

**ATTACHMENT A**

**Final EA / Errata  
Bandelier National Monument**

**Final Environmental Assessment for an Air Tour  
Management Plan for  
Bandelier National Monument**

**February 29, 2024**

## Introduction

The Federal Aviation Administration (FAA) and the National Park Service (NPS) (collectively, "the agencies") published a Draft Environmental Assessment (EA) and Draft Air Tour Management Plan (ATMP) for Bandelier National Monument (the Park) on July 12, 2023. This document represents the Final EA for the ATMP and describes comments that resulted in changes to the Draft EA and Draft ATMP and the nature of those changes.

The 2023 review period was not the first time that an ATMP for the Park went out for public review. A Draft ATMP that would authorize air tour operations consistent with current operator reported operating parameters was presented in the 2021 Draft ATMP. Over 1,000 correspondences were received during the public comment period for the 2021 Draft ATMP (September 3, 2021 – October 13, 2021). Information gathered during public comment and tribal consultation in 2021 was used to inform the 2023 Draft ATMP.

The FAA published a notice of availability of the Draft EA and Draft ATMP for the Park again in the Federal Register on July 12, 2023. Draft Air Tour Management Plan (ATMP) and Draft Environmental Assessment (EA); Notice of Public Meeting, 88 Fed. Reg. 44,438 (July 12, 2023). The agencies held the public meeting for the Park's Draft EA and Draft ATMP on July 25, 2023 and accepted public comments between July 12, 2023 and August 11, 2023. During the public review period, the agencies received 28 correspondences on the Draft EA and Draft ATMP, some of which resulted in changes or updates to the Draft EA or Draft ATMP. Comments that resulted in changes to the Draft EA are presented in this Final EA/errata sheet along with a description of the comment and rationale for the change. The comments and agencies' responses to substantive comments received are included in Appendix J.

There were no comments that resulted in substantive changes to the ATMP parameters. All changes made to the ATMP were to improve clarity and accuracy.

The FAA is issuing the Final EA using errata sheets. The FAA's use of errata sheets is consistent with 40 CFR 1503.4(c). The purpose of the Final EA/errata sheet is to correct errors and omissions, and make other adjustments that may be required after the printing of the Draft EA. In addition to changes resulting from public comment, these changes include any corrections identified by the agencies, as well as updates on other consultation processes. This Final EA/errata sheet and Draft EA are being included with the agencies' decision documents that together comprise a full and complete record of the environmental analysis for the ATMP. The EA will not be reprinted. Note that in the following instances where the EA is referred to as a "Draft EA", the issuance of this Final EA/errata amends them to read as "Final EA" (Pages 1, 3, 4, 5, 6, 7, 9 [lines 11, 13], 14, 28, 46, 47, 48, 52, 61, 94, 96, 98, 103, 111, 113).

## Summary of Changes

As a result of public comments, the agencies changed the direction of the ER-N route in Alternative 3 to a westbound flight path. The agencies also clarified in the description of Alternative 3 that the operator would be able to fly either eastbound or westbound over the Park on a given day, but the operator may not fly in both directions over the Park in a single day. This change did not result in any new or different environmental impacts under Alternative 3 than those disclosed in the Draft EA. The figures have been updated to reflect the changed route direction.

As a result of public comments, the agencies also clarified a statement regarding the existing frequency of air tours over the Park.

The agencies added additional information to the Final ATMP on the management of cultural resources described in the NPS 2006 Management Policies to provide additional information for the justification of the ATMP. That information has been added to the cultural resources discussion in the EA. Additionally, the agencies added a new section to the EA providing a general overview and description of the Park as reflected in the Park Overview section of the ATMP document.

The agencies identified one factual correction in the *Noise Technical Analysis* to include average atmospheric data for the local airport. This correction did not result in changes to other data or outputs in the *Noise Technical Analysis*.

Following the publication of the Draft EA, the agencies continued consultation under Section 106 of the National Historic Preservation Act. The FAA proposed a finding of no adverse effect to historic properties for the ATMP undertaking and consulted with the New Mexico State Historic Preservation Office (SHPO), consulting parties, and tribes. One tribe and one consulting party objected to this effect finding. The FAA resolved one objection through continued consultation; the remaining objection could not be resolved. The FAA requested the Advisory Council on Historic Preservation's (ACHP) review of the finding and the ACHP responded that the FAA had appropriately applied the criteria of adverse effect for the undertaking and a finding of "no adverse effect" to historic properties was reasonable. After review of the ACHP advisory opinion, the FAA confirmed the finding that the ATMP would have no adverse effect and provided this response to the ACHP and all consulting parties. The EA has been updated to describe this consultation process and the outcome, and supporting correspondence has been added to Appendix G. The agencies also renamed the title of Appendix G to Section 106 Consultation and Summary.

The FAA also continued to coordinate with Officials with Jurisdiction (OWJ) under Section 4(f) of the Department of Transportation Act of 1966 following the release of the Draft EA. The FAA consulted with the NPS and other OWJs on the FAA's finding of no substantial impairment, and hence, the FAA's proposed no constructive use determination. No responses from OWJs were



received. A summary of this coordination and supporting correspondence was added to Appendix I, *Section 4(f) Analysis*.

A new appendix, Appendix J, was added to the EA with copies of all public comments received on the 2023 Draft ATMP and Draft EA, a summary of the comments, and the agencies' response to substantive comments.

As stated above, based on comments received and changed conditions, several pages in this Final EA/errata have been updated from the Draft EA with new or corrected material. Page numbers referenced pertain to the Draft EA released to the public for review on July 12, 2023. Original text from the Draft EA is included to provide context and to allow for comparison to the text change. Additions to text are underlined, and deleted text is shown by ~~strikeout~~. Revised figures are included at the end of this Final EA/errata.

## **1.0 Purpose and Need**

Page 3, Need: The Act requires an ATMP or Voluntary Agreement to be developed for the Park. Air tours have the potential to impact natural and cultural resources, tribal sacred sites and ceremonial areas, Wilderness character, and visitor experience. ~~The Act requires that the FAA and the NPS develop acceptable and effective measures to mitigate or prevent significant adverse impacts, if any, of commercial air tour operations on natural and cultural landscapes and resources, Wilderness character, visitor experience, and Native American Traditional Cultural Properties (TCPs) including Native American sacred landscapes, sites, and ceremonial areas.~~ The Act requires that the FAA and the NPS develop acceptable and effective measures to mitigate or prevent significant adverse impacts, if any, of commercial air tour operations on natural and cultural resources, tribal sacred sites and ceremonial areas, Wilderness character, and visitor experience.

Page 7, new Section 1.6, "Park Overview": The Park consists of 33,676 acres in Los Alamos County, New Mexico and contains more than 3,000 archeological sites, most dating from AD 1100 to 1550 and associated with the Ancestral Pueblo period. The Park in its entirety has been identified as a traditional cultural property. Affiliated pueblo Indian groups still have strong traditional associations and ties to the landscape within the Park. Their cultures, lifestyles, religious beliefs, and traditions continue to be shaped by their ties to the Park's natural and cultural resources. The Pueblo de Cochiti abuts the Park's southern boundary, while the 799-acre Tsankawi Unit 12 miles from the main Park abuts the San Ildefonso Indian Reservation. This unit is of critical importance to the cultural heritage, beliefs, customs, practices, and history of the Pueblo de San Ildefonso—the direct descendants of the people who inhabited the Tsankawi Unit.

The primary purpose of the Park includes protecting and preserving the outstanding features of the Pajarito Plateau, including both natural and cultural resources found there. When the Park was reserved from the public domain in 1916 pursuant to the Antiquities Act of 1906, it was described in the proclamation by President Wilson as featuring: "certain prehistoric aboriginal

ruins...of unusual, ethnologic, scientific, and educational interest...".<sup>1</sup> It is from these features that the Park's significance as a national monument is rooted. Six main statements of significance for the Park were identified in the Park's Foundation Document.<sup>2</sup> "Cultural Connections" is one of these six statements. The Park's Foundation Document explains that "[a]rcheological sites and natural features of Bandelier National Monument remain an integral component of pueblo culture and provide a context for continuing traditional practices" and further goes on to state that the Park "plays an important role for the traditionally associated pueblos, providing a direct cultural connection to resources, stories, and oral histories." "Continuing Cultural Connections" is identified as a fundamental resource and value for the operation of the Park in its Foundation Document, which explains that "Affiliated pueblo Indian groups still have strong traditional associations and ties to Bandelier National Monument's landscape. Their cultures, lifestyles, religious beliefs, and traditions continue to be shaped by their ties to the natural and cultural resources of the monument."

The Park's Foundation Document makes clear that the Park has identified traditional cultural properties associated with tribal partners as a significant cultural resource that should be protected from any diminishment. NPS Director's Order 28: "Cultural Resource Management" (1998) provides the guidance for ensuring that these significant sites are not diminished.<sup>3</sup> Director's Order 28 provides the following direction:

When used by their associated ethnic groups, these types of resources help underpin entire cultural systems. Resource management sensitive to the rights and interests of these groups, especially Native Americans, can help perpetuate if not strengthen traditional activities such as subsistence, language use, religious practice, and aesthetic expression. In this context, cultural resource management extends beyond concern with tangible resources to recognition and accommodation of cultural processes.

The Park's archeological sites and natural features remain an integral component of pueblo culture and provide a context for continuing traditional practices of pueblo culture.<sup>3</sup> National Register listed or eligible cultural resources, including tribal sacred sites, traditional cultural properties, and ancestral sites are some of the Park's most significant cultural and natural resources. The dense cultural landscape is comprised of over 3,000 ancestral sites, dozens of actively used shrines and sacred sites, and includes diverse ecosystems across an elevation gradient of nearly 5,000 feet. Important tribal sites are distributed throughout the entire Park. Ancestral sites, as well as other tribal sacred sites located on the landscape, are all considered a part of the traditional landscape utilized by tribal people from time immemorial. Pueblo people

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<sup>1</sup> Proclamation No. 1322, Bandelier National Monument, N. Mex., 39 Stat. 1764 (Feb. 11, 1916).

<sup>2</sup> NPS. (2015). Foundation Document – Bandelier National Monument.  
<http://npshistory.com/publications/foundation-documents/band-fd-2015.pdf>

<sup>3</sup> NPS. (1998). NPS- 28: Cultural Resource Management Guideline.  
[https://www.nps.gov/parkhistory/online\\_books/nps28/28contents.htm](https://www.nps.gov/parkhistory/online_books/nps28/28contents.htm)

continue to practice traditional ceremonies and make pilgrimages to sacred sites within the Park. These are important to the continuation of pueblo Indian traditional practices in contemporary pueblo communities.

In addition, the Bandelier National Monument Civilian Conservation Corps (CCC) Historic District is the largest collection of CCC structures and furnishings in the National Park System. The district is an outstanding example of design and workmanship from the New Deal era and harmonizes with its natural and cultural setting and helps define the mood of the headquarters and main visitor center area in Frijoles Canyon.

The Park's natural resources include the congressionally designated Bandelier Wilderness, which comprises over 23,000 acres, approximately 70% of the Park, and covers most of the Park's challenging, steep-walled canyons and mesas, and many of its archeological sites. Most of the Park's 70-plus miles of trails are in Wilderness. Popular destinations in the Wilderness include the deep gorge of Alamo Canyon, the Ancestral Pueblo of Yapashi, and Painted Cave in Capulin Canyon.

The Park extends from the Rio Grande at 5,300 feet to the summit of Cerro Grande at 10,200 feet on the caldera rim. Major vegetation types vary with increasing elevation, including juniper savannas, piñon-juniper woodlands, canyon-wall shrublands, ponderosa pine forests, riparian forests, mixed conifer forests, and montane grasslands. The Park's canyons and mesas are still relatively natural, supporting diverse vegetative communities, a variety of wildlife species, several watersheds, and volcanic tuff. A variety of raptor and migratory bird species inhabit the Park. The Park includes many sensitive species potentially affected by overflights, including four federally listed threatened and endangered species (Mexican spotted owl, southwestern willow flycatcher, yellow-billed cuckoo, and New Mexico meadow jumping mouse).

Popular activities include hiking, picnicking, photography, bird-watching, backpacking, and camping. Most visitors are day users and spend their time visiting archeological sites in Frijoles Canyon. Popular trails and destinations include the Pueblo Loop Trail to Tyuonyi and the cliff dwellings, Alcove House, and the Falls Trail.

The purpose of the Park, as stated in its Foundation Document, is to protect, preserve, and interpret an outstanding portion of the Pajarito Plateau, including one of the largest concentrations of Ancestral Pueblo archeological sites in the American Southwest. The Park provides opportunities for people to connect with and enjoy a diversity of cultural and natural resources, striking scenery, wildlife habitats, remnants of a volcanic landscape, and Wilderness.

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

- Protect individuals and populations of wildlife species known to be sensitive to the effects of aircraft overflights, primarily migratory birds, including the federally listed Mexican spotted owl.
- Protect sensitive cultural and historic sites; preserve traditional and cultural resources to facilitate ongoing connection with, and use of, these resources by associated Tribal Nations; maintain confidentiality of sacred sites; and respond to information from tribal consultation.
- Protect the visitor experience of the character and solitude of the Bandelier Wilderness where natural sounds predominate, providing opportunities to experience quiet and solitude in a remote natural setting.

## **2.0 Alternatives**

### **2.1 Alternatives Development**

Page 8: An NPS interdisciplinary team comprised of subject matter experts from the NPS's Natural Sounds and Night Skies Division, Environmental Quality Division, Intermountain Regional Office, and the Park developed the alternatives to be considered in the EA, evaluating the noise impacts of existing air tour routes and operations, the Park's cultural and natural resources, the Park's existing and natural acoustic environment, visitor experience, visual resources, ~~and the concerns about the 2021 draft ATMP expressed by tribes and the public, as well as potential protective measures that could be included in an ATMP and input provided by the tribes and public on the 2021 Draft ATMP.~~

In developing alternatives, the interdisciplinary team also considered Park-specific planning and management documents, ~~as well as the purpose and significance for which the Park was established including its Foundation Document.~~

#### **2.2.1 Air Tours above Existing Levels**

Page 10: ...(see Appendix G, ~~Cultural Resources~~ Section 106 Consultation and Summary).

#### **2.4.1 Commercial Air Tours per Year**

Page 12: These tours occurred, on average, over 99 days per year (thus, a single tour occurred on ~~most~~ days when an air tour occurred, approximately 98% of the time).

## **2.5 Alternative 2**

Page 16: Alternative 2 would eliminate air tour presence over the ~~sacred sites, National Register listed or eligible TCPs, ancestral sites, and cultural landscapes~~ natural and cultural resources, including tribal sacred sites and ceremonial areas within the ATMP planning area; maintain confidentiality of sacred sites (Executive Order (EO) 13007, *Indian Sacred Sites*, dated May 24, 1996); and respect the spiritual significance of the Park to tribal people and maintain cultural

connections to the Park pursuant to the Park’s Foundation Document (NPS, 2015); ~~and prioritize the voices and values of Tribal nations in accordance with the Park’s Strategic Action Plan (NPS, 2022).~~

## 2.6 Alternative 3

Page 19: Compared to existing conditions, Alternative 3 would reduce the number of routes from seven to two ~~eastbound~~ routes (one eastbound and one westbound) that directly cross over the Park and avoid looping over Wilderness and following Park canyons.

### 2.6.2 Commercial Air Tour Routes and Altitudes

Page 20: The ~~two~~ eastbound routes included in Alternative 3, (~~the ER-N route (“red route”) and the ER-S route (“orange route”) as depicted in Figure 4), both~~ enters the western boundary of the ATMP planning area and exits along the eastern boundary. The ER-N route (“red route”) depicted in Figure 4 is a westbound route that enters the eastern boundary of the ATMP planning area and exits along the western boundary.

Page 20: The operator currently does not fly the red or orange route in a westbound direction within the ATMP planning area and under this alternative would only be authorized to fly the red route ~~may not fly~~ over the Park in a westbound direction. Under this alternative, the operator would be able to fly either eastbound or westbound over the Park on a given day, but the operator may not fly in both directions over the Park in a single day.

## 2.7 Summary Comparison of the ATMP Alternatives

Page 25-27, Table 2:

Alternative Attributes	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3
General Description and Objectives	Allows a continuation of air tours without implementation of an ATMP or Voluntary Agreement. Does not meet the purpose and need for the ATMP.	Prohibits air tours within the ATMP planning area to maximize protection of the Park’s natural and cultural resources, including privacy of tribal practices within the Park. Most closely aligns with the purpose and significance for which the Park was established. Air tours could continue to fly in unrestricted airspace outside the ATMP planning area (i.e., at or above 5,000 ft. AGL or more than ½-mile outside of the Park’s boundary).	Authorizes up to 101 air tours per year to be conducted on two routes within the ATMP planning area. Air tours could also fly in unrestricted airspace outside the ATMP planning area (i.e., at or above 5,000 ft. AGL or more than ½-mile outside of the Park’s boundary).

Alternative Attributes	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3
Annual/Daily Number of Flights	Considers the three-year average of 101 flights per year (based on 2017-2019 reporting data) as the existing condition, though up to 126 air tours per year could be conducted under IOA.	None in ATMP planning area.	Authorizes 101 flights per year.
Routes	No mandatory routes or no-fly zones. See map for depiction of reported routes.	None in ATMP planning area.	Two routes (ER-N, ER-S). <u>The ER-N route runs east-to-west while the ER-S route that runs west-to-east across the ATMP planning area. that These routes reflect routes currently flown by the operator.</u>
Minimum Altitudes	No mandatory minimum altitudes. See map for depiction of reported operations. Existing operations range from 800 to 1,000 ft. AGL.	N/A. Operators may fly above the ATMP planning area (at or above 5,000 ft. AGL).	Minimum 10,000 ft. MSL, which results in a minimum of 2,600 ft. AGL.  The operator may continue to fly outside of the ATMP planning area where they already fly or fly routes over or around the ATMP planning area similar to existing flight paths but outside of the ATMP planning area.
Time of Day	No restrictions.	N/A	Two hours after sunrise until two hours before sunset for non-quiet technology flights.
Quiet Technology Incentives	None.	N/A	Quiet technology flights may fly one hour after sunrise until one hour before sunset.
Interpretative Training and Education	None.	N/A	When made available by NPS, the NPS would provide yearly mandatory training for air tour pilots regarding Park resources.
Annual Meeting	None.	N/A	The Park staff, the local FAA FSDO, and the operator would be required to meet once per year.

<b>Alternative Attributes</b>	<b>Alternative 1 (No Action)</b>	<b>Alternative 2 (Preferred Alternative)</b>	<b>Alternative 3</b>
Restrictions for Particular Events	None.	N/A	The NPS can establish no-fly periods and must provide minimum of 15 days written notice to the operator for any restrictions that temporarily restrict certain areas or certain times of day, or 60 days written notice to the operator for any full-day restrictions in advance of the no-fly period for special events or planned Park management. Events may include tribal ceremonies or other similar events.
Monitoring and Enforcement	The operator reports the number of tours, aircraft type, route, and day/time of tour to the FAA and the NPS on a semi-annual basis.	The NPS may conduct ADS-B aircraft monitoring and work with the FAA to respond to instances of noncompliance. The FAA FSDO would investigate and respond to all written reports consistent with applicable FAA guidance. FAA determination of noncompliance may result in legal enforcement actions.	Operators would provide semi-annual reports, including the flight monitoring data. Additional monitoring and enforcement would occur as described in Alternative 2.
Adaptive Management	None.	N/A	Adaptive management of the route, frequency, and timing would be considered/analyzed. NPS would conduct monitoring to ensure that this ATMP remains consistent with Park management objectives

Alternative Attributes	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)	Alternative 3
Initial Allocation of Air Tours and Aircraft Types	Reflects existing conditions of one operator with reported data from 2017-2019.	N/A	The initial allocation would reflect the number of air tours reported over the Park and the existing aircraft types of the one operator that has reported operating in the period from 2017-2019. Competitive bidding may result in a change to the initial allocation if there is a new entrant application. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced.

### 3.0 Affected Environment and Environmental Consequences

#### 3.4 Cultural Resources

Page 57: The methodology in Appendix E, *Environmental Impact Analysis Methodology*, as well as the ~~Section 106~~ correspondence and documentation in Appendix G, *Cultural Resources Section 106 Consultation and Summary*, further describe the identification and treatment of cultural resources for the project.

Page 57: In addition to Section 106 of the NHPA, the NPS's Organic Act and Section 110 of the NHPA apply to and provide for the preservation of historic, ethnographic, and cultural resources on parkland. The cultural resources that the NPS preserves under its Organic Act are broader than "historic properties" under the NHPA. As defined in NPS 2006 Management Policies, a cultural resource is "an aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about the culture." It may be tangible or may be a cultural practice or connection to a landscape. Tangible cultural resources in the Park include archaeological sites, sacred sites, ancestral sites, cultural landscapes, and traditional cultural properties, all of which include the natural resources within them. NPS policies and directives also apply to park cultural and ethnographic resources and provide direction for their management including the NPS Management Policies (2006), Chapter 5, Director's Order 28: Cultural Resource Management, and EO 13007 which provide direction regarding Indian Sacred Sites, and NPS Policy Memorandum 22-03 which sets forth guidance on how the NPS will implement Secretary's Order No. 3403, Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters. The NPS's mandate to conserve Park resources and values "applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired" (NPS, 2006).



Page 57: (see Appendix G, ~~Cultural Resources~~ Section 106 Consultation and Summary, for correspondence and a list of consulting parties).

Page 66: Pueblo villages, including kivas, ceremonial rooms, and ~~cemeteries~~ burial grounds, are sacred places ~~and restricted for use by pueblo members only~~. Air tour patrons' observations of pueblo people carrying out traditional uses and ceremonies in these sacred ~~lands~~ places intrudes on the cultural practices the Park protects ~~is required to protect~~.

Page 66-67: Tribes and tribal members have emphasized that overflights, including commercial air tours, have negative impacts on the cultural heritage of pueblos, dances, and traditional events, ~~and hunting~~, among other events and activities.

Page 63: Descriptions of each can be found in Appendix G, ~~Cultural Resources~~ Section 106 Consultation and Summary.

Page 67: Based on this consultation, the FAA ~~proposes a finding that the ATMP will not adversely affect historic properties~~ found that the ATMP undertaking would result in no adverse effect to historic properties (36 CFR § 800.5(b)). The Pueblo of San Felipe and Southwest Safaris objected to the finding. The Pueblo of San Felipe's objection was resolved through continued consultation. After continued consultation with Southwest Safaris, the objection could not be resolved; therefore on November 21, 2023, the FAA requested the Advisory Council on Historic Preservation's (ACHP) review of the finding pursuant to 36 CFR §§800.5(c)(2) and (3). On December 21, 2023, the ACHP responded to FAA's request for ACHP review stating that FAA has appropriately applied the criteria of adverse effect for this undertaking and a finding of "no adverse effect" to historic properties is reasonable. After review of the ACHP advisory opinion, the FAA confirmed the finding that the ATMP at Bandelier National Monument would have no adverse effect on historic properties. The FAA provided the agency response to the ACHP and all consulting parties on the project in a letter dated January 11, 2024, thereby concluding the Section 106 process. See Appendix G, ~~Cultural Resources~~ Section 106 Consultation and Summary, for more information.

Page 69: While Alternative 3 would authorize air tours to be conducted on fewer routes over the APE than the No Action Alternative, because National Register listed or eligible tribal sacred sites, cultural landscapes, and ancestral sites occur throughout the Park, ~~which is considered a traditional cultural property in its entirety~~, Alternative 3 is unable to reduce impacts to tribes, tribal resources, and tribal privacy by routing air tours to avoid sensitive locations because sensitive locations are densely distributed throughout the Park.

Page 72: See Appendix G, ~~Cultural Resources~~ Section 106 Consultation and Summary, for more information.

### **3.9 Department of Transportation (DOT) Act Section 4(f) Resources**

Page 111: ...and Appendix G, ~~Cultural Resources~~ Section 106 Consultation and Summary, list historic resources that qualify under Section 4(f).

Page 112:... and the NPS determined that the ~~No Action Alternative cannot be altered to avoid or prevent unacceptable impacts to the Park's cultural resources~~ impacts of the No Action Alternative to cultural practices, sacred sites, and the cultural landscape of the Park are too great and inhibit the NPS's ability to provide the pueblos their cultural connection to the landscape which is essential to meeting the purpose of the Park.

### 3.10 Summary of Environmental Consequences

Page 119-123, Table 14:

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)	Alternative 3
Noise and Noise-Compatible Land Use	<ul style="list-style-type: none"> <li>• 12-hr equivalent sound level: &lt;35 dBA</li> <li>• DNL: &lt;35 dB within the ATMP planning area.</li> <li>• Time above 35 dBA: maximum &lt;5 minutes per day in 39% of ATMP planning area.</li> <li>• Maximum time above 52 dBA: 0.1 minutes at location point #11 (Rio Grande).</li> <li>• Maximum sound level in ATMP planning area: 54.8 dBA at location point #11 (Rio Grande).</li> <li>• No indirect effects expected.</li> </ul>	<ul style="list-style-type: none"> <li>• 365 days per year without air tours within the ATMP planning area and would reduce noise in the most noise sensitive regions of the Park.</li> <li>• Indirect noise impacts may occur due to air tours displaced to outside the ATMP planning area.</li> </ul>	<ul style="list-style-type: none"> <li>• 12-hr equivalent sound level: &lt;35 dBA within the ATMP planning area.</li> <li>• DNL: &lt;35 dB within the ATMP planning area.</li> <li>• Time above 35 dBA: ER-S orange route, 0 minutes across ATMP planning area; ER-N red route, &lt;5 minutes in 53% of ATMP planning area.</li> <li>• Maximum time above 52 dBA: 0.5 minutes at location point #10 (Capulin Canyon).</li> <li>• Maximum sound level in ATMP planning area: 57.7 dBA at location point #10 (Capulin Canyon).</li> <li>• Indirect noise impacts may occur due to air tours being displaced to outside the ATMP planning area.</li> </ul>

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)	Alternative 3
Air Quality and Climate Change	<ul style="list-style-type: none"> <li>• GHG emissions: 0.46 to 1.13 MT of CO<sub>2</sub> per year.</li> <li>• Would not cause NAAQS exceedance or increase the frequency or severity of any existing violations.</li> <li>• No indirect effects expected.</li> </ul>	<ul style="list-style-type: none"> <li>• 100% reduction in criteria pollutant emissions within the ATMP planning area.</li> <li>• Reduction in GHG emissions of 0.46 to 1.13 MT CO<sub>2</sub> within the ATMP planning area.</li> <li>• Would not cause NAAQS exceedance or increase the frequency or severity of any existing violations.</li> <li>• Indirect impacts may occur due to air tours outside the ATMP planning area if winds transport emissions to within the ATMP planning area, and some areas not currently exposed to emissions from air tours (outside the ATMP planning area) may be exposed to emissions.</li> <li>• Highly unlikely that air tours displaced to outside the ATMP planning area would result in air quality impacts under NEPA or change the current attainment status of the Park.</li> </ul>	<ul style="list-style-type: none"> <li>• No to negligible change in criteria pollutant emissions within the ATMP planning area.</li> <li>• No to minimal change to GHG emissions of -0.53 to 0.28 MT of CO<sub>2</sub> per year within the ATMP planning area.</li> <li>• Would not cause NAAQS exceedance or increase the frequency or severity of any existing violations.</li> <li>• Indirect impacts may occur due to air tours outside the ATMP planning area if winds transport emissions to within the ATMP planning area, and some areas not currently exposed to emissions from air tours (outside the ATMP planning area) may be exposed to emissions.</li> <li>• Highly unlikely that air tours displaced to outside the ATMP planning area would result in air quality impacts or change the current attainment status of the Park.</li> </ul>
Biological Resources	<ul style="list-style-type: none"> <li>• Commercial air tour noise would continue, having short and infrequent disruptions to wildlife within the ATMP planning area; small risk of direct strikes to airborne species.</li> <li>• Time above 35 dBA: &lt;5 minutes in 39% of ATMP planning area.</li> <li>• Not expected to result in indirect effects to wildlife.</li> </ul>	<ul style="list-style-type: none"> <li>• Direct beneficial effects to biological resources are expected.</li> <li>• No direct impacts to biological resources within the ATMP planning area, but could result in some indirect impacts due to air tour displacement outside the ATMP planning area.</li> </ul>	<ul style="list-style-type: none"> <li>• Would limit flights to two routes and increase altitudes, overall reducing disruptions to wildlife behavior and reducing risk of direct strikes to airborne species.</li> <li>• Time above 35 dBA: ER-S orange route, 0 minutes across ATMP planning area; ER-N red route, &lt;5 minutes across 53% of ATMP planning area.</li> <li>• Could result in indirect effects to wildlife due to air tour displacement outside the ATMP planning area</li> </ul>

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)	Alternative 3
Cultural Resources	<ul style="list-style-type: none"> <li>• Cultural resources would continue to be impacted by air tours, as noise and visual effects would impact the feeling and setting of cultural resources.</li> <li>• Interruptions to tribal practices would continue associated with violations to tribal privacy.</li> <li>• 12-hr equivalent sound level: 19.3 dBA at location point #11 (Rio Grande).</li> <li>• Time above 35 dBA: &lt;5 minutes across the APE.</li> <li>• Not expected to result in indirect effects to cultural resources within the APE.</li> </ul>	<ul style="list-style-type: none"> <li>• Would reduce the noise and remove visual intrusions from the setting of cultural resources within the APE.</li> <li>• Eliminate disruptions to tribal practices from air tours and improve privacy for tribal users of the Park.</li> <li>• Could result in some indirect impacts to cultural resources within the APE.</li> </ul>	<ul style="list-style-type: none"> <li>• Would reduce noise and visual impacts that could detract from the feeling and setting of cultural resources within the APE.</li> <li>• Would limit flights to two routes, reducing the spatial area across which air tours could interrupt tribal practices, but would still result in violations to tribal privacy from the presence of air tours in the APE.</li> <li>• 12-hr equivalent sound level for ER-S orange route, &lt;3 dBA across APE; ER-N red route, &lt;25 dBA across APE.</li> <li>• Time above 35 dBA: ER-S orange route, 0 minutes across ATMP planning area; ER-N red route, &lt;5 minutes across 53% of ATMP planning area.</li> <li>• Could result in air tour displacement outside the ATMP planning area.</li> </ul>

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)	Alternative 3
Wilderness	<ul style="list-style-type: none"> <li>• Current air tour noise within and near NPS Wilderness would continue to have minor detractions from the natural quality and opportunity for solitude.</li> <li>• Time above 35 dBA: &lt;5 minutes in 39% of ATMP planning area.</li> <li>• No indirect effects expected.</li> </ul>	<ul style="list-style-type: none"> <li>• Offers the greatest protection of NPS Wilderness, as commercial air tours would be eliminated over NPS Wilderness.</li> <li>• Could result in indirect impacts to USFS Wilderness areas associated with the sights and sounds of air tours if tours were displaced to outside the ATMP planning area.</li> </ul>	<ul style="list-style-type: none"> <li>• Would limit flights to two routes, overall reducing areas where noise impacts could detract from the natural quality of Wilderness character and opportunities for solitude within NPS Wilderness.</li> <li>• Time above 35 dBA: ER-S orange route, 0 minutes across ATMP planning area; ER-N red route, &lt;5 minutes across 53% of ATMP planning area.</li> <li>• Could result in some indirect impacts to USFS Wilderness areas if tours were displaced to outside the ATMP planning area and the sights and sounds of those tours affected USFS Wilderness areas. Alternative 3 would likely result in fewer indirect impacts than Alternative 2, as some tours would still be permitted within the ATMP planning area.</li> </ul>

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)	Alternative 3
Visitor Use and Experience and Other Recreational Opportunities	<ul style="list-style-type: none"> <li>• Current minimal impacts to interpretive programs at the Visitor Center due to sound levels from air tours resulting in speech interference and inability to hear natural sounds would continue.</li> <li>• Minor impacts to visitor experience in natural areas of the Park related to the intrusion of audible air tour noise where visitors would expect natural sounds to prevail during their visit to the Park.</li> <li>• Maintains the current availability of air tours for those that wanted to view the Park from an aerial vantage point.</li> <li>• 39% of the ATMP planning area would experience audible air tour noise at some point in the day.</li> <li>• Audible air tour noise &lt;5 minutes a day in areas most heavily used by visitors.</li> <li>• Time above 52 dBA: &lt;1 minute a day.</li> <li>• No indirect effects expected.</li> </ul>	<ul style="list-style-type: none"> <li>• Offers the greatest protection of visitor use and experience but eliminates air tours within the ATMP planning area.</li> <li>• Eliminates the opportunity for those interested in viewing the Park from an aerial perspective.</li> <li>• Air tours occurring outside the ATMP planning area may result in noise in other areas near those flights which could affect the visitor experience.</li> <li>• Indirect impacts to visitor experience and points of interest could occur if flights were displaced to outside the ATMP planning area.</li> </ul>	<ul style="list-style-type: none"> <li>• Limits flights to two routes, overall reducing areas where noise impacts could detract from visitor use and experience.</li> <li>• Limits the availability of air tours for those interested in viewing the Park from an aerial perspective.</li> <li>• Time above 35 dBA: ER-S orange route, 0 minutes across ATMP planning area; ER-N red route, &lt;5 minutes across 53% of ATMP planning area.</li> <li>• Audible air tour noise zero minutes a day for the ER-S orange route and less than 5 minutes a day for the ER-N red route in areas most heavily used by visitors.</li> <li>• Time above 52 dBA: &lt;1 minute for the ER-S orange route and &lt;1 minute a day for the ER-N red route.</li> <li>• Indirect impacts to visitor experience and points of interest could occur if flights were displaced to outside the ATMP planning area.</li> </ul>

<b>Environmental Impact Category</b>	<b>Alternative 1 (No Action)</b>	<b>Alternative 2 (Preferred)</b>	<b>Alternative 3</b>
Environmental Justice and Socioeconomics	<ul style="list-style-type: none"> <li>• Would not result in disproportionately high and adverse impacts to EJ populations or impact those populations in ways that are unique to those EJ populations.</li> <li>• DNL: &lt;35 dB</li> <li>• 0.46-1.13 MT CO<sub>2</sub></li> <li>• Peak month, average day= 1 air tour</li> </ul>	<ul style="list-style-type: none"> <li>• Would not result in disproportionately high or adverse impacts to EJ populations or impact those populations in ways that are unique to those EJ populations.</li> <li>• Could result in changes to employment or the amount of income that the air tour operator and other ancillary businesses generate from conducting air tours within the ATMP planning area.</li> </ul>	<ul style="list-style-type: none"> <li>• Would not result in disproportionately high or adverse impacts to EJ populations or impact those populations in ways that are unique to those EJ populations.</li> <li>• DNL: &lt;35 dB within the ATMP planning area.</li> <li>• Δ -0.53-0.28 MT CO<sub>2</sub></li> <li>• Could impact employment or the amount of income that the air tour operator and other ancillary businesses generate from conducting air tours within the ATMP planning area; impacts would be less than Alternative 2.</li> </ul>
Visual Effects	<ul style="list-style-type: none"> <li>• Air tours would continue to have minimal impact to viewsheds.</li> <li>• No indirect effects expected.</li> <li>• Peak month, average day = 1 air tour</li> </ul>	<ul style="list-style-type: none"> <li>• Would provide the greatest protection to Park viewsheds and would benefit visual resources and visual character within the Park.</li> <li>• Indirect impacts to viewsheds could occur if flights were displaced to outside the ATMP planning area.</li> </ul>	<ul style="list-style-type: none"> <li>• Would limit flights to two routes, overall reducing the likelihood of impacts to viewsheds.</li> <li>• Indirect impacts to viewsheds could occur if flights were displaced to outside the ATMP planning area.</li> </ul>

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)	Alternative 3
DOT Act Section 4(f) Resources	<ul style="list-style-type: none"> <li>The FAA consulted with the NPS on the potential for substantial impairment to Section 4(f) resources that would occur under the No Action Alternative, and the NPS determined that <del>the No Action Alternative cannot be altered to avoid or prevent unacceptable impacts to the Park's Section 4(f) resources</del> <u>impacts of the No Action Alternative to cultural practices, sacred sites, and the cultural landscape of the Park are too great and inhibit the NPS's ability to provide the pueblos their cultural connection to the landscape which is essential to meeting the purpose of the Park.</u></li> </ul>	<ul style="list-style-type: none"> <li>No substantial impairment of Section 4(f) resources in the ATMP planning area.</li> <li>No "constructive use" to any Section 4(f) properties.</li> </ul>	<ul style="list-style-type: none"> <li>No substantial impairment of Section 4(f) resources in the ATMP planning area.</li> <li>No "constructive use" to any Section 4(f) properties.</li> <li>DNL: &lt;35 dB within the ATMP planning area.</li> <li>Time above 35 dBA: ER-S orange route, 0 minutes across ATMP planning area; ER-N red route, &lt;5 minutes across 53% of ATMP planning area.</li> <li>Time above 52 dBA: Not anticipated to exceed 1 minute per day.</li> </ul>

## Appendix F: Noise Technical Analysis

Page 8, Footnote 3: Atmospheric absorption is based on the ~~2012-2021 average temperature of 76 degrees Fahrenheit and 71% relative humidity~~ 2011-2020 average temperature at Santa Fe Municipal Airport (KSAF) of 52 degrees Fahrenheit and 40% relative humidity and computed according to SAE-ARP-5534.

## Appendix G: ~~Cultural Resources~~ Section 106 Consultation and Summary

The following contents have been added to Appendix G:

- Objection from Pueblo of San Felipe and FAA's resolution
- Objections from Southwest Safaris
- FAA response to Southwest Safaris
- Request for Advisory Council on Historic Preservation's (ACHP) Review of FAA's Finding
- ACHP Opinion
- FAA's Response to ACHP Opinion



## **Appendix I: Section 4(f) Analysis**

Page 1: Table 1 lists Section 4(f) parks and recreational areas identified in the study area. All data sources were accessed the week of January 30, 2023. The FAA corresponded with the Officials with Jurisdiction (OWJ) related to the Section 4(f) resources. On July 20, 2023, the FAA sent emails with an attached letter to the U.S. Army Corps of Engineers, U.S. Forest Service, and the National Park Service describing the proposed action and FAA's preliminary determination and requested response within a 14-day review period. A follow-up email was sent on July 27, 2023. Additionally, the FAA notified the National Park Service (NPS) of the determination via email on July 12, 2023. The 14-day response period for all review requests closed on August 3, 2023. No responses were received. Information on coordination with OWJs is located in Table 4.

The following contents have been added to Appendix I:

- OWJ letter to U.S. Army Corps of Engineers
- OWJ letter to U.S. Forest Service
- OWJ letter to NPS

## **Appendix J: Draft ATMP and Draft EA Public Involvement Materials**

- The recorded public meeting for the 2023 Draft ATMP and Draft EA is available via the following: <https://www.youtube.com/watch?v=6OETrpLMwco>
- The NPS Planning, Environmental and Public Comment website for the 2023 ATMP and EA is available via the following: <https://parkplanning.nps.gov/BandelierDraftATMPandEA>

The following contents are included in Appendix J:

- Comment Summary Report and Agency Responses to Comments on the Draft ATMP and Draft EA
- Copies of all public comments received on the Draft ATMP and Draft EA

Page 24, Figure 4:

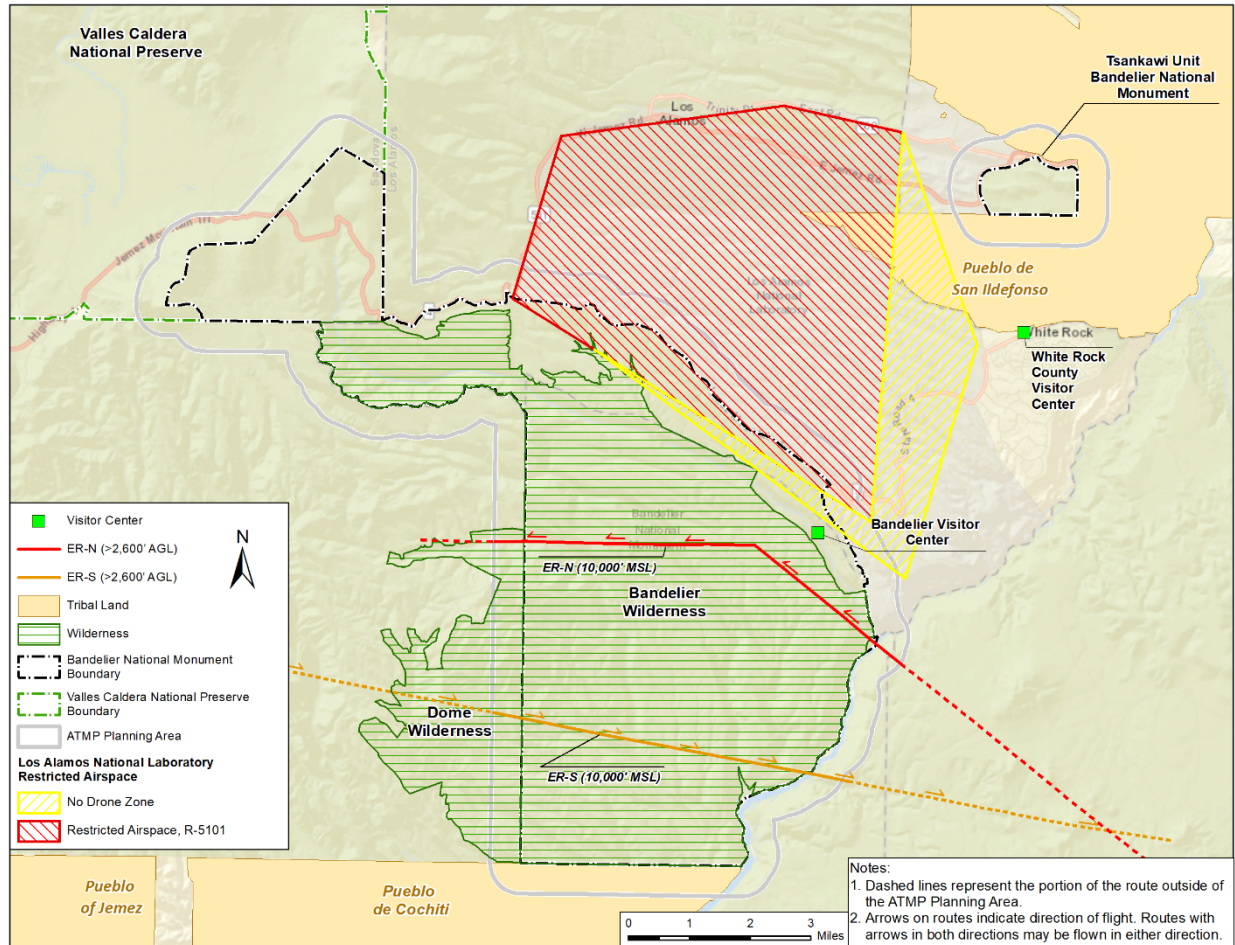


Figure 4. Alternative 3.

Page 54, Figure 8:

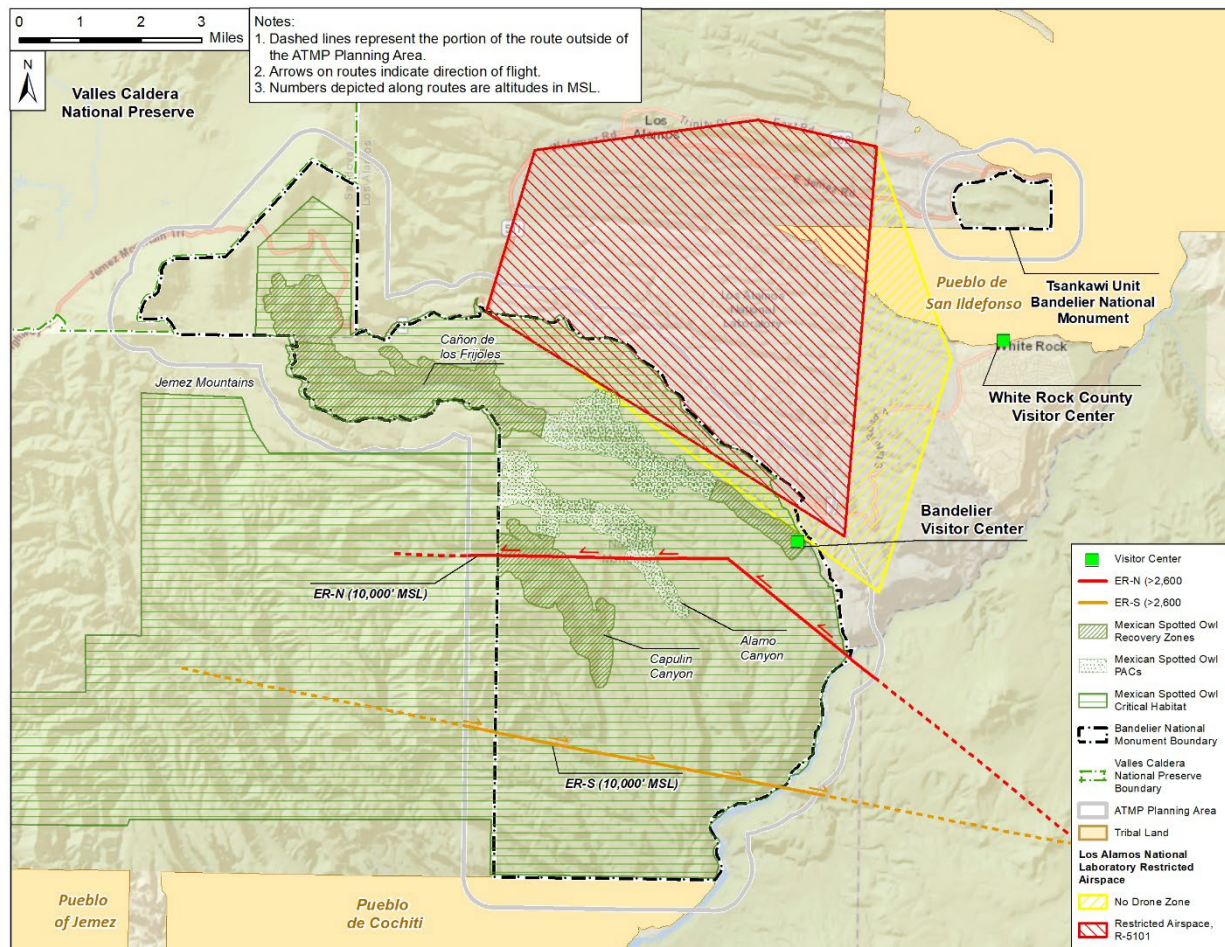


Figure 8. Biological Resources Environmental Consequences for Alternative 3.



Page 70, Figure 10:

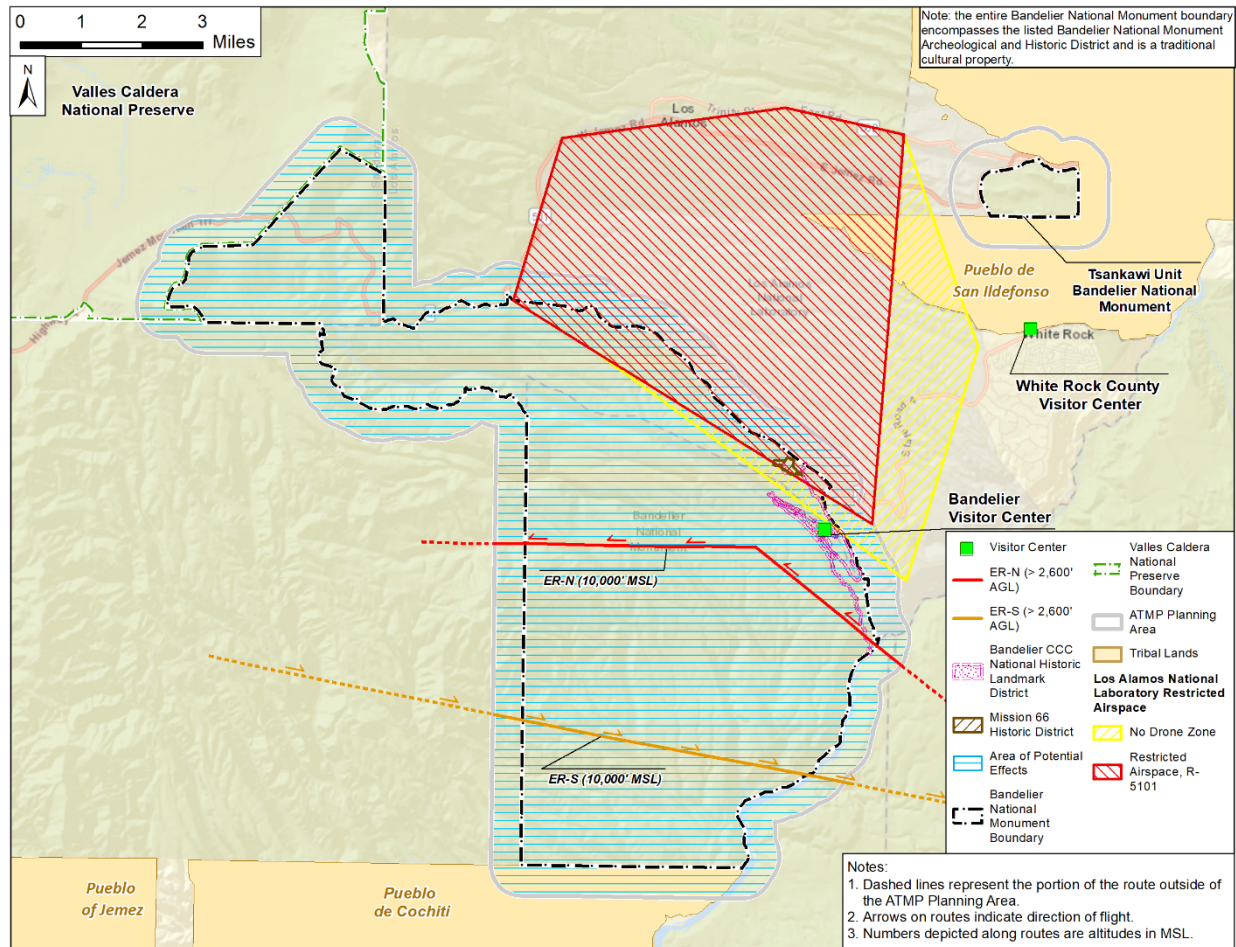


Figure 10. Cultural Resources Environmental Consequences for Alternative 3.

Page 81, Figure 12:

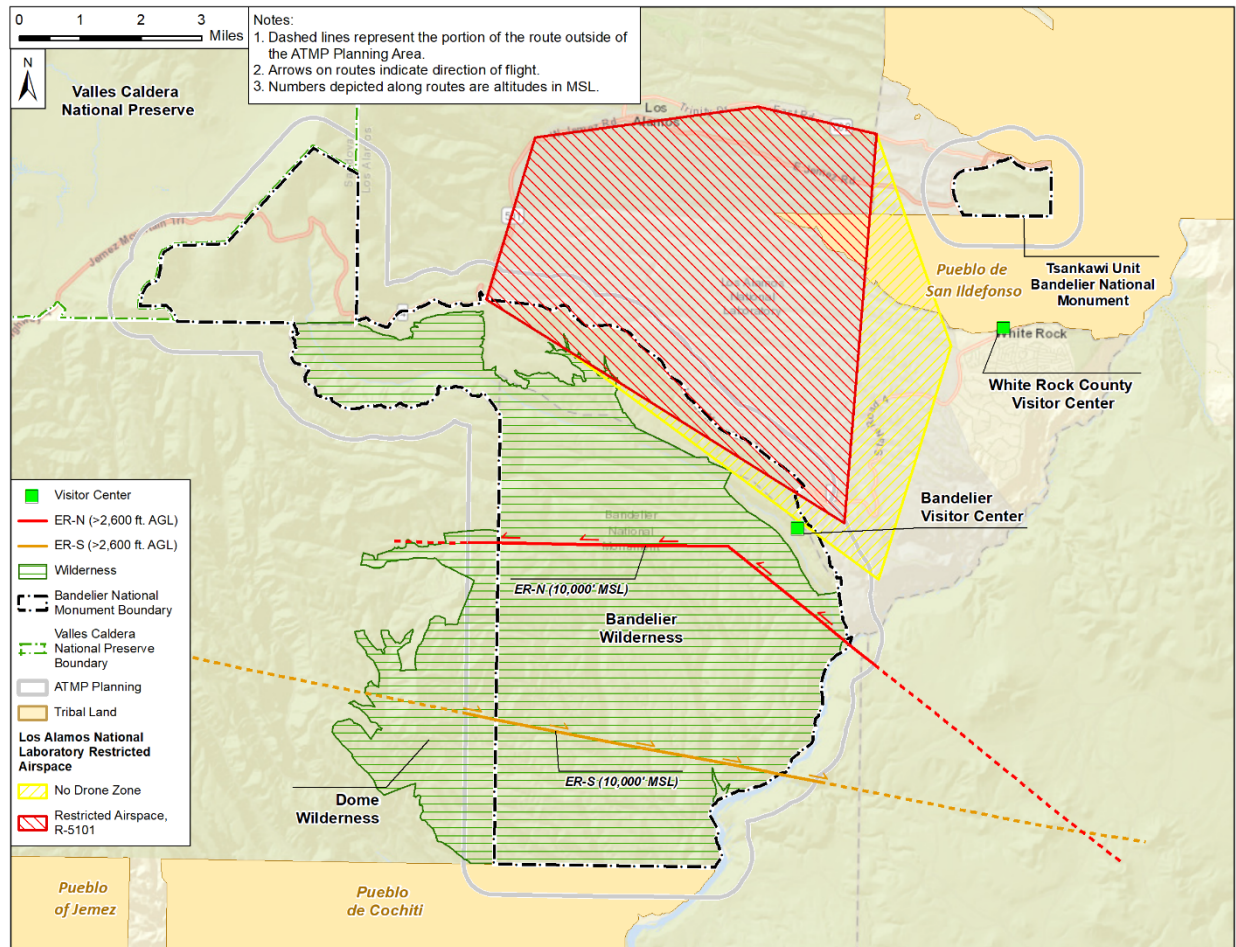


Figure 12. Wilderness Environmental Consequences for Alternative 3.

Page 91, Figure 14:

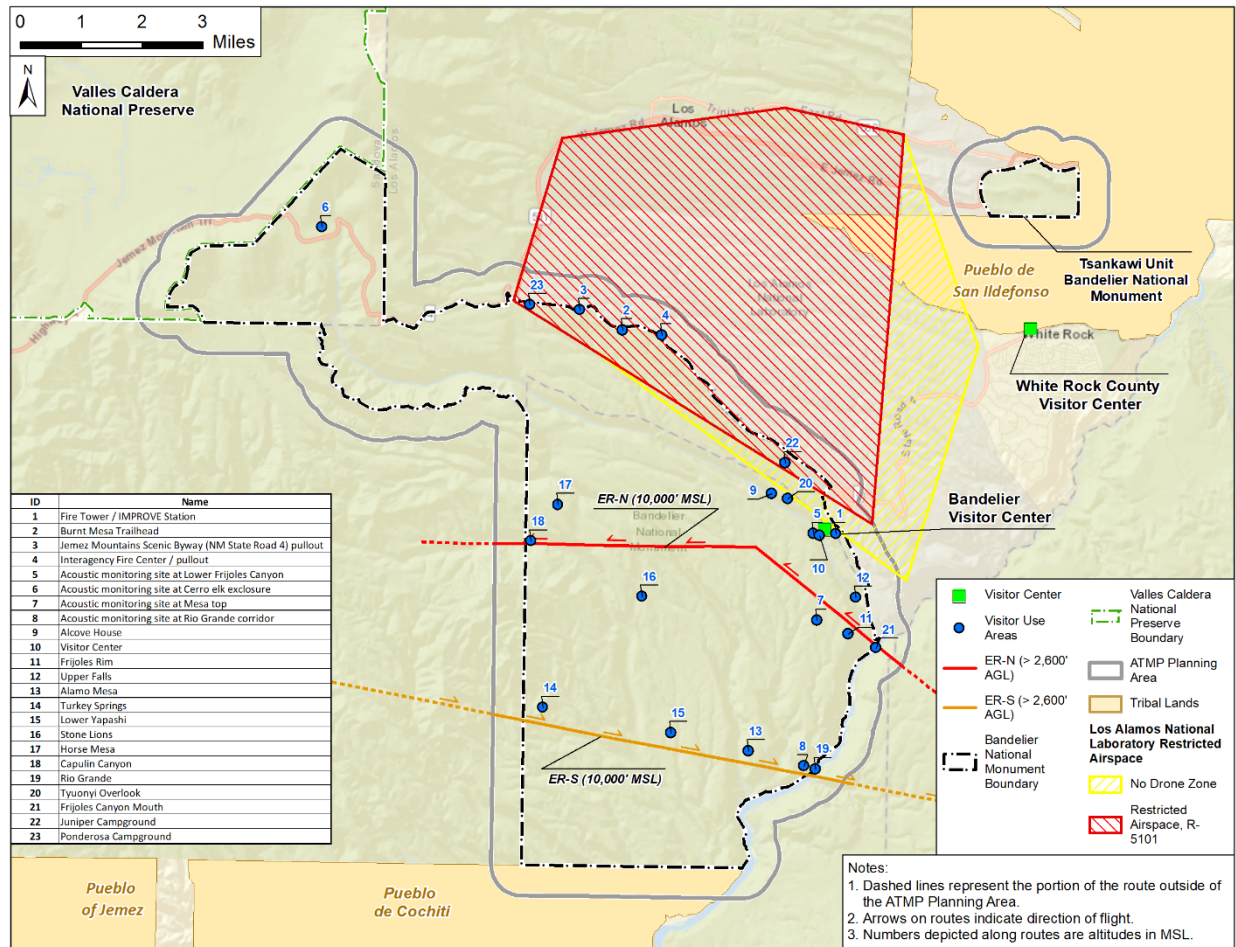


Figure 14. Visitor Use and Experience Environmental Consequences for Alternative 3.



Page 102, Figure 16:

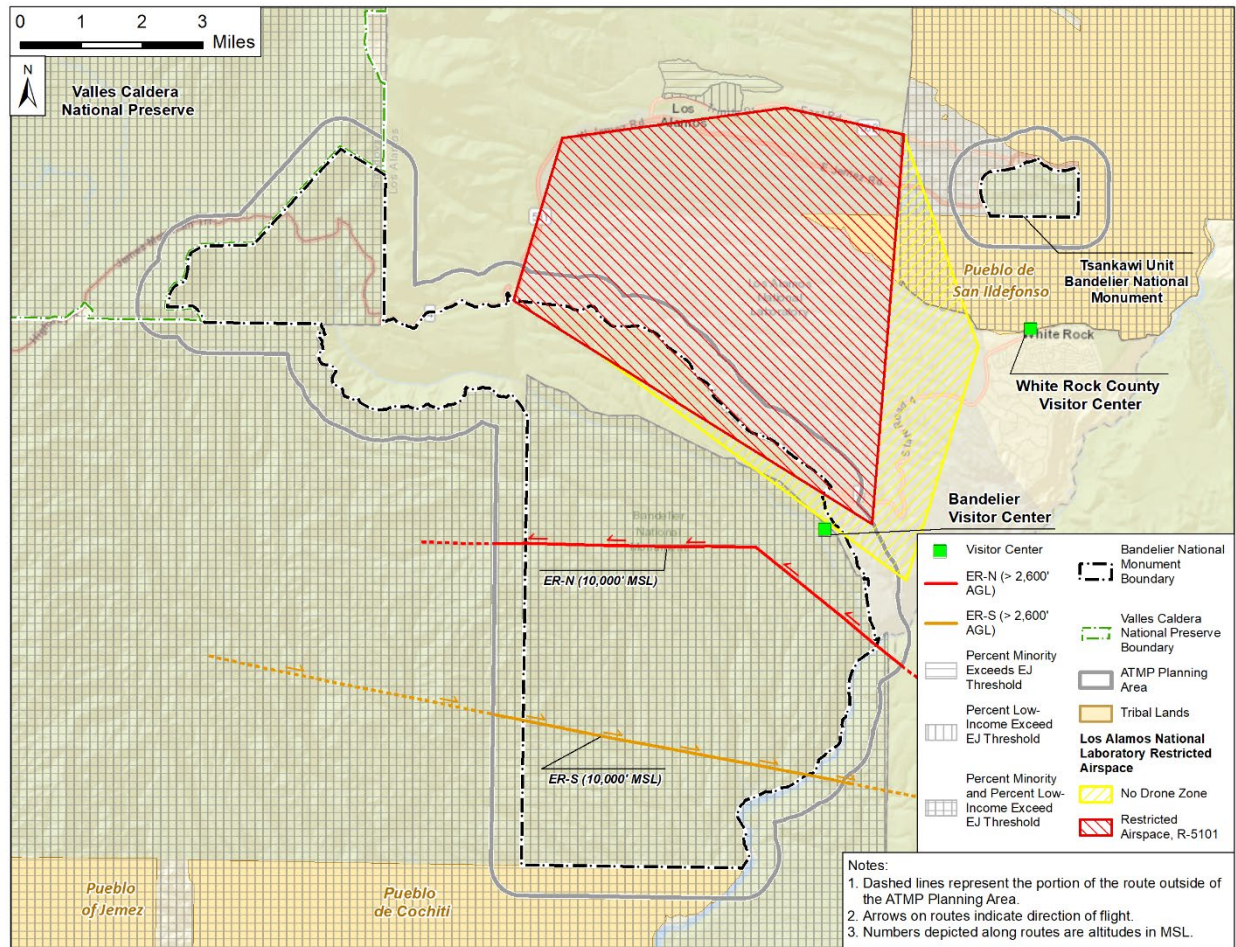


Figure 16. Environmental Justice Environmental Consequences for Alternative 3.

Page 108, Figure 18:

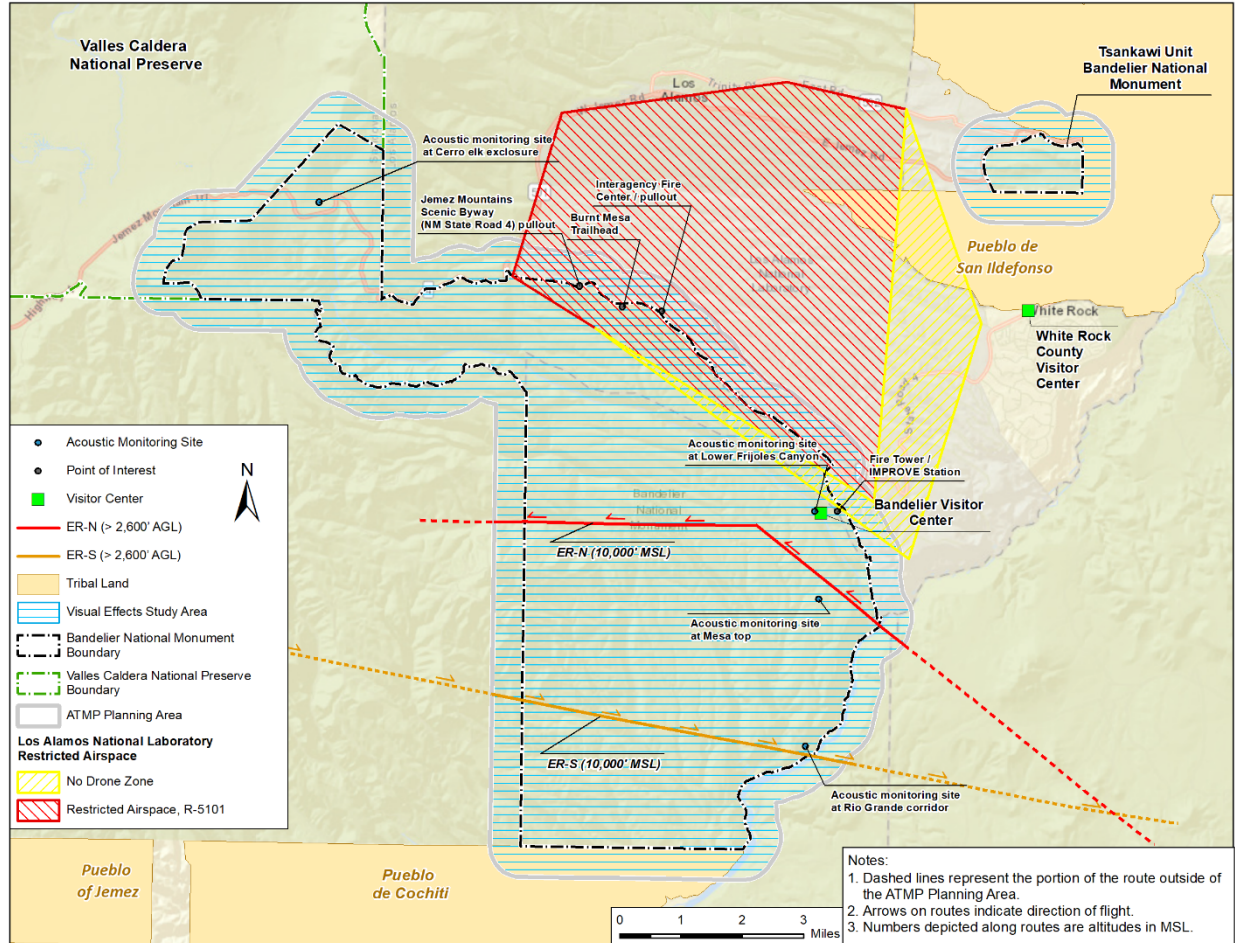


Figure 18. Visual Effects Environmental Consequences for Alternative 3.



Page 116, Figure 21:

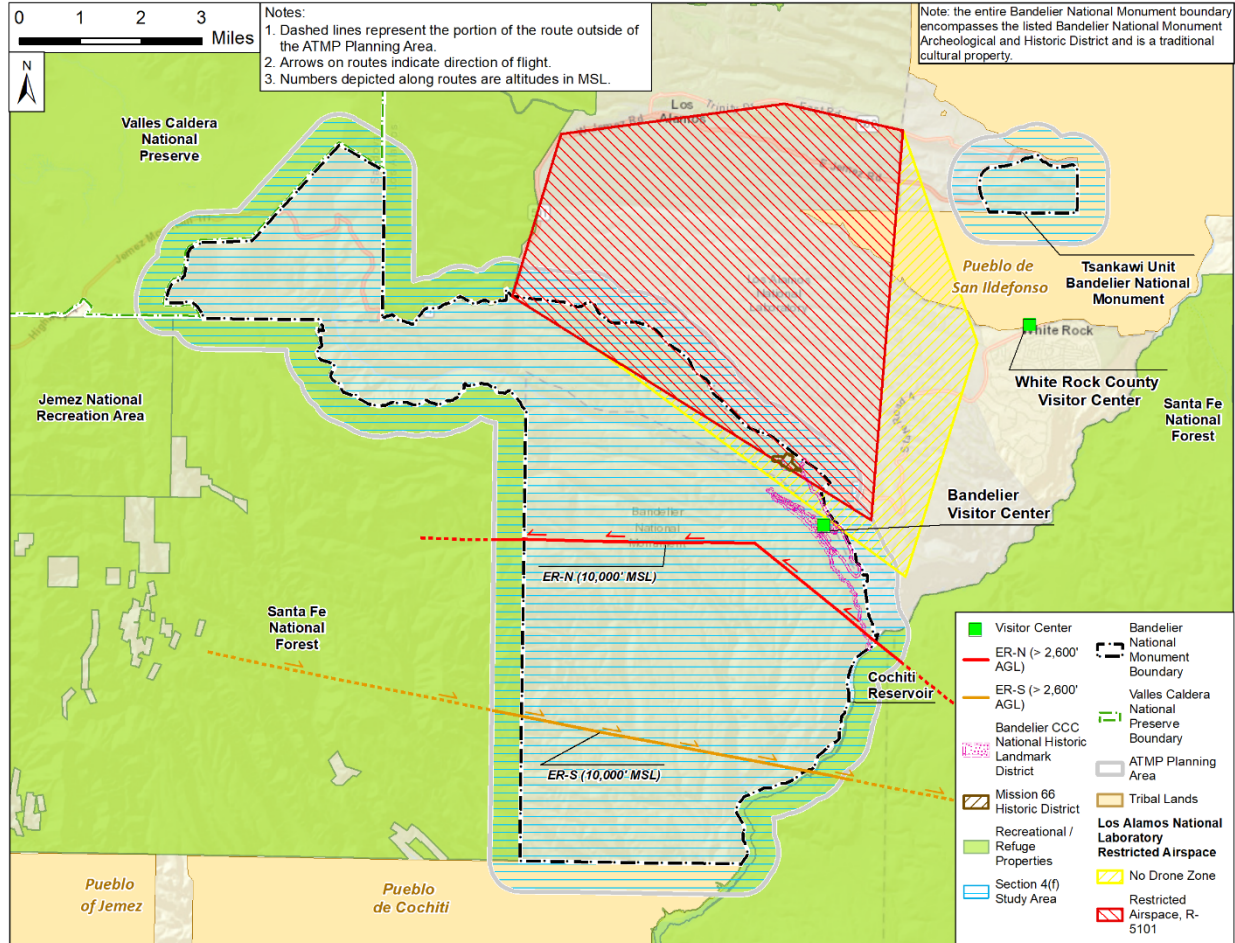


Figure 21. Section 4(f) Environmental Consequences for Alternative 3.