The FAA received comments from Pueblo de San Ildefonso Governor Christopher A. Moquino in a letter dated September 23, 2021, which notes that the Pueblo de San Ildefonso considers the Park to lie within the ancestral domain of the Pueblo de San Ildefonso and considers the documented historic properties within the Park to be the material evidence of the occupation of the monument by their ancestors, whose spiritual presence continues to reside within this domain. The letter further points out that there are extensive resources within the Park that are not documented and are associated with traditional and ceremonial practices conducted since time immemorial into the present. The Pueblo de San Ildefonso considers the lands of the Park, as well as lands beyond the Park boundary, to be a traditional cultural landscape of which the archaeological resources form only a part. Additionally, Pueblo de San Ildefonso expressed that air tours within the boundaries of Bandelier National Monument and its surrounding area has the potential to affect traditional and ceremonial practices by the Pueblo de San Ildefonso. The tribe also noted that there is a potential for air tours to affect the spiritual domain and presence of the Pueblo de San Ildefonso's ancestors.

The FAA received comments from Acoma Tribal Historic Preservation Officer (THPO) Steven Concho of the Pueblo of Acoma in a letter dated December 9, 2021. In those comments, the Pueblo of Acoma noted they continue to claim cultural affiliation to many areas in New Mexico, Arizona, Colorado, and Utah. The THPO recognized each of these places contains the cultural and archaeological "footprints" of their ancestors, along with cultural landscapes, shrines, and gathering places. In their comments, the Pueblo of Acoma informed the FAA that there are TCPs within the Park. The Pueblo of Acoma also expressed concerns about the impacts of air tours on fragile historic structures and sensitive cultural areas in and around the Pueblo. Pueblo of Acoma stated that although they have "no-fly" periods for tribal ceremonies, unauthorized flights still occur and have lasting consequences on tribal members as they continue to mark cultural observances and practice with sensory intrusions from flights. The Pueblo additionally expressed concern about cumulative effects that occur from direct flyovers. The FAA invited the Pueblo to engage in Government-to-Government consultation with FAA and NPS leadership at the Park pursuant to Executive Order 13175.

In a letter dated January 18, 2022, the FAA received comments from the Pueblo of Santa Clara's Governor, Michael Chavarria. The letters explain that the Pueblo of Santa Clara has deep ties to the Park and its surrounding cultural landscape. The letter notes that the Park is part of their ancestral migration history and holds a pivotal role in the expression of the Pueblo of Santa Clara's identity today. The letter also informed the FAA that there are thousands of documented tribal cultural properties within the Park, as well as countless unregistered sacred and culturally significant sites.

The FAA also received comments from Governor Phillip Quintana of the Pueblo de Cochiti in a letter dated February 21, 2022. In those comments, the Pueblo de Cochiti expressed concern regarding the level of consultation the FAA and NPS have provided for the Pueblo. They mention that the two consultation letters they received in March and August of 2021 do not constitute meaningful consultation. The Pueblo de Cochiti also expressed that Bandelier National Monument is an invaluable cultural landscape and a place of retreat and prayer to ensure the strength of their community and continued way of life. The letter mentions that the Pueblo de Cochiti maintains a strong cultural affinity in ongoing interactions including through story, song, prayer, ceremony, and pilgrimage with this landscape and the gifts considered by the Pueblo de Cochiti to be both cultural and natural resources - plants, animals, air, soil, and water. The entirety of this area, including individual sites, is central to the maintenance and revitalization of their cultural knowledge, histories, and practices. The Pueblo de

Cochiti notes that allowing the continuation of commercial air tours will exacerbate the existing challenges NPS and tribes continue to experience in protecting cultural resources and tribal religious use by enabling continued viewing access to the Park's visitors, noise pollution, and wildlife disruption. Commercial air tour operations also result in noise-induced vibration that can cause significant short-term and long-term adverse effects on the integrity of natural and man-made structures, objects, and sites.

As a result of comments received asking for more meaningful consultation, the FAA has held meetings under Executive Order 13175 and Section 106 with Pueblo de Cochiti, Pueblo of Pojoaque, Pueblo de San Ildefonso, and Pueblo of Santa Clara. Through this consultation, the tribes have repeatedly stated that they consider the entire landscape of the Pajarito Plateau to be sacred and believe air tours are inappropriate and adversely impact the cultural landscape and TCPs throughout.

The tribes whom the FAA contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment A**.

Identification of Historic Properties

In accordance with 36 CFR 800.4, the FAA has made a reasonable and good faith effort to identify historic properties 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 National Register 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, and outdoor spaces designed for meditation or contemplation. The FAA is specifically considering whether air tours could affect the use of TCPs associated with cultural practices, customs or beliefs that continue to be held or practiced today. 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).

The initial identification of historic properties relied upon data submitted by the NPS regarding known historic properties in the Park. The FAA also coordinated with the New Mexico Historic Preservation Division (State Historic Preservation Office) to collect data for previously identified properties that may be listed in or eligible for listing in the National Register. Data from the New Mexico Preservation Division was received on February 10, 2022 and updated on December 16, 2022. The FAA also consulted with the federally recognized tribes among the list of consulting parties enclosed as **Attachment A** regarding the identification of any other previously unidentified historic properties that may be located within the APE. In a letter dated September 23, 2021, the Pueblo de San Ildefonso expressed that air tours would adversely affect the qualities that make historic properties eligible for the National Register, without accounting for certain kinds of historic properties that might not be captured during archaeological survey. The Pueblo de San Ildefonso noted that the inventory of historic properties based upon archaeological survey is currently incomplete and would benefit from additional inventory documenting ethnographic use within the APE.

In addition to the previously identified historic properties, Park staff and affiliated tribes have informed FAA there are TCPs located within the APE. While the TCPs are noted in **Attachment C** in a general manner, these are not mapped in **Attachment B** to ensure confidentiality.

A preliminary list of historic properties was provided to all consulting parties for their review and comment in a letter dated August 27, 2021. A letter dated January 26, 2023, sent to all consulting parties, described FAA's further efforts to identify and evaluate historic properties within the APE and provided results of those efforts. Your office provided a response in a letter dated February 10, 2023, in which you agreed that several Native American tribes consider Bandelier National Monument to be a traditional cultural landscape. You also recommended that the agencies replace the word "several" with "many" when referring to the contributing sites within the Bandelier National Monument Archaeological and Historic District. The agencies have made that change in the description of significant characteristics in **Attachment C**. The agencies did not receive comments from other consulting parties identifying additional historic properties within the APE.

The effort described resulted in the identification of four historic properties within the APE for which feeling and setting are characteristics that make the properties eligible for listing on the National Register, which are listed in **Attachment C**. Those historic properties identified with available non-restricted location data are shown in the APE map provided in **Attachment B**. There are thousands of additional below-ground archaeological sites within the APE; however, these below-ground archaeological resources are not further described in this letter because feeling and setting are not characteristics that make these properties eligible for listing on the National Register and there is no potential for the undertaking to affect these resources.

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 National Register. The characteristics of the historic properties within the APE that qualify them for inclusion in the National Register are described in **Attachment C**. 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

To assess the potential for the introduction of audible elements, including changes in the character of aircraft noise, the agencies considered whether there would be a change in the annual number, daily frequency, routes, or altitudes of commercial air tours, as well as the type of aircraft used to conduct those tours. The level of commercial air tour activity under the ATMP is expected to improve the protection of cultural resources within the APE.

The ATMP prohibits commercial air tours within the ATMP planning area and would reduce noise effects to historic properties. Therefore, the undertaking would not alter the characteristics of historic properties within the APE in comparison to existing conditions. The elimination of air tours within the ATMP planning area will reduce maximum noise levels at sites directly below commercial air tour routes compared to existing conditions. All historic properties within the APE would experience a reduction in noise from air tours.

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 Yearly³ Day Night Average Sound Level (L_{dn} or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the undertaking would not result in any noise impacts that would be “significant” or “reportable” under the FAA’s policy for NEPA.⁴

As part of the ATMP noise analysis, the NPS provided supplemental metrics to further assess the impact of commercial air tours in quiet settings: time above 35 dBA and time above 52 dBA. These metrics account for the amount of time in minutes that aircraft sound levels are above a given threshold (i.e., 35 dBA and 52 dBA). In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007). Interference with Park interpretive programs would reasonably occur at 52 dBA. **Attachment D** provides further information about the supplemental noise metrics and presents the results of modeling.

Attachment D presents noise contours (i.e. graphical illustration depicting noise exposure) for existing conditions and the representative location point analysis. Under existing conditions, noise related to commercial air tours is greater than 35 dBA for less than 1 minute a day within the ATMP planning area. All historic properties within the APE will experience the elimination of noise related to commercial air tours within the ATMP planning area. Because noise is modeled using conservative assumptions (see **Attachment D**) and implementing the ATMP would eliminate flights and routes within the ATMP planning area, noise is expected to be reduced within the ATMP planning area. The elimination of air tours within the ATMP planning area will also reduce the likelihood that an air tour would interrupt traditional practices such as ceremonies, as compared to existing conditions. Therefore, the undertaking would not diminish the integrity of any historic property’s significant historic features.

Assessment of Visual Effects

Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the agencies considered the potential for the introduction of visual elements that could alter the characteristics of a historic property that qualify it for inclusion in the National Register. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The elimination of flights within the ATMP planning area make it unlikely a historic property within the ATMP planning area would experience a visual effect from the undertaking. The agencies also considered the experience of tribal members who may be conducting ceremonies or practices that could involve looking toward the sky. The elimination of air tour aircraft overhead represents an improvement over existing conditions.

The ATMP prohibits commercial air tours within the ATMP planning area and would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the National Register. All historic properties within the APE would experience a reduction in visual intrusions from air tours, therefore the undertaking would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the National Register.

³ Yearly conditions are represented as the Average Annual Day (AAD)

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.

Indirect Effects

Because the undertaking would eliminate air tours within the ATMP planning area, the agencies also considered the potential for indirect effects on historic properties within the APE that could occur from air tours displaced outside the ATMP planning area as a result of the undertaking. It is unlikely that the operator would continue to conduct commercial air tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area. Since the operator cannot fly on the north side of the Park due to restricted air space, it is unlikely there would be new or different impacts in that area. Flights at or above 5,000 ft. AGL are unlikely due to the Park's elevation and safety requirements for unpressurized aircraft flying over 10,000 ft. MSL for more than 30 minutes. If air tours are conducted at or above 5,000 ft. AGL over the ATMP planning area, the increase in altitude would likely decrease impacts on ground level resources as compared to current conditions because the noise would be dispersed over a larger geographical area. Noise from air tours conducted at or above 5,000 ft. AGL would be audible for a longer period, but at lower intensity. Similarly, aircraft are transitory elements in a scene and visual impacts tend to be relatively short, especially at higher altitudes.

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 would not result in any alteration or physical modifications to historic properties. 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 auditory 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

FAA and NPS approval of the undertaking would not alter the characteristics of any historic properties located within the APE in a manner that would diminish its integrity as there would be a reduction in audible or visual effects from existing conditions. Based on the above analysis, the FAA proposes 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 30 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, sweeping flourish extending to the right.

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

Attachments

- A. List of Consulting Parties
- B. APE Map including existing Commercial Air Tour Routes
- C. List of Historic Properties in the APE and Description of Historic Characteristics
- D. Summary of Noise Technical Analysis from NEPA Review

Concur with No Adverse
Effect determination.

ATTACHMENT A
List of Consulting Parties

Adams, Bruce M. (Southwest Safaris)
Apache Tribe of Oklahoma
Comanche Nation, Oklahoma
Fort Sill Apache Tribe of Oklahoma
Hopi Tribe of Arizona
Jicarilla Apache Nation, New Mexico
Kewa Pueblo, New Mexico
Los Alamos National Laboratory*
National Trust for Historic Preservation
Navajo Nation, Arizona, New Mexico & Utah
New Mexico State Land Office
Ohkay Owingeh, New Mexico
Pueblo de Cochiti, New Mexico
Pueblo de San Ildefonso, New Mexico
Pueblo of Acoma, New Mexico
Pueblo of Isleta, New Mexico
Pueblo of Jemez, New Mexico
Pueblo of Laguna, New Mexico
Pueblo of Nambe, New Mexico
Pueblo of Picuris, New Mexico
Pueblo of Pojoaque, New Mexico
Pueblo of San Felipe, New Mexico
Pueblo of Sandia, New Mexico*
Pueblo of Santa Ana, New Mexico*
Pueblo of Santa Clara, New Mexico
Pueblo of Taos, New Mexico

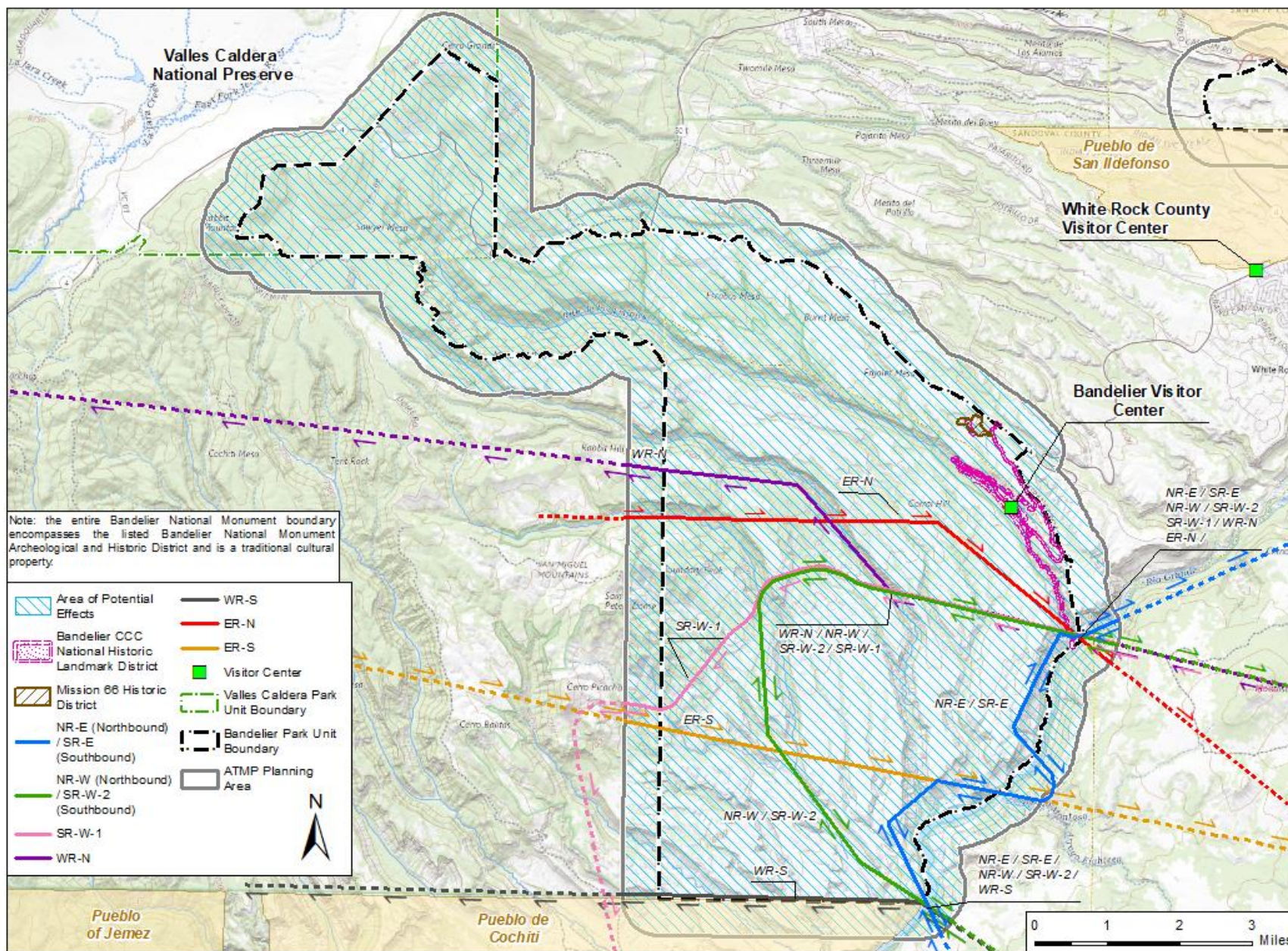
Pueblo of Tesuque
Pueblo of Zia, New Mexico
Santa Fe National Forest
Standing Rock Sioux Tribe of North & South Dakota
Tewa Women
Ysleta Del Sur Pueblo
Zuni Tribe of the Zuni Reservation, New Mexico

*Consulting party has opted out of further Section 106 consultation for the undertaking.

ATTACHMENT B

**Area of Potential Effects Map
Including
Existing Commercial Air Tour Routes**

Area of Potential Effects Map for ATMP at Bandelier National Monument



ATTACHMENT C

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

Property Name	Property Type	Eligibility Status	Significant Characteristics
Bandelier CCC National Historic Landmark District	National Historic Landmark and Historic District	Listed	The Bandelier CCC National Historic Landmark was designed by NPS architects and landscape architects and built by the CCC (Civilian Conservation Corps) between 1933 and 1942. The district contains 31 buildings of Pueblo Revival design that serve as office space, residences for employees, and lodging for guests. It is significant for its association with the New Deal era in the areas of Social History and Art. It is also significant for its rustic Pueblo Revival architectural style and the careful design of the entrance road and other non-building elements. As a result of the application of rustic design principles, the cultural landscape today blends with its natural setting and conveys a strong sense of place. The rustic, pueblo revival architecture, the natural canyon setting, views and the experience of archeological sites and the riparian corridor all contribute to the unique feeling that the district conveys.
Bandelier National Monument Archeological and Historic District	Historic District	Listed	<p>The Bandelier National Monument Archeological and Historic District encompasses the entire park boundary and is significant for its association with the Archaic use of the Pajarito Plateau (5500 BCE-600 CE); Ancestral Pueblo occupation of the Pajarito Plateau (600-1600 CE); early historic use of the Pajarito Plateau (1600-1848); early scientific investigations and development of archaeology (1848-1932); early Native Arts revival efforts (1848-1932); homestead-era ranching, farming, and timber extraction (1848-1932); and the New Deal era and the CCC (1932-1942).</p> <p>The district contains 32 contributing buildings, 90 contributing structures, and 2,974 contributing sites⁵. Many of the archaeological sites in the park are in good condition and retain a high level of integrity, but there are a series of natural and</p>

⁵ This number include the archaeological sites that exist within the boundary nominated to the National Register in 1970 and archaeological sites within the post-1970 expanded boundaries of the monument.

Property Name	Property Type	Eligibility Status	Significant Characteristics
			<p>cultural disturbances that have affected them. The pre-Hispanic sites are associated with habitation of the area by Ancestral Pueblo peoples. The area saw limited occupation in historic times by historic Pueblo groups, nomadic Athabascan groups, Hispanos, and Euro-Americans.</p> <p>During the New Deal era and CCC construction, there was great emphasis on the visual impacts of development. Landscape architects took great care to provide pleasant surroundings in the built-up area to promote spectacular and unobstructed views of archaeological sites that contribute to the Park's history. A trail system was also constructed to direct visitors to scenic overlooks and to enhance their access to various archaeological sites.</p> <p>Areas of significance include archeology (prehistoric, historic), science, conservation, social history (exploration/settlement), commerce, industry, architecture, landscape architecture, art, Native American ethnic heritage, military, and entertainment/recreation.</p>
Mission 66 Historic District	Historic District	Eligible	<p>Bandelier National Monument's staff and public-use village on Frijoles Mesa is a Mission 66 Historic District comprised of a park employee housing area (4 buildings) and the Juniper Family Campground and associated roads and interpretive service structures. The Mission 66 Historic District is significant for its association with the unique Frijoles Mesa land swap between the National Park Service and the Atomic Energy Commission, through a 1961 executive order from President Dwight Eisenhower that made the village and park-services expansion possible. The village also represents a well-considered and largely intact 1963–1964 application of the national NPS Mission 66 program to the unique management challenges at the monument and upon the landform of Frijoles Mesa.</p> <p>The Mission 66 designers carefully sited the Bandelier Mission 66 Village for minimum disturbance of natural Frijoles Mesa vegetation, resulting in desirable privacy for campsites, and screening of the amphitheater and the residential area from campers and automobiles. In addition, siting of the Mission 66 houses in the residential area took advantage of topography and spacing of large pine</p>

Property Name	Property Type	Eligibility Status	Significant Characteristics
			trees to allow stunning views of St. Peter's Dome and the San Miguel Mountains to the west.
Bandelier National Monument Traditional Cultural Properties ⁶	TCP	Eligible	Many contributing sites within the Bandelier National Monument Archeological and Historic District are Ancestral Pueblo sites that are considered TCPs. Several tribes have informed the FAA that there are TCPs within the Park boundary and that extend beyond to the larger landscape of the area.

⁶ Location is restricted and therefore cannot be shown on the APE map.

ATTACHMENT D

Summary of Noise Technical Analysis from NEPA Review

There are numerous ways to measure the potential impacts 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 ATMPs are shown in the table below.

Metric	Relevance and citation
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 selected to represent typical daytime commercial air tour operating hours.
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 10 dB penalty between 10 PM and 7 AM local time.</p> <p>Note: Both $L_{Aeq, 12\text{hr}}$ and DNL 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>If there are no nighttime events, then $L_{Aeq, 12\text{hr}}$ is arithmetically three dBA higher than DNL.</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>
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). This level is also shown to cause blood pressure increases in sleeping humans (Haralabidis et al., 2008); as well as exceeding recommended maximum background noise level inside classrooms (ANSI S12.60/Part 1-2010).</p>

⁷ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μPa . 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 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.

Metric	Relevance and citation
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>

Aircraft, Routes and Number of Operations Modeled

Route	Aircraft	Existing Conditions
ER-S (Orange) 1,000 ft. AGL	Cessna 182	1
ER-N (Red) 10,000 ft. MSL	Cessna 207	
ER-S (Orange) 10,000 ft. MSL	Cessna 182	
	Total	1

Two types of analyses were performed using FAA’s AEDT, Version 3e: 1) contour analysis and 2) representative location point analysis. A noise contour presents a graphical illustration or “footprint” of the area potentially affected by the noise. Location point results present the metric results at specific points of interest. The NPS provided a list of 13 location points, geographically located across the ATMP planning area, where noise levels were to be evaluated. These locations are geographically shown in Figure 1 and listed in Figure 2.

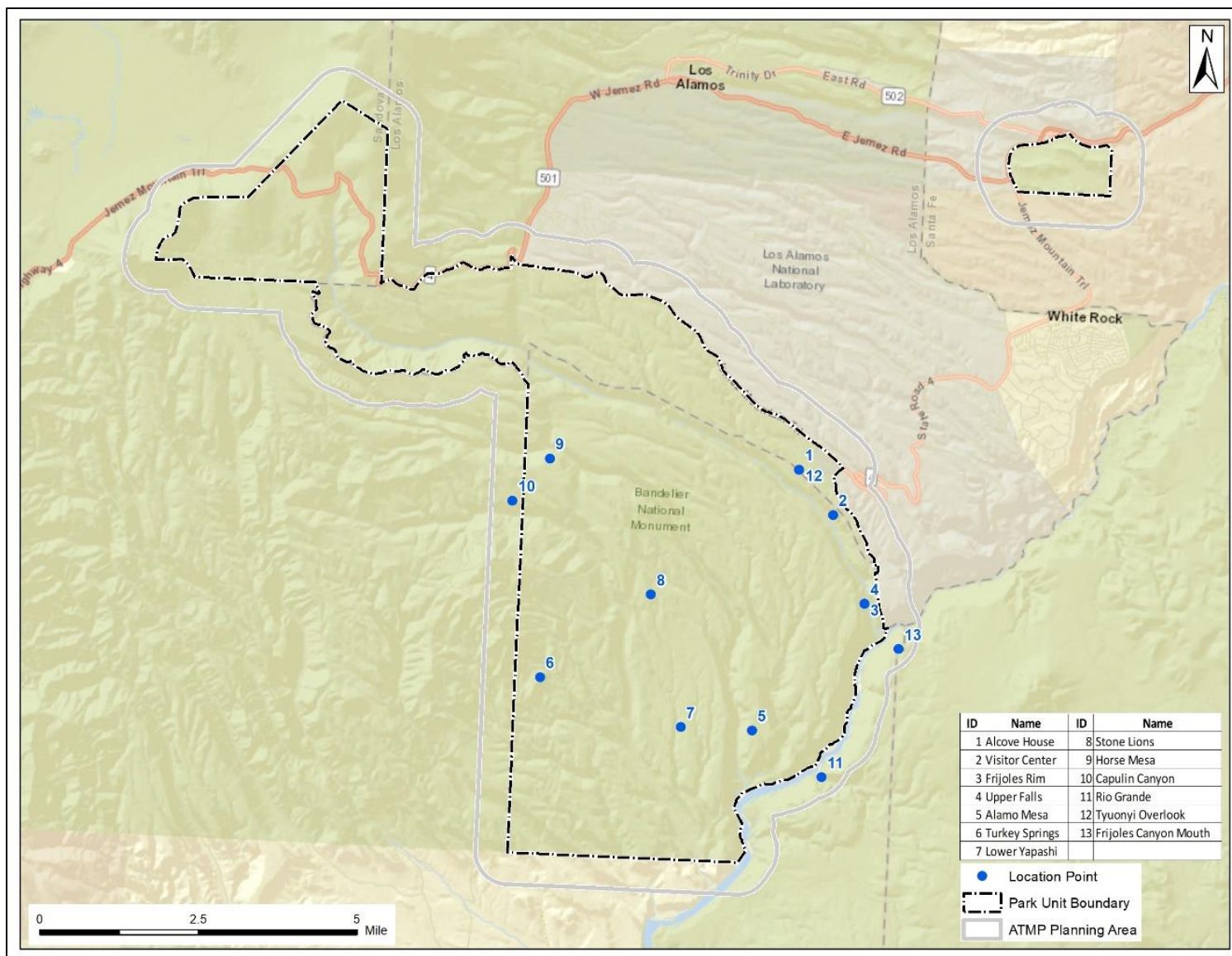


Figure 1. Location Points Modeled

Figure 2. Location point results – Existing Conditions

Location	12-Hour Equivalent Sound Level (dBA)*	Time Above 35 dBA (minutes)	Time Above 52 dBA (minutes)
1. Alcove House	0	0.0	0.0
2. Visitor Center	0	0.0	0.0
3. Frijoles Rim	6.9	0.3	0.0
4. Upper Falls	0	0.0	0.0
5. Alamo Mesa	15.9	0.6	0.0
6. Turkey Springs	16.2	0.6	0.0
7. Lower Yapashi	14.7	0.6	0.0
8. Stone Lions	3.6	0.0	0.0
9. Horse Mesa	0	0.0	0.0
10. Capulin Canyon	0	0.0	0.0
11. Rio Grande	19.3	0.6	0.1
12. Tyuonyi Overlook	0	0.0	0.0
13. Frijoles Canyon Mouth	0	0.0	0.0

* As there are no nighttime events, DNL would be 3 dB less than the 12-hour equivalent sound level.

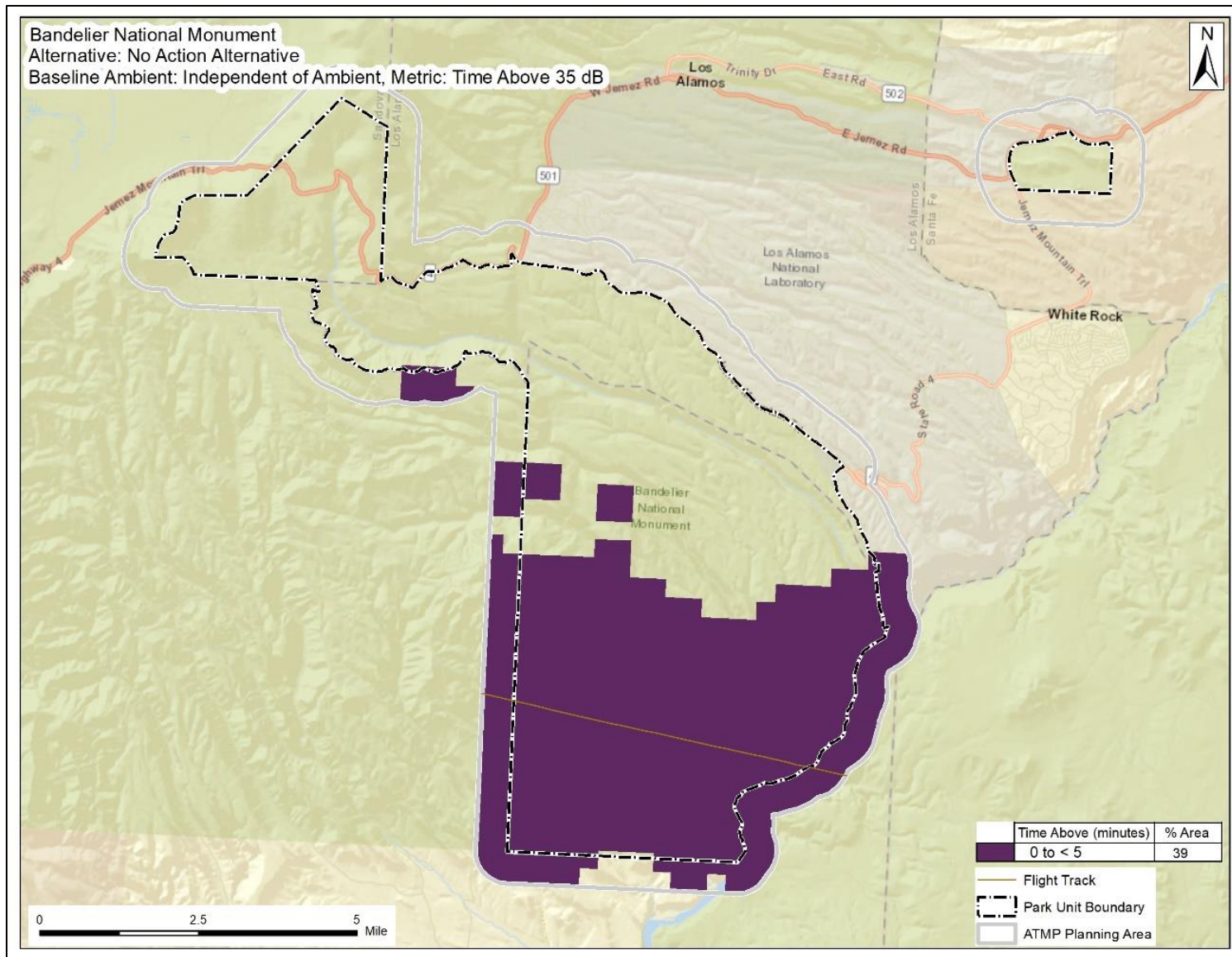


Figure 3. Time Above 35 dBA map for existing conditions

COMANCHE NATION



United States Department of Transportation
Federal Aviation Administration
Attn: Ms. Judith Walker
800 Independent Avenue, SW.
District of Columbia 20591

June 1, 2023

Re: Continuing 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 Bandelier National Monument

Dear Ms. Walker :

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of "**No Properties**" have been identified. (IAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 492-1153 if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office
Theodore E. Villicana , Technician
#6 SW "D" Avenue, Suite C
Lawton, OK. 73502