

## Apache Leap Special Management Area Management Plan

# **Environmental Assessment and Finding of No Significant Impact**





#### For More Information Contact:

Tonto National Forest 2324 E. McDowell Rd. Phoenix, Arizona 85006 (602) 225-5500

Cover Photo: Apache Leap area, view looking east from Forest Road 2440. (Photo by Meggan Dugan).

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Apache Leap Special Management Area Management Plan Environmental Assessment		

## Introduction

The Forest Service, an agency within the United States Department of Agriculture, is proposing to amend the 1985 Tonto National Forest Land and Resource Management Plan (forest plan) with a management plan for the approximately 839-acre<sup>1</sup> Apache Leap Special Management Area (Apache Leap SMA) established by Congress in December 2014 through the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015<sup>2</sup> (NDAA). See Appendix A for language from Section 3003 of the NDAA. These actions are proposed to be implemented on the Globe Ranger District of the Tonto National Forest.

Section 3003(g)(5)(a) of the NDAA directed the Forest Service to prepare a special management plan for the Apache Leap SMA within 3 years in consultation with affected Indian tribes, the Town of Superior, Resolution Copper Mining, LLC (Resolution Copper), and interested members of the public. The Apache Leap SMA management plan (Forest Service, 2017) proposes the management direction and monitoring strategy for preserving and managing the natural character of the Apache Leap SMA, pursuant to the terms set forth in the NDAA (NDAA Section 3003(g)(1–6)).

We, the Forest Service, prepared this environmental assessment (EA) to determine whether amending the forest plan and implementing the contents of the Apache Leap SMA management plan may significantly affect the quality of the human environment and thereby require the preparation of an environmental impact statement (EIS). By preparing this EA, we are fulfilling agency policy and direction to comply with the National Environmental Policy Act. For more details on the proposed action, see the "Proposed Action and Alternatives" section of this document.

## 1985 Land and Resource Management Plan

The Tonto National Forest Land and Resource Management Plan (Forest Service, 1985) describes existing management direction for resource use within National Forest System lands. The purpose of the forest plan is to "guide sustainable, integrated resource management of the resources within the plan area in the context of the broader landscape, giving due consideration to the relative values of the various resources in particular areas" (Title 36 Code of Federal Regulations [CFR] 219.1b). The forest plan would be amended to include the Apache Leap SMA as a designated management area and to incorporate plan components specific to the Apache Leap SMA that follow National Forest System land management planning regulations adopted in 2012. These plan components can be found in Chapter 3 of the Apache Leap SMA management plan.

## **Project Location**

The project area is located in Pinal County, Arizona, on the Globe Ranger District of the Tonto National Forest.

The location and boundary of the Apache Leap SMA are shown in Figures 1 and 2. Surrounding lands include additional Tonto National Forest lands, state lands, and privately held land near the Town of Superior.

The Apache Leap SMA is located on the eastern edge of the Town of Superior. The Apache Leap SMA includes approximately 839 acres of land currently under federal and private ownership. Upon completion of the Southeast Arizona Land Exchange (directed as part of the NDAA), the Apache Leap SMA will include only federal lands.

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<sup>&</sup>lt;sup>1</sup> Using updated survey information provided by Resolution Copper, the Forest Service revised the Apache Leap South End Parcel from 110 acres (as presented in the NDAA) to 142 acres. As a result, the Apache Leap SMA acreage has been revised from 807 acres presented in the NDAA to 839 acres.

<sup>&</sup>lt;sup>2</sup> Public Law (PL) 113–291 (113th Congress, 2014).

The Apache Leap SMA is named after its signature feature, an escarpment of sheer cliff faces, hoodoos, and buttresses known as "Apache Leap." The escarpment is the dominant feature of the western area of the Apache Leap SMA (see cover photo) and stretches north-south for approximately 2.5 miles. The remainder of the special management area consists of rugged, east-west-oriented mountain-foothills and canyons. The eastern portion gradually slopes down from the top of the escarpment toward Oak Flat. Elevations range from 3,100 feet in canyon floors to 4,720 feet above mean sea level at the peak of Apache Leap.

## **Need for Action**

The purpose of this federal action is to develop and adopt long-range direction for managing natural and cultural resources and human uses of the Apache Leap SMA.

There are two related needs for the proposed action:

- 1. to fulfill the requirements outlined in NDAA Section 3003(g) to prepare a management plan for the Apache Leap SMA; and
- 2. to meet the requirements at 36 CFR 219.13 for amending forest plans due to changed circumstances (in this case, the congressional designation of a new special management area).

Therefore, the proposed action under environmental review is to:

- 1. prepare and adopt a programmatic management plan for the Apache Leap SMA; and
- 2. amend the forest plan (Forest Service, 1985) by including a new management area and adding new plan components for the Apache Leap SMA.

## **Public Involvement and Tribal Consultation**

We developed the management plan and this EA in consultation with individuals, tribes, and the federal, state, and local agencies listed below.

## **NDAA Consulting Parties**

The NDAA directs the Forest Service to consult with affected Indian tribes, the Town of Superior, Resolution Copper, and other interested members of the public (Section 3003(g)(5)(a)). The following is a summary of our ongoing consultation efforts with the NDAA consulting parties.

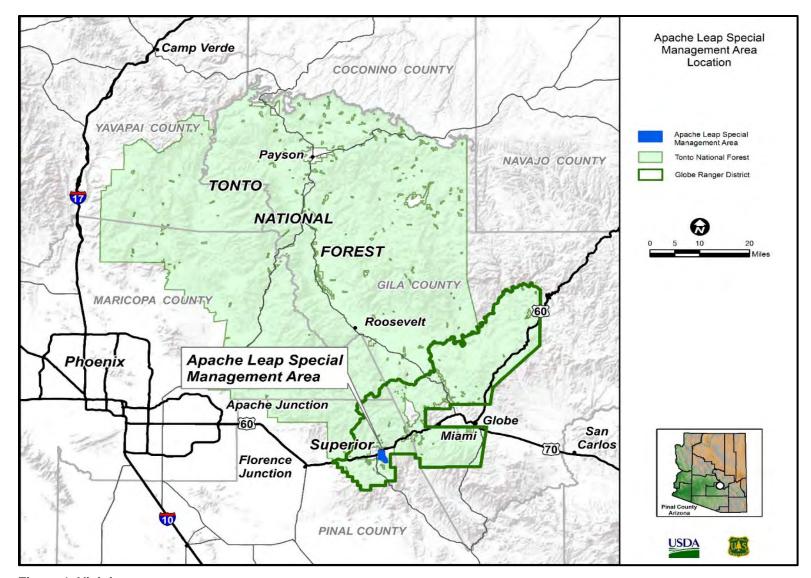


Figure 1. Vicinity map.

Apache Leap Special Management Area Management Plan Environmental Assessment		
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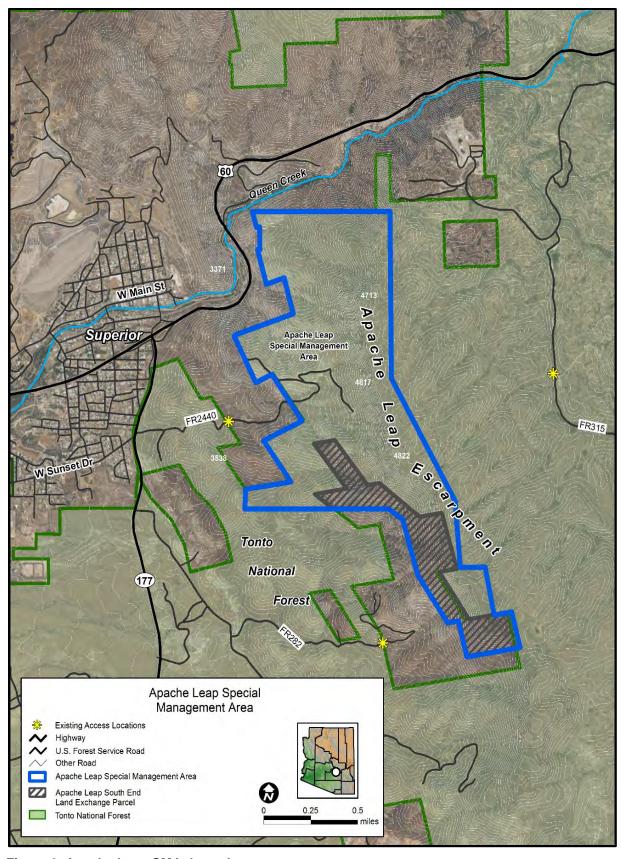


Figure 2. Apache Leap SMA: boundary.

#### **Affected Indian Tribes**

The NDAA, Section 3003(g)(5)(A), specifies that affected Indian tribes shall be consulted regarding the preparation of the Apache Leap SMA management plan. In addition, the preparation and approval of the Apache Leap SMA management plan is a federal undertaking subject to compliance with Section 106 of the National Historic Preservation Act, which requires federal agencies to consider the effects of a proposed undertaking on historic properties eligible for the National Register of Historic Places in consultation with the Arizona State Historic Preservation Office, affected tribes, and interested parties. Consultation with Indian tribes must be government-to-government.

The Tonto National Forest is conducting ongoing consultation with 12 Indian tribes, in accordance with Forest Service Handbook Section 1509.13, Chapter 10, "Consultation with Indian Tribes and Alaska Native Corporations" (Forest Service, 2016a). Content discussed in government-to-government consultations is confidentially protected by Sections 8101–8107(5) of PL 110–234, which authorize the Secretary of Agriculture to protect the confidentiality of certain information, including information that is culturally sensitive to Indian tribes.

Government-to-government consultation for the Apache Leap SMA was initiated with a formal letter dated September 26, 2016, from Forest Supervisor Neil Bosworth to the following tribes: San Carlos Apache Tribe, Tonto Apache Tribe, Mescalero Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, Fort McDowell Yavapai Nation, Yavapai Prescott Indian Tribe, Gila River Indian Community, Salt River Pima-Maricopa Indian Community, Hopi Tribe, and Pueblo of Zuni. In April 2017, the Ak-Chin Indian Community provided comments and attended a meeting for the Apache Leap SMA.

The Forest Service held meetings and continues to seek tribal input via written correspondence, phone calls, and in-person meetings. Meetings to date have included the Forest Supervisor and/or line officers and representatives and leaders from the following tribes:

- November 29, 2016, with the Fort McDowell Yavapai Nation and Yavapai Prescott Indian Tribe
- December 9, 2016, with the Mescalero Apache Tribe, San Carlos Apache Tribe, and Tonto Apache Tribe
- December 13, 2016, with the Pueblo of Zuni
- December 14, 2016, with the San Carlos Apache Tribe
- December 20, 2016, with the Fort McDowell Yavapai Nation and Yavapai-Apache Nation
- December 30, 2016, with the Salt River Pima-Maricopa Indian Community and Gila River Indian Community
- January 10, 2017, with the Salt River Pima-Maricopa Indian Community and Gila River Indian Community
- February 16, 2017, with the Yavapai-Apache Nation
- March 8, 2017, with the Mescalero Apache Nation
- March 29, 2017, with the Hopi Tribe
- April 27, 2017, with the Mescalero Apache Tribe, San Carlos Apache Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, Ak-Chin Indian Community, Gila River Indian Community, and Salt River Pima-Maricopa Indian Community

- May 16, 2017, with the Mescalero Apache and Ak-Chin Indian Community
- July 5, 2017, with the Yavapai-Apache Nation

We held meetings with all the consulting tribes and the Ak-Chin Indian Community between October 2016 and July 2017 at the Forest Supervisor headquarters, at tribal headquarters, or on the project site. We organized a meeting for all 12 tribes in April 2017. Eight of the 12 tribes were represented at the meeting, which included a tour of the project area and discussion of affected resources, tribal concerns, and potential measures to avoid, minimize, or mitigate potential adverse effects.

## **Town of Superior**

The NDAA also lists the Town of Superior as a consulting party for the development of the Apache Leap SMA management plan. We held the following public engagement activities in the Town of Superior as the management plan and EA were developed:

- Public input period from October 6, 2016, through January 31, 2017;
- Public workshop held on October 20, 2016;
- Development of the Apache Leap SMA website (www.ApacheLeapSMA.us), which went live on October 7, 2016;
- A presentation to the Community Working Group on November 9, 2017;
- A presentation to the Recreation User Group, a subcommittee of the Community Working Group, on December 7, 2016;
- A presentation to the Superior Town Council on January 12, 2017;
- A meeting with the Superior Town Manager on January 25, 2017;
- A public meeting on the proposed management plan and scoping for the EA on April 4, 2017; and
- A presentation to the Community Working Group on May 10, 2017.

During the scoping period, the Town Manager provided comments reflecting the Town of Superior's concerns about current and proposed public access to the special management area for various uses. The Town of Superior favored maintaining motor vehicle access on existing routes and expanding the scope of non-motorized access to existing and future trailheads.

## **Resolution Copper Mining, LLC**

Resolution Copper is currently operating in the area east of the Apache Leap SMA, with plans to expand its operations in the Oak Flat area. As authorized in the Southeast Arizona Land Exchange and Conservation Act set forth in Section 3003 of PL 113–291, Resolution Copper, in cooperation with the Forest Service, is authorized to perform the following activities in the Apache Leap SMA: (1) install seismic monitoring equipment on the surface and subsurface to protect the resources located within the Apache Leap SMA; and (2) operate an underground tunnel and associated workings just beyond the northern boundary of the Apache Leap SMA, as described in the Resolution Copper "General Plan of Operations," subject to reasonable terms and conditions. Resolution Copper has a permit for motorized use on Forest Road (FR)2440 to access two hydrological monitoring wells within the Apache Leap SMA, as authorized under the 2010 Pre-feasibility Plan of Operations (Forest Service, 2010).

During the scoping period, Resolution Copper provided a comment letter requesting continued motorized access to the monitoring wells that are under its existing permit. Resolution Copper also commented on

the final configuration of the special management area boundary, which is pending final land survey results.

Following the release of the modified management plan, Resolution Copper submitted comments pertaining to the management plan's incorporation of NDAA Section 3003(g)(6) and various other technical edits.

## **State Agencies**

#### **Arizona State Historic Preservation Office**

The Arizona State Historic Preservation Office is a state office with a federal mandate. Under Section 106 of the National Historic Preservation Act, federal agencies are required to consult with the State Historic Preservation Office regarding the eligibility of cultural resources (known by the general term "historic properties") for nomination to the National Register of Historic Places, and on determinations of effect from federal undertakings and management decisions. We met with the State Historic Preservation Office on July 13, 2017, and additional informal consultation is ongoing.

## **Arizona Game and Fish Department**

The Arizona Game and Fish Department (AGFD) is the agency responsible for managing and protecting Arizona's fish and wildlife resources. The Apache Leap SMA lies within AGFD Game Management Unit 24A. The agency sets game animal harvest levels, hunting seasons, and similar wildlife population regulatory actions for each game management unit throughout the state.

The AGFD identifies species with population viability issues through research and surveys, including some known to occur in the Apache Leap SMA. The agency actively participates with the Forest Service in protection of these species. Surveys for sensitive wildlife species are conducted to monitor populations, such as raptor surveys.

During the scoping process, AGFD commented that wildlife-related recreational opportunities, including hunting and wildlife viewing, should be kept available and broadened relative to the proposed management plan language. In addition, AGFD requested that non-motorized public access for overnight camping be allowed. AGFD also suggested that various wildlife management policies or information on species of special concern (i.e., special status and Species of Greatest Conservation Need) be included in the management plan.

Following the release of the modified management plan, AGFD provided a second set of comments. These comments included requests for additional acknowledgement of wildlife-related recreational opportunities in the management plan and the development of additional plan components related to AGFD's wildlife management authority.

## **Arizona Department of Forestry and Fire Management**

The mission of the Department of Forestry and Fire Management is to manage and reduce fire risk to protect Arizona's people, communities, and wildland areas and to champion the health of Arizona's natural resources. The department provides fire protection to 22 million acres of state and private lands and responds to incidents on federal lands by cooperative agreement. The department supports local fire departments and helps coordinate fire response activities statewide.

## **Public Involvement**

We sought public input on the proposed management plan and EA during both the planning process in fall 2016 and the public scoping process in spring 2017. Additionally, we sought public input on the forest plan amendment and modified management plan in summer 2017. A summary of public involvement is outlined below.

## Management Plan Development

We held a public workshop on October 20, 2016, in Superior with the goal of informing the public about the Apache Leap SMA designation and to solicit input from the public about their current use of the area, issues or concerns, and ideas for the desired future management of the Apache Leap SMA. Approximately 40 people attended the public workshop, which included a formal presentation given by the Forest Service, followed by an interactive public workshop session.

Notes were taken during the workshop session to capture the essence of the public workshop discussions. In addition to the workshop session, we accepted formal written comments from October 5, 2016, through November 21, 2016. Comments could be submitted at the public workshop (comment form), by mail, or online. We received 10 mailed-in comment submittals during this planning phase. We considered the comments and concerns raised by the public during the development of the proposed management plan.

#### **Public Scoping**

We provided a 45-day public scoping period on the proposed management plan ("Apache Leap Special Management Area Management Plan – Proposed") between March 17, 2017, and May 1, 2017; the content of the proposed management plan was published on April 1, 2017. Scoping materials, including the proposed management plan, legal notice, and scoping meeting posters, newsletter, comment form, and presentation slides, were made available to the public on the project website.

We held a public meeting during the scoping period in Superior, Arizona, on April 4, 2017. Approximately 53 people attended the open house. The meeting consisted of a Forest Service presentation on the proposed management plan components, followed by a public open house. During the open house, we answered questions and provided clarifications on the proposed plan content and environmental review process.

Formal public comments were submitted as verbal comments taken by the court reporter at the public meeting or as written comments submitted via mail, email, or in-person delivery to the Forest Supervisor.

#### Consideration of Public Comments

We received a total of 72 submittals during the scoping period. Submittals were received from 61 individuals, five non-governmental organizations, two government entities, one tribe, and one business.

We reviewed all public comment submittals using a process called content analysis, which has several discrete steps. First, we read each letter, email, or website submission.

We identified approximately 237 individual comments and concerns from all submittals. We assigned each individual comment/concern a classification code based on resource area to assist with identifying potential revisions to the management plan and/or issues and possible alternatives to the proposed action for further analysis in this document, the EA. Members of the interdisciplinary team reviewed the comments.

It is important to note that all comments were treated evenly and were not weighted by number, organizational affiliation, "status" of the commenter, or other factors. Emphasis was on the content of a comment, rather than on the author or tally of similar comments. We appreciate the time and perspectives shared by each commenter and the willingness of all to engage in the environmental review process.

After completing the content analysis process, we revised the proposed management plan based on scoping comments. We then wrote responses to all comments on the proposed management plan explaining how we considered each comment. These comments can be found in Appendix C, "Public Scoping Comment Response."

#### **Forest Plan Amendment Notice**

Approval of the Apache Leap SMA management plan requires a concurrent forest plan amendment to add or modify one or more plan components or to change where one or more plan components apply (36 CFR 219.13(a)). The Tonto National Forest provided an opportunity for public comment on the proposed amendment to the forest plan to include a new management area and add new plan components for the Apache Leap SMA. A revised management plan ("Apache Leap Special Management Area Management Plan – Modified") was released to the public for comment during this same time period. The legal notice was published in the paper of record, the *Arizona Capitol Times* (as well as other newspapers), on June 30, 2017. The 30-day comment period ran from July 1, 2017, to July 31, 2017.

We received a total of 23 submittals during the comment period. Submittals were obtained from 18 individuals, two non-governmental organizations, one government entity, one tribe, and one business. We reviewed all public comment submittals using the content analysis process described above. We identified approximately 89 individual comments and concerns from all submittals. After completing the content analysis process, we revised the modified management plan to create the management plan carried forward as the proposed action described in the "Proposed Action" section below. We then wrote responses to all comments explaining how we considered each comment. These comments can be found in Appendix D, "Forest Plan Amendment Notice Public Comment Response."

## **Relevant Issues**

Using the input from the consulting parties and the public scoping comments described above, we identified four thematic issues relevant to the environmental review of the Apache Leap SMA management plan.

## Cultural Resources and Tribal Interests

- 1. How will the Forest Service ensure that Native American peoples can continue their use of traditional and ceremonial sites in the Apache Leap SMA?
- 2. How will the Forest Service treat historic mine sites in the Apache Leap SMA? Will historic mine sites be managed as important wildlife (e.g., bat) habitat?
- 3. How will the Forest Service inventory and protect resources in the Apache Leap SMA that are eligible for listing in the National Register of Historic Places?
- 4. How will the Forest Service consider impacts to and protection of the *Chi'chil Bildagoteel* Historic District (listed as a Traditional Cultural Property in the National Register of Historic Places)?
- 5. How will the Forest Service manage the Apache Leap SMA to prioritize the area's importance to Indian tribes above other resources and uses?

## **Preserving Natural Character**

- 1. How will the Forest Service preserve the natural character of the Apache Leap SMA and account for the area's unique ecological characteristics and habitats?
- 2. Considering the proposed Resolution Copper Project on lands adjacent to the Apache Leap SMA, how will the Forest Service preserve the natural character and scenery from mining impacts, including subsidence, light pollution, noise, and dust?
- 3. How will the Forest Service preserve the natural character and scenery while allowing for wildland fire management, invasive species control, and livestock grazing?

#### **Public Access and Recreation**

- 1. How will the Forest Service ensure that the public is able to access the Apache Leap SMA for recreation and traditional uses in the future? With the anticipated future closure of FR315 on the east side of the special management area and the pending administrative use designation of FR2440 on the west side, how will the Forest Service provide opportunities for future access to the Apache Leap SMA?
- 2. What future recreation uses and activities will be authorized in the special management area? For example, how will the Forest Service manage future rock climbing activity in the Apache Leap SMA?
- 3. Will the Forest Service authorize dispersed overnight camping in the Apache Leap SMA that is accessed by non-motorized travel?
- 4. How will the Forest Service address future trail planning and trail construction in the Apache Leap SMA?

## Proposed Resolution Copper Project and Land Exchange

- 1. How will the Forest Service consider future impacts from the proposed Resolution Copper Project and Land Exchange on the Apache Leap SMA?
- 2. What resource monitoring activities (including seismic monitoring of subsidence) will ensure protection of the Apache Leap SMA from future adverse impacts from the Resolution Copper Project and Land Exchange?
- 3. How will the Forest Service manage existing mining-related permits and the NDAA-authorized activities to be consistent with the primary purpose of the Apache Leap SMA?

## **Proposed Action and Alternatives**

The no action and proposed action were considered in this EA. This represents a reasonable range for addressing all of the expressed concerns about uses of available resources that arose during the two public comment periods.

The Apache Leap Special Management Area Management Plan – Proposed was first presented for public review from March 30, 2017, through April 30, 2017. Following this public review period, the management plan was revised based on public and consulting party comments (titled "Apache Leap Special Management Area Management Plan – Modified"). Several management plan components (desired conditions, standards, guidelines, and management approaches) for resources such as natural character and scenery, cultural and historic resources, access, recreation, livestock grazing, and wildland

fire were revised to provide more clarity and consistency. Clarification regarding how the Tonto National Forest intends to monitor and mitigate potential resource impacts, coordinate with stakeholders, work with permittees, and respond to wildland fire was added to the proposed action. A new tribal section was also added, with new management plan components related to tribal resources and interests.

During the forest plan amendment public notice, between July 1, 2017, and July 31, 2017, the revised management plan, titled "Apache Leap Special Management Area Management Plan – Modified," was released to the public for a second comment period. The management plan was again revised in August 2017 based on public and consulting party comments. The proposed action described in this EA is the August 2017 version and incorporates revisions based on comments from both public comment periods.

#### No Action Alternative

The no action alternative serves as a baseline against which to compare the effects of the proposed action with the current and expected future conditions if the proposed action were not implemented (36 CFR 220.7 (b)(ii); Forest Service Handbook 1909.15, Chapter 10 [Forest Service, 2016a]).

Under the no action alternative, management of the Apache Leap SMA would continue in accordance with the existing forest plan, as amended. All project-level decisions would continue to be guided by the existing Globe Ranger District – General Management Area (Management Area [MA] 2F) plan components and any relevant forest-wide plan direction.

Because the no action alternative is a continuation of current management and prescriptions and would not change the existing forest plan, there would be no amendment to the forest plan to identify the Apache Leap SMA as a unique management area or to adopt the Apache Leap SMA management plan components. Continuing current management under the no action alternative would include the use of desired conditions, objectives, standards, guidelines, and suitability of lands, as defined in the 1985 forest plan.

The no action alternative does not meet the purpose of and need for complying with the NDAA, which requires the Secretary of Agriculture to prepare a management plan no later than 3 years after the enactment of the NDAA.

## **Proposed Action**

The proposed action has two parts: (1) amending the existing forest plan, and (2) adopting a management plan for the Apache Leap SMA.<sup>3</sup> Each part of the proposed action is described below.

#### **Forest Plan Amendment**

The proposed forest plan amendment includes changes to the existing management area descriptions and maps, as well as new plan components that would be added in accordance with 36 CFR 219. All other relevant direction from the forest plan would still apply within the Apache Leap SMA.

Implementation of the proposed forest plan amendment would not significantly alter the multiple-use goals and objectives of the current forest plan. The amendment proposes changes in management direction for the Apache Leap SMA only. The Apache Leap SMA management direction is restricted in geographic extent and would not have wide-ranging effects across the Tonto National Forest.

<sup>&</sup>lt;sup>3</sup> In this EA, excerpts from the Apache Leap SMA management plan will be included and will be noted as such without being formally cited.

Significant changes in the multiple-use goals and objectives for long-term land and resource management are not expected.

## Management Area 2G (Globe Ranger District – Apache Leap SMA)

A new management area would be added with the title "MA 2G Globe Ranger District – Apache Leap SMA." The new management area would include the following:

- 1. The new MA 2G would be carved out from the existing management area, MA 2F, consistent with the map described in NDAA Section 3003(b)(1). The new management area includes 697 acres of National Forest System lands.
- 2. The management emphasis for the Apache Leap SMA would include the primary purposes stated in the NDAA Section 3003(g)(3): to preserve the natural character of Apache Leap; to allow for traditional uses of the area by Native American people; and to protect and conserve the cultural and archaeological resources of the area.
- 3. The plan components found in Chapter 3 of the Apache Leap SMA management plan would be added.

Note: Upon completion of the Southeast Arizona Land Exchange, an additional 142 acres of privately owned land within the Apache Leap SMA would be conveyed to the Tonto National Forest and included as part of MA 2G. Thus, the final acreage for MA 2G would eventually be 839 acres.

#### Management Area 2F (Globe Ranger District – General Management Area)

The existing MA 2F comprises approximately 385,848 acres. Within the boundaries of MA 2F, the forest plan would be amended in the following ways to ensure appropriate management of the Apache Leap SMA:

- 1. The visual quality objectives (VQOs) of the existing MA 2F would be amended to exclude approximately 697 acres of Tonto National Forest land.
- 2. The Recreation Opportunity Spectrum (ROS) classifications of the existing MA 2F would be amended to exclude approximately 697 acres of Tonto National Forest land.
- 3. Projected changes in range condition acreages of the existing MA 2F would be amended to exclude approximately 697 acres of Tonto National Forest land.<sup>4</sup>

The final acreage for management area MA 2F would be 385,151. No other applicable aspects of the forest plan would change as part of this proposed action.

## **New Plan Components**

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Plan components are intended to provide for social, economic, and ecological sustainability and multiple uses in an integrated manner. We developed plan components to meet the three stated purposes of the Apache Leap SMA: (1) to preserve the natural character of Apache Leap, (2) to allow for traditional uses of the area by Native American people, and (3) to protect and conserve the cultural and archaeological resources of the area (NDAA Section 3003(g)(3)).

We developed plan components to address various substantive requirements found at 36 CFR 219.8–219.11 for managing the multiple uses and resources of a designated area in an integrated manner.

<sup>&</sup>lt;sup>4</sup> For the purposes of the effects analysis and depicting VQOs, ROS, and range condition on the figures contained in this EA, acreages were approximated using the best available geographic information system data. As a result, there are slight discrepancies in the total project area acreages across data sources.

These plan components were designed to reduce or eliminate adverse impacts as well as promote beneficial impacts from management plan implementation.

Consistent with direction found at 36 CFR 219.3, a review of relevant and available scientific information was used to inform the development of plan components and other plan content. Information considered during the planning and environmental review processes was determined to be accurate, reliable, and relevant by members of the interdisciplinary team before it was included as part of the project record. The best available scientific information for the Apache Leap SMA was applied to the issues considered in this EA through archaeological records reviews performed by qualified archaeologists, planning considerations put forth by qualified National Environmental Policy Act practitioners, biological surveys and inventories conducted by qualified biologists, and spatial analyses conducted by qualified geographic information system specialists. A rigorous search for reasonably foreseeable actions was completed for the cumulative effects analysis. Incomplete or unavailable scientific information, scientific uncertainty, and risks are noted in the project record.

The plan components for the Apache Leap SMA form a strategic management plan that is programmatic in nature and does not authorize specific projects or activities. The management plan identifies the "suitability of lands" for certain multiple uses that would be directly implemented through the adoption of the management plan. The plan may constrain the agency from authorizing or carrying out certain projects and activities within the special management area or dictate the manner in which they may occur. The Apache Leap SMA management plan would not regulate use by the public but may guide future project or activity decisions that regulate use by the public under 36 CFR Part 261 Subpart B. All future proposed actions within the Apache Leap SMA would be subject to the appropriate level of environmental review and analysis, public involvement, and pre-decisional administrative review procedures.

The proposed action includes the following new plan components developed in response to the identified purpose and need to prepare a management plan for the Apache Leap SMA.

#### Natural Character and Scenery

#### **Desired Conditions**

- The landscape appears natural within the context of native vegetation and landforms and remains
  generally unaltered by human activity. Deviations from the natural landscape are limited and may
  include valued cultural landscape features and essential management elements that blend with the
  natural landscape.
- 2. Natural character and scenery is consistent with "High" scenic integrity according to the Scenery Management System, or the "Retention" visual quality objective according to the Visual Management System (Forest Service, 1995), throughout the Apache Leap SMA. The landscape character "appears" intact, and any deviations repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.
- 3. The Apache Leap SMA persists in a substantially natural condition to be used and enjoyed by the public, and the special characteristics for which it was designated are protected. Subsidence associated with any future mining adjacent to the area does not impair the special characteristics for which it was designated.

#### Standards

1. Natural character and associated values, including natural quiet, dark skies, and limited encounters with other visitors, shall take precedence over recreation uses where conflicts occur.

#### Guidelines

- 1. All proposed developments (including vegetation manipulation and ground-disturbing activities/construction) should be designed to blend with the natural setting by remaining consistent with the form, line, color, texture, and pattern common to the landscape character.
- 2. Construction of new communications sites, utility lines, or transmission lines should not occur within the Apache Leap SMA.
- 3. Regular maintenance activities, such as utility line clearing, should be performed in a manner consistent with protection of the natural character and values of the Apache Leap SMA.
- 4. If seismic monitoring indicates that the natural character or values of the Apache Leap SMA are being negatively impacted, rehabilitation and closures may be used to mitigate impacts.
- 5. The Apache Leap SMA should be managed for the visual quality objective of "Retention" under the Visual Management System and a scenic integrity objective of "High" under the Scenery Management System.

#### Management Approaches

If Resolution Copper's proposed "General Plan of Operations" is approved, develop a seismic monitoring strategy in consultation with Resolution Copper mining engineers and geologists to provide a means to monitor, estimate, and anticipate the effects of future proposed mining adjacent to the special management area in order to preserve the natural character, cultural, and historic resources of the Apache Leap SMA as much as practicable. The monitoring strategy should include seismic monitoring equipment on the surface and subsurface, surface monuments (e.g., wooden or concrete post) that would be surveyed for movement, monitoring locations for collecting rock mechanics data, and a baseline survey using state-of-the-art methods, such as LiDAR, to establish pre-mine conditions against which future surveys could be compared. The strategy should identify and explore solutions to remediate and mitigate surface conditions that could threaten the integrity of the Apache Leap SMA as allowed by pertinent laws and regulations.

Implementation of the seismic monitoring strategy should occur as soon as practicable, and before the commencement of any mine-related activities that may be authorized under the proposed "General Plan of Operations" and related documents. The intent of the monitoring strategy is to:

- 1. Provide an adequate period before mine construction and development in which to collect baseline seismic and other monitoring information,
- 2. Ensure that the Forest Service is integrally involved in the design of the monitoring plan, and
- 3. Ensure that monitoring information is adequately reported and independently assessed by the Forest Service, including any monitoring information collected and made available to the Forest Service from areas outside the Apache Leap SMA. Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement.

#### Tribal

#### **Desired Conditions**

1. The landscape appears natural within the context of native vegetation and landforms and remains unaltered by human activity. Deviations from the natural landscape are limited. Natural character, scenery, and integrity are priorities.

- 2. Traditional resources are preserved in place wherever feasible.
- Tribal members have access to the Apache Leap SMA for individual and group prayer and traditional ceremonies and rituals. There are opportunities for solitude and privacy for ceremonial activities.
- 4. Traditional uses such as the collection of medicinal plants and wild plant foods are valued as important uses. Traditionally important plant species are available for traditional uses. Healthy populations are sustained or expanded within the Apache Leap SMA.

#### Standards

- 1. The Forest Service shall, to the full extent allowed under the law, maintain the confidentiality of culturally sensitive information provided by tribes with the express expectation of confidentiality.
- 2. Consideration in planning for federal, federally licensed, and federally assisted projects shall include tribal input on standards for maintaining archaeological sites, traditional use areas, and natural resources (e.g., monitoring strategies). When there is a "substantial direct effect" to the land on one or more of the tribes from the proposed decision or action, consultation must be initiated.
- 3. Consultation with tribes shall occur at the early stages of planning and project design, and tribal perspectives, needs, and concerns, as well as traditional knowledge, should be incorporated into project design and decisions, as appropriate.

#### Guidelines

- 1. Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations.
- 2. The responsible line officer should work with Indian tribes to comply with the Cultural and Heritage Cooperation Authority (25 United States Code [U.S.C.] 3054) under which the tribes may request temporary closures of specific areas for traditional cultural purposes.
- 3. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.
- 4. When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and cultural values of the Apache Leap SMA.
- 5. If additional cultural resources within the Apache Leap SMA that are not currently included in the existing Historic District, are determined eligible for listing in the National Register of Historic Places, and Forest Service guidelines for National Register nominations are met, nomination(s) should be prepared and submitted to the Keeper of the National Register for consideration in the National Register of Historic Places within 5 years of initial determination of eligibility.

#### Management Approaches

Consider working with tribes to develop a monitoring strategy and timeline to ensure that Traditional Cultural Property values are protected from vandalism, looting, and other forms of human disturbance.

Consider implementing actions to secure and stabilize sites, including permanent or seasonal closures pending assessment and determination of appropriate actions to protect the sites or traditional use areas.

Consider developing a strategy to incorporate the private land in the Apache Leap SMA into the *Chi'chil Bildagoteel* Historic District to be included on the formal National Register listing.

Consider working with tribes to ensure that healthy sustainable plant populations are available for traditional uses.

#### Cultural/Historic

#### **Desired Conditions**

- 1. Visitors to the Apache Leap SMA have access to information for a general understanding of the cultural and historic values present, the role of human activity in shaping the landscape of the area, and the importance of protecting these resources.
- 2. Heritage resources are preserved in place wherever feasible. Archaeological sites are protected from vandalism, looting, and other forms of human-caused deterioration. Excessive forms of natural deterioration such as gully erosion and animal trampling/burrowing that threaten the integrity of features or cultural deposits are rare or not evident on the landscape. Adverse effects from management activities, visitor impacts, and damaging levels of natural deterioration are rare, and known occurrences are mitigated.
- 3. The significance of the historic and cultural resources of the Apache Leap SMA is recognized in nomination(s) for the National Register of Historic Places.

#### Standards

1. Include tribal input on the criteria for monitoring and maintaining archaeological sites, traditional use areas, and natural resources.

#### Guidelines

1. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, temporary closures to protect the affected sites or use areas should be employed until restorative measures can be identified and implemented.

#### Management Approaches

Develop a framework to inventory archaeological and cultural sites in the Apache Leap SMA (94% of which has been previously surveyed), traditional tribal use areas, and places of traditional or religious significance as opportunities arise.

Develop a monitoring strategy and timeline to ensure that historic properties and traditional resources are protected from vandalism, looting, and other forms of unnatural deterioration. Consider implementing actions to secure and stabilize sites, including temporary closures pending assessment and determination of appropriate actions to protect the sites or traditional use areas.

Although it is not anticipated that additional mitigation measures will be needed, if necessary, develop mitigation strategies specific to the resources within the Apache Leap SMA to limit significant effects on heritage resources.

#### Access

#### **Desired Conditions**

- 1. Public access within the Apache Leap SMA is consistent with the protection of scenic and cultural/historic values.
- 2. The transportation system supports access for dispersed recreation opportunities, resource management activities, and authorized uses. Roads and motorized trails are only evident within the Apache Leap SMA on the west side of the escarpment, where FR2440 is located, if approved as part of the travel management decision. Non-motorized trails are the primary source of public access for most of the area's rugged, remote landscapes. Road access for seismic and hydrological monitoring is maintained.

#### Standards

1. Only designated roads, motorized trails, and motorized use areas as depicted and described on the motor vehicle use map<sup>5</sup> are open to public motorized vehicle use.

#### Guidelines

- 1. Road and trail signs and barriers should be installed where needed to inform the public about travel management regulations and to prevent unauthorized motorized use. These improvements should be consistent with the Recreation Opportunity Spectrum and Scenery Management System guidelines.
- Roads on private lands within the Apache Leap SMA acquired by the Tonto National Forest should be evaluated to determine whether to decommission the road and convert them to nonmotorized trails.
- 3. Roads that are decommissioned and converted to trails should be narrowed and restored to meet a semi-primitive non-motorized character, consistent with soil and watershed protection.

#### Management Approaches

Develop a management approach with the goal of collaborating with consulting parties, stakeholders, and the public to ensure availability of future opportunities to access the Apache Leap SMA for dispersed recreation and traditional uses.

Review travel management road designations to allow for motorized access to the Apache Leap SMA. Consider developing access "nodes" on the west and south sides of Apache Leap for future public access. These nodes would provide locations for non-motorized trail junctions and trailheads and could also be considered for parking areas if at a road terminus.

#### Recreation

#### **Desired Conditions**

1. The Apache Leap SMA offers dispersed recreation opportunities that emphasize non-motorized recreation. Recreation activities occur at appropriate locations and intensities such that cultural and natural values are protected. Recreation opportunities and activities are primarily nature

<sup>&</sup>lt;sup>5</sup> At the time of publication of this management plan in August 2017, the motor vehicle use map that designates motorized vehicle access on the Tonto National Forest is under development and will be available when the travel management process is completed.

- based and offer opportunities for experiencing scenic beauty and the intrinsic cultural and natural resources associated with the Apache Leap SMA.
- Recreation-related project-level decisions and implementation activities are consistent with
  mapped classes and setting descriptions. Recreation opportunities associated with the Apache
  Leap SMA enhance the quality of life for local residents (e.g., social interaction, physical activity,
  connection with nature), provide tourist destinations, and contribute monetarily to local
  economies.
- 3. Facilities for dispersed recreation activities are appropriate for the Recreation Opportunity Spectrum class and scenic integrity objective of the location and are designed to the minimum necessary to protect natural and cultural resources. Day-use recreation opportunities are offered within a predominantly undeveloped setting. Overnight camping does not occur. Recreation user conflicts are minimal.

#### **Objectives**

1. Within 3 years of plan approval, establish a closure order and complete associated National Environmental Policy Act documentation to exclude overnight camping under 36 CFR 261, "Prohibitions."

#### Guidelines

- 1. Where agency or applicant objectives can be met outside of the designated area, special use permits should not be issued for the Apache Leap SMA.
- 2. New trail and associated structures should be designed and constructed to blend with the natural setting to the greatest extent possible without compromising their function or resource benefit.
- 3. The Apache Leap SMA should be managed for recreational settings consistent with the Recreation Opportunity Spectrum classification of semi-primitive motorized and semi-primitive non-motorized as mapped (see Figure 7 in the "Recreation" section).

#### Management Approaches

As opportunities arise, consider ways to integrate and develop non-motorized trails within the Apache Leap SMA.

Review trail proposals as they are received from non-governmental organizations, local governments, and citizen initiatives and work with all consulting parties, stakeholders, and the public to ensure that any future trail development is consistent with the purposes for which the Apache Leap SMA was designated. Consider existing and proposed non-motorized trails that are adjacent (e.g., the LOST [Legends of Superior Trails]) for connectivity to future proposed trails within the Apache Leap SMA.

Work with local non-governmental organizations, local governments, tribes, and recreation groups to establish sustainable rock climbing and bouldering expectations in the Apache Leap SMA. Develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA. Within the Climbing Management Plan, consider designating approaches to the escarpment from the west side, designating climbing routes, and prohibiting new bolting on select climbing routes to minimize environmental impacts.

#### Mineral Resources

#### **Desired Conditions**

- 1. Exploration and development of mineral resources does not occur within the Apache Leap SMA. Evidence of historic mining exists, but it does not dominate the landscape. Lands where past mineral development or exploration has occurred recover to more stable natural conditions over time. Areas requiring site-specific reclamation measures are rare or non-existent.
- 2. Abandoned mine lands do not endanger people or the environment.
- 3. Archaeological, geological, and biological features of caves and abandoned mines are not adversely affected by visitors.

#### Standards

- 1. The Apache Leap SMA is withdrawn from all forms of location, entry, and patent under the mining laws; and disposition under the mineral leasing, mineral materials, and geothermal leasing laws pursuant to Section 3003 of the NDAA.
- 2. Filing of mineral claims, mineral exploration, mineral development, and removal of mineral material is not authorized within the Apache Leap SMA.

#### Guidelines

- 1. Adits and other remnants of historic mining should be evaluated for public safety hazards.
- 2. Public safety hazards associated with adits and other remnants of historic mining operations should be mitigated within 5 years of detection.

#### Management Approaches

Consider conducting a site-wide inventory of mining-related safety hazards within 3 years of adopting the Apache Leap SMA management plan. Mitigate known hazards within 5 years and any subsequent discovered hazards within 5 years of detection.

#### Wildlife

#### **Desired Conditions**

- 1. The Apache Leap SMA provides wildlife habitat (food, water, and shelter) over a relatively undisturbed landscape.
- 2. Current habitat characteristics enable continued use by wildlife for movement, cover (protective/breeding), and forage across the landscape. Diverse vegetation and functioning ecosystem processes ensure ongoing sustainability for a variety of wildlife species.

#### Guidelines

1. Adits and other remnants of historic mining that do not pose a public safety hazard should be evaluated for continued wildlife use (bats, owls, javelina, etc.).

#### Management Approaches

Manage to provide diverse habitats with ecological conditions that enable native species to persist long term. In conjunction with Resolution Copper, develop and implement a monitoring plan to assess impacts

to wildlife from mining activities, including low-frequency effects from blasting, conveyor and machinery operation, and mining-induced micro-seismic responses.

Support wildlife by implementing management practices that reduce or eliminate negative impacts and take into special consideration species that may be imperiled. Work with the Arizona Game and Fish Department to minimize or avoid impacts to seasonally permitted hunting opportunities within the Apache Leap SMA.

#### Vegetation

#### **Desired Conditions**

- 1. Natural ecological processes (e.g., plant growth and die-off, nutrient cycling, soil formation) and disturbances (e.g., fire, insects, drought, and disease) are the primary forces affecting the composition, structure, and growth of vegetation.
- 2. Plant communities within the Apache Leap SMA are dominated by native species. Woody and herbaceous native vegetation is present and consistent with potential composition, density, and structural diversity.
- 3. Undesirable non-native species do not adversely affect ecosystem composition, structure, or function, including native species populations or the natural fire regime. Introduction of additional invasive species rarely occurs and is detected at an early stage.

#### Management Approaches

Develop an integrated management approach with the goal of preventing, controlling, or eradicating invasive species. This should involve prioritizing species and areas for treatment and identifying the most appropriate method(s) for control and eradication. Treatment efforts should focus on areas of high use (roads/trails) and on drainages, washes, and low-lying areas subject to flowing or standing water, due to increased dispersal means in these habitats.

Inventory areas of invasive species' occurrence. Because of the often aggressive and tenacious nature of invasive species, apply timely initial treatments with follow-up for appropriate intervals to meet objectives.

Consider management tools that include, but are not limited to, timing restrictions, signage, visitor outreach, or physical barriers as a means to reduce impacts on the vegetative community.

#### Livestock Grazing

#### **Desired Conditions**

1. Evidence of current livestock grazing is not found within the Apache Leap SMA. Impacts to vegetation and soils associated with historic use recover over time, sustaining the natural character of the landscape.

#### **Objectives**

1. Efforts to exclude livestock from the Apache Leap SMA are completed within 2 years following approval of the management plan, in collaboration with grazing allotment permittees.

#### Standards

- 1. Livestock grazing shall be excluded from the portions of the Superior and Devil's Canyon Allotments located within the Apache Leap SMA boundary. New livestock grazing permits are not authorized within the Apache Leap SMA.
- 2. When necessary, fences to exclude livestock shall be located and constructed with materials that minimize their visibility to the extent practicable and avoid any significant cultural or natural resources.

#### Guidelines

1. As opportunities arise, existing fencing and other grazing-related improvements within the Apache Leap SMA should be decommissioned.

#### Management Approaches

Work with permittees to identify any livestock issues within the Apache Leap SMA, including adjustments to existing grazing allotment plans.

#### Wildland Fire

#### **Desired Conditions**

1. Human life, property, and natural and cultural resources are protected from damaging wildfires within and adjacent to the Apache Leap SMA.

#### Guidelines

- 1. Determinations of responses to wildfire should be based on risk assessments that include preseason analysis and review as well as on-scene and immediate risk assessments by those initially responding to the wildfire incident. Such assessments should be on an appropriate scale and timeline relative to the time of the assessment and the time available during the incident. Such risk assessments should include, but not be limited to, the following:
  - Evaluation of the threats to firefighter and public safety.
  - Evaluation of the threats to both natural and human-made resource values.
  - Evaluation of seasonal and/or climatic conditions.
  - Evaluations of cost-effective strategies that contribute to the success of the appropriate wildfire objective(s).
- 2. Firelines, helispots, and fire camps should be located outside of the Apache Leap SMA when feasible to avoid disturbance to critical species and impacts to cultural resources.
- 3. Within the Sonoran Desertscrub vegetation type, fire should not be used as a tool for management, and all fires should be suppressed.
- 4. Within the Interior Chaparral vegetation type, strategies to manage wildland fire (wildfire and prescribed fire) that restore and maintain the natural fire regime should be encouraged.

#### Management Approaches

Wildfires may be concurrently managed for one or more objectives (e.g., protection, resource enhancement) that can change as the fire spreads across the landscape. Strategies chosen for wildfires include interdisciplinary input to assess site-specific values to be protected. These strategies are used

to develop incident objectives and courses of action to enhance or protect those values. Managers use a decision support process to guide and document wildfire management decisions that provide for firefighter and public safety, minimize costs and resource damage, and are consistent with the values to be protected.

#### Suitability of Lands

In the context of managing National Forest System lands, suitability of lands refers to the appropriateness of applying certain resource management practices to a particular area of land, in consideration of the relevant social, economic, and ecological factors. Suitability determinations are one of the decisions made as part of creating a management plan.

Suitability is determined based on compatibility of a given use with the desired conditions applicable to those lands. Lands within the plan area are not identified as suitable for a certain use if the use is prohibited by law, regulation, or policy; if the use would result in substantial and permanent impairment of the productivity of the land or resources; or if the use is incompatible with the desired conditions for the relevant portion of the area. The identification of an area as suitable for a particular use does not mean that the use will occur over the entire area.

The suitability of lands for the Apache Leap SMA management plan is summarized in Table 1 below. The Apache Leap SMA management plan determined that the lands within the special management area are not suitable for livestock grazing (see Table 1). See the "Livestock Grazing" plan component section above for more information on planning for livestock grazing removal in the special management area.

**Table 1. Land Suitability Determinations** 

Land Use Categories		
Livestock Grazing	Timber Production	Mining
Livestock grazing is not a suitable use of the Apache Leap SMA because it is not compatible with many desired conditions put forth in the management plan. These desired conditions direct managing the special management area to enhance natural ecological processes on an undisturbed landscape where disturbance by human activity to the natural landscape is limited. See the "Desired Conditions" sections for the following resources in the management plan components above: "Natural Character and Scenery," "Tribal," "Cultural/Historic," "Wildlife," and "Vegetation."	because the following factor from 36 CFR 219.11a applies: the land is not forest land. The vegetation composition is a mix of the Sonoran Desertscrub and Interior Chaparral communities, which do not support commercial tree species.	withdrawn from future mining activity, pursuant to PL 113–291, NDAA Section 3003, subsection (f);
Not Suitable*	Not Suitable*	Not Suitable*

Notes:

Suitable - The area or site is appropriate for the activity, whether the opportunity is available or not.

\* Not Suitable - The area or site is not appropriate for the activity or the activity is not allowed by law or regulation within the area.

## Alternatives Considered but Eliminated from Detailed Analysis

During public involvement and consultation activities, we received many suggestions for alternative actions to address specific concerns or relevant issues surrounding the proposed action. We carefully considered these suggestions and determined whether they would be carried forward as alternatives for detailed analysis in the EA. To be analyzed in detail in the EA, a suggestion must meet the purpose of and need for action and address one or more relevant issues.

Alternatives not considered in detailed analysis in the EA may include, but are not limited to, those that do not meet the purpose and need, are technologically or economically infeasible or illegal, or would result in unreasonable environmental harm. The suggestions dismissed from detailed analysis are summarized in the following paragraphs.

One suggestion for the Apache Leap SMA was to prohibit any future development within the Apache Leap SMA for the protection of Native American traditional uses and cultural and archaeological resources. This suggestion would not meet the stated purpose of developing a management plan for Apache Leap SMA consistent with Section 3003(g)(4)(b) of the NDAA, which specifically authorizes activities (e.g., seismic monitoring, fences, signs, underground tunnel and associated workings) in the Apache Leap SMA.

Commenters expressed an interest in closing certain areas of the Apache Leap escarpment to all public use to decrease impacts to cultural and historic resources. Area closures would require a site-specific National Environmental Policy Act analysis and would be subject to a separate future decision.

Therefore, consideration of any area closure at this time is outside the scope of the Apache Leap SMA management plan decision.

Some comments suggested that improvements be made to existing Forest Service routes (namely FR2440) so that motorized use can continue. Other comments suggested eliminating roads in the Apache Leap SMA and authorizing only non-motorized trails. Proposed changes to the designation of any travel route on the Tonto National Forest are outside the scope of the Apache Leap SMA management plan decision.

Several comments suggested site-specific actions, including to create parking areas and/or trailheads and construct trails. These suggestions were not carried forward for consideration as alternatives because authorizing site-specific actions is not within the scope of the programmatic Apache Leap SMA management plan decision.

Several commenters asked that overnight camping be prohibited within the Apache Leap SMA, whereas others asked that overnight camping be allowed to continue. Overnight camping is an allowed activity included under the no action alternative. The proposed action includes a recreation desired condition and related objective to establish a closure order and complete the associated National Environmental Policy Act documentation to exclude overnight camping within 3 years of plan approval.

Commenters also requested that the management plan prohibit all future trail development in the Apache Leap SMA. Establishing management direction that would prohibit future trails in the Apache Leap SMA would be inconsistent with the NDAA direction in Section 3003(g)(5)(b)(ii) to consider additional measures as necessary to provide access for recreation.

## Decision to be Made

The Forest Supervisor will decide whether to amend the forest plan as proposed in this document or make adjustments based on objections received during the pre-decisional administrative review period (objection period).

The forest plan amendment includes a new management area designation, desired conditions, objectives, standards, guidelines, and suitability of lands, as well as management approaches for the area designated as the Apache Leap SMA.

# Affected Environment and Environmental Consequences

## Introduction

Management plans provide a programmatic framework to guide future site-specific actions but do not authorize, fund, or carry out any projects or ground-disturbing activities. Because the Apache Leap SMA management plan does not mandate any site-specific projects or activities, the proposed action does not generally have direct effects on resources. However, the management plan does identify the "suitability of lands" for certain multiple uses that would be directly implemented through the adoption of the management plan. Direct effects of the proposed action are limited to these suitability determinations. There may be indirect implications or long-term effects of managing the Apache Leap SMA under this programmatic framework. Several assumptions were made in assessing the environmental impacts of the proposed action and no action alternative:

- Plan components (i.e., desired conditions, objectives, standards, guidelines, suitability) would be followed when planning or implementing future site-specific projects and activities.
- Implementation of the management plan would facilitate progress toward the attainment of desired conditions for those resources within the Apache Leap SMA.
- Law, policy, regulations, and applicable best management practices would be followed when planning or implementing site-specific projects and activities.

This section summarizes the scientific and analytic information used to compare the environmental effects of the proposed action with the no action alternative. The project record contains complete documentation of analyses undertaken throughout this planning process. Short-term, long-term, direct, indirect, and cumulative effects of both the forest plan amendment and management plan implementation are considered and described below. A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

## Natural Character and Scenery

#### **Affected Environment**

Apache Leap is a high, square peak broken by jagged cliffs. It dominates the eastern skyline from the area below as it rises approximately 2,000 feet from the base, creating a dramatic scenic backdrop for the town of Superior, Arizona. It is a prominent feature of the Arizona State-designated Gila-Pinal Scenic Road (U.S. Route [U.S.] 60) as it approaches the Town of Superior from the west.

The western portion of the Apache Leap SMA includes the west-facing Apache Leap escarpment, which is composed of sheer cliff faces, hoodoos, and buttresses. Apache Leap itself is formed from horizontal, stratified volcanic rocks (tuff) and overlies sedimentary rocks that have similarly eroded into ridges and canyons to form the foothills below (to the west of) the Apache Leap escarpment. The geological features and erosion have created an extremely rugged landscape beneath the escarpment.

Within the Apache Leap SMA, these foothills include ephemeral drainages that primarily flow westward to Queen Creek. Surface water features are absent within the Apache Leap SMA, and soils are shallow and not well developed. Exposed bedrock consists of Apache Leap Tuff and Precambrian sedimentary rocks. The eastern portion of the Apache Leap SMA gradually slopes from the top of Apache Leap down to the Oak Flat area and primarily consists of exposed Apache Leap Tuff eroded into numerous canyons, plateaus, and scarps.

Vegetation communities within the Apache Leap SMA consist of the Arizona Upland subdivision of the Sonoran Desertscrub biotic community in lower elevations, with the Interior Chaparral community along the top of the Apache Leap escarpment (Brown, 1994). Interior Chaparral species also occur on north-facing slopes in lower elevations west of the Apache Leap escarpment.

The very nature of the topography of the Apache Leap SMA, extremely rugged and largely impassible by most humans, has preserved the area as mostly undisturbed. As the Apache Leap SMA and surrounding area is managed for rangeland resources, there are existing pasture fences (e.g., four-string barbed wire) and gates. An existing utility line crosses the northern portion of the Apache Leap SMA and there are some existing roads that provide motorized access to hydrological monitoring wells owned and managed by Resolution Copper.

Development at each of the hydrological monitoring wells consist of small, approximately  $10 \times 10$ —foot concrete pads with well head casings rising 5 feet above the ground; the disturbance area associated with these wells is approximately  $100 \times 100$  feet, or approximately 0.25 acre each. Several old, small-scale mining/prospecting remnants persist (e.g., adits, roads, frames and other workings), but the landscape within the Apache Leap SMA boundary is otherwise largely undeveloped.

#### Scenery Management

#### Visual Management System

Scenery management on the Tonto National Forest, as detailed in the forest plan, is guided by the Forest Service Visual Management System (Forest Service, 1995). The Visual Management System is a methodology for inventorying visual resources and establishing management objectives. Based on Visual Management System inventories, all Tonto National Forest lands were assigned a visual quality objective (VQO) that establishes the acceptable degree of alteration of the characteristic landscape. Table 2 presents the VQOs contained in the forest plan (Forest Service, 1985). VQOs establish minimum acceptable thresholds for landscape alterations from an otherwise natural-appearing landscape. The threshold of effects is exceeded when alterations do not meet the visual intensity and dominance criteria of the VQO.

Table 2. VQO Definitions from the Forest Plan

VQO Class	Characterization
Preservation (P)	Provides for ecological changes only.
Retention (R)	In general means human activities are not evident to the casual forest visitor.
Partial Retention (PR)	In general means human activities may be evident but remain subordinate to the characteristic landscape.
Modification (M)	Human activities may dominate the characteristic landscape but must, at the same time, use naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in the foreground or middle ground.
Maximum Modification (MM)	Human activities may dominate the characteristic landscape but should appear as a natural occurrence when viewed as background.

The existing VQO designations for the Apache Leap SMA are Retention (373 acres) and Partial Retention (187 acres); 279 acres are not designated (Figure 3).

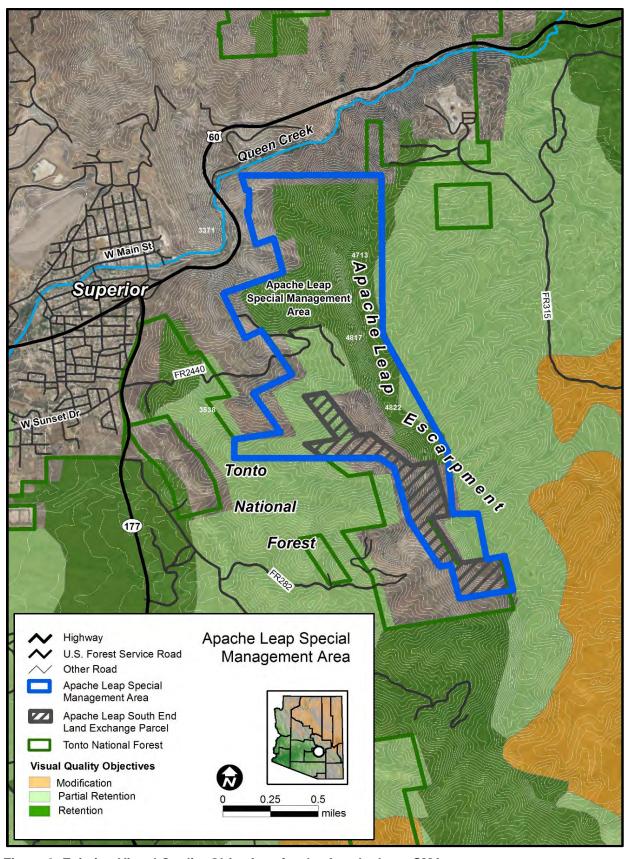


Figure 3. Existing Visual Quality Objectives for the Apache Leap SMA.

#### Scenery Management System

The Forest Service developed an updated version of the Visual Management System in 1995 called the Scenery Management System (Forest Service, 1995). The Scenery Management System emphasizes natural-appearing scenery, while also taking into consideration the added scenic values associated with human modified features and settings. Under the Scenery Management System, National Forest System lands are assigned scenic integrity objectives (SIOs) to depict the scenic integrity of lands and determine the degree of acceptable change or alteration to the visual landscape. Table 3 presents the SIO designations as contained in Forest Service Handbook 701, "Landscape Aesthetics: A Handbook for Scenery Management" (Forest Service, 1995). The Tonto National Forest is currently revising its forest plan and is using the Scenery Management System to inventory scenery using the SIO designations and to update scenery management information.

Table 3. SIO Definitions from the Forest Service Handbook for Scenery Management

SIO Class	Characterization
Very High	Landscapes where the valued landscape character "is" intact with only minute if any deviations. The existing landscape character and sense of place is expressed at the highest possible level.
High	Landscapes where the valued landscape character "appears" intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such a scale that they are not evident.
Moderate	Landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed.
Low	Landscapes where the valued landscape character "appears moderately altered." Deviations begin to dominate the valued landscape character being viewed, but they borrow valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed.
Very Low	Landscapes where the valued landscape character "appears heavily altered." Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes, or architectural styles within or outside the landscape being viewed.
Unacceptably Low	Landscapes where the valued landscape character appears extremely altered. Deviations are extremely dominant and borrow little, if any, form, line, color, texture, pattern, or scale from the landscape character.

## **Environmental Consequences**

#### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of natural character and scenery resources in the Apache Leap area would continue as a mix of the Retention and Partial Retention VQOs, as prescribed in the forest plan (Forest Service, 1985) and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on natural character or scenery resources, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

#### **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surface-disturbing activities. Exclusion of livestock grazing from the portions of the Superior and Devil's Canyon Allotment pastures within the Apache Leap SMA would result in a direct beneficial effect on natural character and scenery. Livestock removal would provide direct benefits to vegetation and soils, which in turn would enhance the natural character and scenic qualities of the Apache Leap SMA.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan. As management actions are implemented within the Apache Leap SMA, natural character and scenery conditions would move toward the desired conditions described in the management plan. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

Future implementation of the management plan would have a beneficial effect on the natural character and scenery of the Apache Leap SMA. The plan's natural character and scenery desired conditions, standards, guidelines, and management approaches provide guidance for protecting the area's natural character and scenery. To be consistent with the current forest plan and the forthcoming forest plan revision, the desired conditions include both VQO and SIO designations for the Apache Leap SMA. The management plan designates the entire Apache Leap SMA as a VQO of "Retention" and an SIO of "High" (Figure 4). The VQO "Retention" designation "in general means man's activities are not evident to the casual forest visitor" (Forest Service, 1985). The "High" designation means that "the valued landscape character 'appears' intact" and that deviations from the landscape character are not evident (Forest Service, 1995). These new designations would provide natural character and scenery protection beyond what is in the current forest plan and thus improve protection of these resources.

The management plan standards and guidelines contain direction that would protect the natural character and scenery for the Apache Leap SMA. The standards state that the natural character and associated values, including natural quiet, dark skies, and limited encounters with other visitors, shall take precedence over recreation uses where conflicts occur. The guidelines, when implemented, that would aid in protection of the natural character and scenery include the following:

- All proposed developments (including vegetation manipulation and ground-disturbing activities/construction) should be designed to blend with the natural setting by remaining consistent with the form, line, color, texture, and pattern common to the landscape character.
- Construction of new communications sites, utility lines, or transmission lines should not occur within the Apache Leap SMA.
- Regular maintenance activities, such as utility line clearing, should be performed in a manner consistent with protection of the natural character and values of the Apache Leap SMA.
- If seismic monitoring indicates that the natural character or values of the Apache Leap SMA are being negatively impacted, rehabilitation and closures may be used to mitigate impacts.

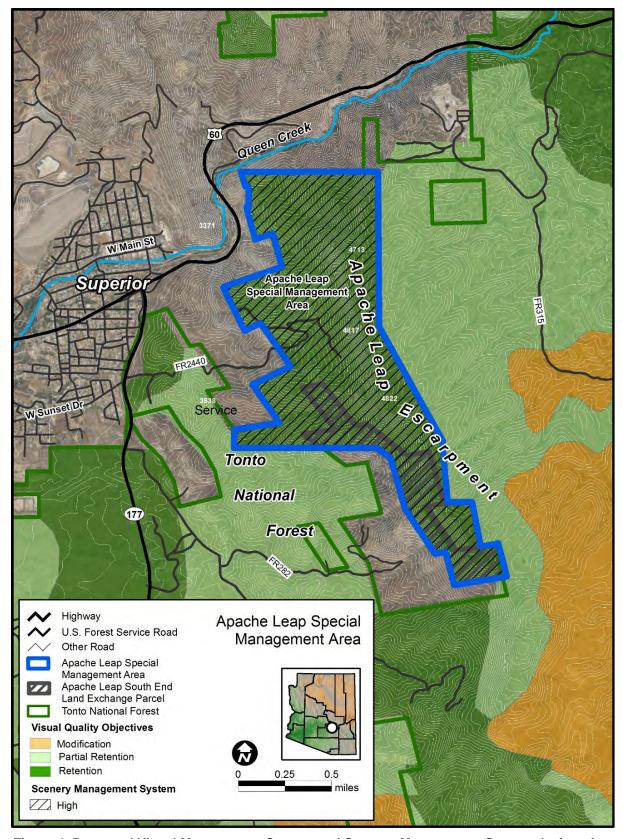


Figure 4. Proposed Visual Management System and Scenery Management System designations for the Apache Leap SMA.

In addition to the specific management plan components for natural character and scenery, future implementation of other resource management actions would also contribute to the preservation of the natural character and scenery Apache Leap SMA. As described in the wildlife and vegetation sections below, future vegetation management actions would have a beneficial effect on the natural vegetation composition of the Apache Leap SMA, which in turn would benefit habitat and wildlife. Decommissioning of abandoned mining roads, removal of existing livestock range improvements, and public safety mitigation of abandoned mine features would also enhance the natural character and scenic qualities of the Apache Leap SMA.

## Cumulative Effects<sup>6</sup>

Resolution Copper Project and Land Exchange – If Resolution Copper mining activities are approved and implemented as currently proposed, cumulative effects on the natural character and scenery of the Apache Leap SMA from adjacent mining operations may include dust and noise emanating from construction and mining operations. Users would see parts of the mine operations from the Apache Leap SMA, including the subsidence area, mine frames/shafts, and East Plant Site surface facilities, roads, and equipment. Noise from construction and mining operations could affect users on the east half of the Apache Leap SMA. Additionally, nighttime lighting associated with mine operations would impact dark sky viewing opportunities in the Apache Leap SMA.

**Forest Plan Revision** – The forest plan revision would adopt the Scenery Management System SIO designations for Tonto National Forest lands, including the SIO designation of "High" for the Apache Leap SMA. Therefore, there would be no cumulative effect on scenery management in the Apache Leap SMA from the forest plan revision.

Resolution Copper Pre-feasibility Hydrological Monitoring Wells – Resolution Copper would continue to have permitted administrative use of FR2440 to access the two existing hydrological monitoring wells in the Apache Leap SMA. The wells would continue to exist as unnatural features in the Apache Leap SMA throughout the life of the Resolution Copper Project and Land Exchange; however, these features are small and would only be visible to users in the immediate vicinity of the wells. At the completion of groundwater monitoring, the disturbed areas would be reclaimed to blend in with the surrounding landscape.

NDAA-Authorized Activities – Construction of NDAA-authorized activities (e.g., seismic monitoring, fencing, signs) would affect the natural character and scenery of the Apache Leap SMA through modifications of the existing natural landscape. To protect the natural character and scenery of the Apache Leap SMA into the future, the management plan includes guidelines for design of development and maintenance activities that blend in with the natural setting and protect the landscape character.

The management plan addresses cumulative effects resulting from the Resolution Copper Project and Land Exchange through inclusion of a management approach that encourages the Forest Service to develop a strategy in consultation with Resolution Copper mining engineers and geologists to provide a means to monitor, estimate, and anticipate, where possible, the effects of future mining adjacent to the special management area in order to preserve the natural character, cultural, and historic resources of the Apache Leap SMA as much as practicable. The management plan further details how the Forest Service would develop and implement this management approach. Implementation of this strategy and other aspects of the management plan would reduce overall cumulative effects on the Apache Leap SMA from the projects described above.

<sup>&</sup>lt;sup>6</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

## Tribal

## **Affected Environment**

## Places of Traditional and Cultural Importance

The legend of Apache Leap holds that an Apache campsite located within what is now the Apache Leap SMA was attacked by U.S. Cavalry troops in the late 1800s. A number of Apaches, driven to the edge, leaped over the cliff to death rather than surrender. When the women and children discovered their beloved husbands, fathers, and sons dead at the bottom of the cliff, they began to weep. As their tears fell, black stones were formed on the white, sandy earth for every tear that hit the ground. These are Apache Tears (obsidian). There are numerous accounts of this event, although it is important to note that the reported details of this event often conflict with oral history accounts by the Apache people.

Archaeological evidence of Indian tribal use of the area dates to the Hohokam and Salado cultures, respectively, during the Formative period (A.D. 200–1450) and to later Western Apache (i.e., Apache bands that include ancestors of the White Mountain, San Carlos, Cibecue, and Tonto Apache) and Yavapai occupations in the Protohistoric and Historic periods (ca. A.D. 1100s–1880s). The Apache/Yavapai presence in the western Pinal Mountains during the protohistoric and historical eras has been confirmed through archaeological surveys; however, this presence on the landscape is often hard to detect archaeologically due to the ephemeral nature of the Apache and Yavapai imprint on the land and their tendency to reoccupy prehistoric sites.

Apache Leap and its surrounding landscape is of significant cultural importance to several federally recognized southwestern tribes including: the San Carlos Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, Tonto Apache Tribe, Mescalero Apache Tribe, Fort McDowell Yavapai Nation, Yavapai Prescott Indian Tribe, Hopi Tribe, Gila River Indian Community, Salt River Pima-Maricopa Community, Ak-Chin Indian Community, and Pueblo of Zuni. These tribal groups continue to retain strong cultural ties to this land and, through its association with cultural practices, beliefs, and traditions of these tribal groups, Apache Leap is vital to maintaining the continued cultural identities of these living communities.

## Chi'chil Bildagoteel Historic District

The area known as Oak Flat on the Tonto National Forest and its surrounding landscape is of significant cultural importance to the Western Apache groups. Known as *Chi'chil Bildagoteel* ("a broad flat of Emory oak tree"), it is a geographically defined cultural landscape with physical and spiritual integrity essential to the continuation of traditional Western Apache cultural practices, particularly to the San Carlos Apache Tribe. Western Apache groups practiced subsistence based on the gathering of wild plants, agriculture, and hunting. These groups collected wild plant foods, including acorns from the Emory oak (*Quercus emoryi*), juniper berries, sumac berries, and agave (*Agave* sp.). They also hunted large game, wild fowl, and rodents, often returning to favored harvesting sites, including seasonal camps and agricultural areas for which many Western Apache clans are named. Tribal members continue to visit *Chi'chil Bildagoteel* for a wide range of traditional practices, including gathering wild foods and conducting ceremonies, and strengthening their continued ancestral connections to this area as a sacred place through prayer and song.

The majority of the Apache Leap SMA falls within the boundaries of the *Chi'chil Bildagoteel* Historic District, which is listed in the National Register of Historic Places as an Apache Traditional Cultural Property. Traditional Cultural Property is a formal designation that is applied to areas central to a traditional community's cultural practice and beliefs.

Private property owned by Resolution Copper that is currently part of the Apache Leap SMA was not included in the National Register of Historic Places listing. The *Chi'chil Bildagoteel* Historic District listing criteria are discussed in further detail in the next section (see "Indian Tribal Access" section).

### Indian Tribal Access

The Apache Leap SMA is important because of its association with cultural practices and traditional uses of the Western Apache as well as other tribal groups as discussed above. It is an area continually accessed for ceremonial purposes and forest projects. As Apache Leap is tied to the heritage of these traditional communities, access by tribal members is important in order to maintain traditional lifeways of these groups.

All resources in the Apache Leap SMA are accessible to Indian tribal members and the general public capable of using an unimproved, unmaintained trail from Oak Flat.

## Regulatory Framework

Protections for tribal resources at the federal level are shaped by several laws and regulations, which are discussed below.

### American Indian Religious Freedom Act

The American Indian Religious Freedom Act of 1978, as amended (42 U.S.C. 1996), was passed to protect the basic civil liberties of Native Americans and to preserve their traditional cultural practices and religious rights. These rights include, but are not limited to, use and possession of sacred objects and the freedom to worship through ceremonial and religious rites. This act also requires federal agencies to accommodate access to and ceremonial use of sacred sites and to avoid adversely affecting the physical integrity of such sacred sites.

## Native American Graves Protection and Repatriation Act

Native American Graves Protection and Repatriation Act of 1990, as amended (25 U.S.C. 3001–3013), and its implementing regulations (43 CFR 10), establishes a process for Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony that were excavated or collected on federal and Indian lands or collected using federal funding to be returned to lineal descendants or to culturally affiliated Native American tribes, Alaskan corporations, or Native Hawaiian organizations.

#### Executive Order 13007

Executive Order 13007 (May 24, 1996), "Indian Sacred Sites," was enacted to protect and preserve Native American religious practices. The executive order directs agencies to accommodate, to the extent practicable, access to and ceremonial use of Native American sacred sites by Native Americans on federal land and, where appropriate, maintain the confidentiality of those sacred sites.

# **Environmental Consequences**

#### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of Indian tribal resources in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on tribal resources and access, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

## **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surface-disturbing activities. The removal of livestock grazing from the portions of the Superior and Devil's Canyon Allotments within the Apache Leap SMA would result in direct beneficial effects on tribal resources. Livestock removal would improve conditions for vegetation, including important wild plant species used by tribal members. As grazing can directly affect vegetation communities by altering soil and vegetation species composition, exclusion of grazing activities would improve soil condition and result in an increase of vegetation density, cover, and diversity, which would have a beneficial impact on plant communities within the Apache Leap SMA.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan, which would include desired conditions, standards, guidelines, and management approaches to protect access for tribal members to the *Chi'chil Bildagoteel* Historic District and any identified places of traditional or cultural significance in the Apache Leap SMA. Because the Apache Leap SMA management plan is designed to maintain the natural character and would protect and conserve places of traditional and cultural importance, as well as tribal access to those places within the entire Apache Leap SMA, the proposed action is not anticipated to result in adverse indirect effects. Therefore, the approval and implementation of the plan would have an overall beneficial impact to tribal resources within the Apache Leap SMA. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

Future implementation actions and their direct effects, which may consist of ground-disturbing activities and/or changes in management strategy (such as removal of existing range improvements, or prohibition of overnight camping), would be analyzed under a separate environmental review process. Under the Apache Leap SMA management plan, future decisions would include tribal consultation in the early stages of planning and project design to consider tribal perspectives, needs, and concerns and traditional knowledge.

The decommissioning and/or conversion to non-motorized trail of approximately 0.35 mile of roads on acquired private lands would result in an overall indirect benefit to places of traditional and cultural importance and tribal access to those places. Access by tribal members to traditional resources, which would be preserved in place wherever feasible, would be ensured for individual and group prayer and for traditional ceremonies and rituals. Converting old, abandoned roads and motorized roads to non-motorized trails would not eliminate access to these areas by non-tribal members but would benefit these resources, as degradation to the landscape from motorized vehicles and impacts from human presence (e.g., dumping, human-caused fires, damage from vehicles) would be reduced.

The limits on the construction of new infrastructure and implementing the NDAA withdrawal of the Apache Leap SMA from mineral leasing and mining would result in a net benefit to tribal resources, as there would be no potential for new construction that would potentially impact traditional use areas and access to those use areas. Additionally, the closure of abandoned mining infrastructure (e.g., pits, adits, and other mine features) identified as hazards to public safety could result in indirect benefits to tribal members, whose safety would be increased if these hazardous mining features are located in

traditional use areas. The mitigation of abandoned mining infrastructure would include tribal input during the planning and design stages.

The prohibition of overnight camping (camping could result in impacts to traditional use areas and tribal resources) would result in beneficial effects on tribal resources. All planning and decisions on future facilities (trails, parking areas, trailheads) and the development of an Apache Leap SMA Climbing Management Plan, which would facilitate resource protection and sustainable rock climbing and bouldering opportunities, would incorporate measures to mitigate adverse effects on tribal resources from these management activities. Tribal input would also be incorporated into those decisions, which would consider impacts to important tribal places and access to those areas.

Wild plant species important to tribal communities would be available for traditional uses, and healthy populations of these species would be sustained or expanded in the Apache Leap SMA. The Forest Service would work with Indian tribes to develop monitoring strategies to ensure that healthy, sustainable plant populations are available for traditional uses.

Future implementation of the proposed action would also provide mitigation strategies to protect and preserve tribal resources. Indian tribes may request temporary closures of specific areas for traditional cultural purposes and, if traditional use areas were found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect these areas would be considered until restorative measures could be identified and implemented. Additionally, the management plan encourages the Forest Service to work with tribes to develop monitoring strategies to ensure that tribal resources are protected from human disturbance (e.g., vandalism, looting).

### Cumulative Effects<sup>7</sup>

The proposed action does not contribute to present effects, but instead guides future management of the proposed Apache Leap SMA.

There are three known reasonably foreseeable actions that may affect tribal resources and access to those resources for the proposed action: the Resolution Copper Project and Land Exchange, Tonto National Forest Travel Management, and NDAA-authorized activities. Because the proposed action does not have any adverse effects on tribal resources or on access to those resources, implementation of the proposed action would not contribute to adverse cumulative effects of these reasonably foreseeable actions.

Cumulative effects from these potential future actions would be primarily related to reduced access to the Apache Leap SMA through road closure or restricted access. Decreasing motorized access may reduce the incentive for use by some but would not restrict access to the Apache Leap SMA.

Resolution Copper Project and Land Exchange – If Resolution Copper mining activities are approved and implemented as currently proposed, development of the Resolution Copper Project East Plant Site would eventually require the closing of FR315. This is anticipated to occur in approximately the sixth year of mine operations, which could limit accessibility to Apache Leap for cultural and spiritual use. As part of the Resolution Copper Project and Land Exchange, the Oak Flat area, east of the Apache Leap SMA, would be exchanged in a land swap with the Tonto National Forest, excluding this area from public access. Reduced access could lead to reduced recreation and cultural and spiritual uses of the area, which would reduce human interaction and effects on natural, cultural, and historic resources. Because of its geographic location and proximity to sensitive resources, which may be impacted by the Resolution

<sup>&</sup>lt;sup>7</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

Copper Project and Land Exchange, the Apache Leap SMA is being considered as a possible location for tribal use mitigation activities.

**Tonto National Forest Motorized Travel Management** – The Tonto National Forest is currently considering motorized route designation changes through the "Travel Management on the Tonto National Forest Final Environmental Impact Statement" (Travel Management Final EIS) (Forest Service, 2016b). The Travel Management Final EIS proposes an *administrative use only* designation for FR2440 and FR282. If this designation were to be approved in the record of decision, these roads would no longer be available for public motorized travel. Access on FR2440 would require persons to park at State Route (SR) 177 and travel the road via non-motorized travel (hiking, biking, horseback riding).

On FR2440, this adds an additional 0.5 mile to the route into the Apache Leap SMA; on FR282, this adds an additional 1.75 miles. This could make accessing the Apache Leap by non-motorized travel more difficult for those tribal members using the special management area for cultural or spiritual purposes; however, access to these areas would be ensured. Conversely, reduced motorized access could be seen as an enhancement to conditions for cultural and spiritual use.

**NDAA-Authorized Activities** – Future surface disturbance and motorized use in the Apache Leap SMA associated with the NDAA-authorized activities (e.g., installation of seismic monitoring, fences, and signs) would result in disturbance (surface and subsurface) that could impact places of traditional and cultural importance to Indian tribes in the Apache Leap SMA and affect access to those areas by tribal members. As applicable during project-level environmental review for these actions, tribal consultation would be conducted early in the planning process, and input from Indian tribes would be considered and incorporated into project planning and decision making, as appropriate.

## Cultural/Historic

#### Affected Environment

The Forest Service defines *cultural resources* as an object or definite location of human activity, occupation, or use identifiable through field survey, historical documentation, or oral evidence. Cultural resources are prehistoric, historic, archaeological, or architectural sites, structures, places, or objects and traditional cultural properties (Forest Service Manual 2361.05 [Forest Service, 2008]). This may include, but is not limited to, the physical remains (e.g., artifacts, ruins, burial mounds, rock art) and conceptual content or context (e.g., as a setting for legendary, historic, or prehistoric events, or as an area sacred to native peoples) of an area that are useful or important for making land use planning decisions. *Historic resources* indicate physical remains and conceptual content or context dating from first occupancy by Euro-American settlers.

Cultural and historic resources include archaeological sites, which are physical remains of past human activity. Archaeological sites may also be important to tribal groups, as these physical manifestations represent tangible evidence of the long-standing cultural significance of the area and provide a continuous link from the past to present. While association with cultural beliefs and practices gives a Traditional Cultural Property its significance, a Traditional Cultural Property must be a physical property or place. Therefore, cultural and historic resources as physical remains are extremely important as they relate to preserving and protecting cultural traditions of living tribal communities.

## Regulatory Framework

### National Historic Preservation Act

The National Historic Preservation Act of 1966, as amended (54 U.S.C. 300101 *et seq.*), was established to preserve the nation's heritage through the protection of its cultural resources.

Specifically, Section 106 of the National Historic Preservation Act (54 U.S.C. 306108) and its implementing regulations (36 CFR 800) require federal agencies to consider the effects of their undertakings on historic properties, which are defined as any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (36 CFR 800.16(1)). If the federal agency determines that an undertaking has the potential to affect historic properties, i.e., properties that are listed in or eligible for listing in the National Register of Historic Places, they must, in consultation with the appropriate State Historic Preservation Officer, tribes, and other interested parties, define the area of potential effects and identify any historic properties within the area of potential effects; determine whether the undertaking will have an adverse effect on historic properties; and, if it does, resolve those adverse effects through avoidance, minimization, or mitigation.

### Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979, as amended (16 U.S.C. 470aa–470mm), and its implementing regulations (43 CFR 7) were designed to protect archaeological resources on federal and tribal lands and establish procedures for permitting archaeological work on those lands in order to curtail unauthorized collection or disturbance.

## Archaeological Sites within the Apace Leap SMA

Approximately 94% of the 839-acre Apache Leap SMA has been surveyed for archaeological resources, including all private parcels (142 acres or 17%) and 651 acres of the 697 acres of National Forest System lands (77%). The remaining 46 acres (6%) of National Forest System land in the Apache Leap SMA were either surveyed more than 30 years ago, prior to modern methods of site recordation, or remain unsurveyed. The unsurveyed acreage is located adjacent to the private land parcels. Overland access routes to several cattle tanks were surveyed within this portion of National Forest System land in 1983; however, no sites were recorded.

Site types documented and/or expected to occur within the Apache Leap SMA include prehistoric and historic archaeological sites. Prehistoric site types include resource procurement and processing sites, as well as campsite and habitation sites. These prehistoric sites typically represent limited-activity areas used for preparing tools for hunting, processing plant and animal materials, acquiring raw materials, and conducting domestic activities. Historic archaeological site types include sites representing mining and ranching activities; trails, which show how people repeatedly moved through a landscape; prehistoric period resource procurement and processing sites, campsites, and habitation sites; and Historic period mining sites, ranching sites, trails, and utilities.

In all, 10 archaeological sites have been recorded in the Apache Leap SMA. Of these 10 sites, seven have been determined eligible for listing in the National Register of Historic Places, one has been recommended eligible, and the remaining two have been recommended not eligible for the National Register of Historic Places. Additional site information is included in the project record.

## Chí'chil Biłdagoteel Historic District

The majority of Apache Leap SMA falls within the boundaries of the *Chi'chil Bildagoteel* Historic District, which was listed in the National Register of Historic Places as an Apache Traditional Cultural Property in 2016 for its traditional and cultural significance.

The *Chi'chil Bildagoteel* Historic District was listed under the following National Register of Historic Places 8 criterion:

- 1. Criterion A: as a place "associated with events that have made a significant contribution to the broad patterns of our history," because it is associated with traditional Apache oral history, is a venue for ongoing Apache participation in traditional social activities, and is associated with traditions rooted in the history of the Western Apache Tribes.
- 2. Criterion B: as a place "associated with the lives of persons significant in our past."
- 3. Criterion C: as a place "representative of a significant and distinguishable entity whose components may lack individual distinction" because of the oak groves that figure prominently in traditional Apache subsistence patterns, and other important natural resources.
- 4. Criterion D: as a place "that has yielded, or may be likely to yield, information important in prehistory or history" because of opportunities available to record the oral histories of the Western Apache people and the information contained in the Apache archaeological sites.

In total, 38 archaeological sites have been recorded within the *Chi'chil Bildagoteel* Historic District. Seventeen of these sites are considered to contribute to the overall district's eligibility for the National Register of Historic Places. Four of the 17 contributing sites are located in the Apache Leap SMA.

## **Environmental Consequences**

### Resource Indicators and Measures

Currently, cultural and historic resources on the Apache Leap SMA are not being intentionally disturbed, and all resources are accessible to Indian tribal members and the general public capable of climbing an unimproved trail from Oak Flat. Based on the resource indicators and measures for assessing effects of the proposed action on cultural and historic resources (see "Relevant Issues" section), nine cultural and historic resources have been identified within the area of potential effects. In all, eight historic properties (i.e., archaeological sites eligible for listing in the National Register of Historic Places) and one traditional cultural property (the *Chi'chil Bildagoteel* Historic District) are in the Apache Leap SMA (Table 4).

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<sup>&</sup>lt;sup>8</sup> National Park Service. 2002. *National Register of Historic Places Brochure*. Available at: https://www.nps.gov/nr/publications/bulletins/brochure/.

Table 4. Cultural and Historic Resource Indicators and Measures for Assessing Effects\*

Resource Element	Resource Indicator	Measure	Used to Address: Purpose and Need, or Key Issue?	Existing Condition
Historic property (properties eligible for the National Register of Historic Places)	Disturbance, damage, or loss of resource	Number of historic properties affected	Yes	8
Places of traditional and cultural significance	Disturbance, damage, or loss of resource	Types of places of traditional and cultural significance affected	Yes	1—Chi'chil Bildagoteel Historic District (Traditional Cultural Property)
	Loss of access to resource	Type of places of traditional and cultural significance where access is lost		

<sup>\*</sup> Resource indicators and measures for assessing effects are discussed here as they apply to tangible cultural and historic resources. It should be noted that these metrics are also associated with tribal cultural resources, as discussed in the "Tribal" section.

### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of cultural and historic resources in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Impacts on cultural and cultural and historic resources would primarily result from unmitigated surface disturbance such as wildland fires, unauthorized collection, and inadvertent vandalism and trampling. Impacts from recreation, wildland fires, and unauthorized collections and vandalism are not usually considered under Section 106 of the National Historic Preservation Act and can result in the unmitigated loss of cultural and historic resource information.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

### **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surface-disturbing activities. The removal of livestock grazing from the portions of the Superior and Devil's Canyon Allotments within the Apache Leap SMA would result in direct beneficial effects on cultural and historic resources. As grazing can directly impact archaeological sites through trampling, which would threaten the integrity of features or cultural deposits, exclusion of grazing activities would reduce these impacts and result in additional protection for these resources.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan, which would include modified desired conditions, standards, guidelines, and management approaches to protect archaeological sites within the *Chi'chil Bildagoteel* Historic District, thereby preserving the significance of the historic and cultural resources of the Apache Leap SMA as recognized in the National Register of Historic Places. Plan implementation would move toward desired conditions for cultural and historic resources, including visitor outreach to provide a general understanding of the cultural and historic values present, the role of human activity in shaping the landscape of the area, and the importance of protecting those resources.

Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

Because the Apache Leap SMA management plan is designed to maintain the natural character and would protect and conserve cultural and historic resources within the entire Apache Leap SMA, the proposed action is not anticipated to result in adverse indirect effects. Therefore, the approval and implementation of the plan would have an overall beneficial impact to cultural and historic resources within the Apache Leap SMA.

Implementation actions and their direct effects, which may consist of ground-disturbing activities and/or changes in management strategy (such as removal of existing range improvements, or prohibition of overnight camping), would be analyzed under a separate environmental review process. Under the Apache Leap SMA management plan, consideration in planning for these actions would include protection for cultural and historic resources, as well as tribal consultation in the early stages of planning and project design; also, tribal perspectives, needs, and concerns, as well as traditional knowledge, would be considered in project design and decisions.

The decommissioning and/or conversion to non-motorized trail of approximately 0.35 mile of roads on acquired private lands would result in an overall indirect benefit to cultural and historic resources. Many of these roads are historic and lead to historic mining sites. Access to cultural and historic resources, which would be preserved in place wherever feasible, would be reduced by decreased motorized traffic, and, while it would not eliminate public access to these areas, these resources would benefit, as degradation to the landscape from motorized vehicles and impacts from human presence (including damage from motorized vehicles) would be reduced.

The limits on the construction of new infrastructure and the withdrawal of the Apache Leap SMA from mineral leasing and mining would result in a net benefit to cultural and historic resources, as there would be no potential for new construction that would potentially impact archaeological sites. Closure of abandoned mining infrastructure (e.g., pits, adits, and other mining features) identified as public safety hazards could result in impacts to cultural and historic resources during closure activities; however, archaeological sites would be protected from adverse effects resulting from management activities.

The prohibition of overnight camping (camping could result in impacts to archaeological sites) would result in beneficial impacts to these resources. All planning and decisions on future facilities (trails, parking areas, trailheads) and the development of the Apache Leap SMA Climbing Management Plan, which would facilitate resource protection and sustainable rock climbing and bouldering opportunities, would incorporate measures to mitigate adverse effects.

Future installation of grazing fences to keep livestock out of the allotments has the potential to impact cultural and historic resources; however, adverse effects that may result from these management activities would be mitigated as part of separate environmental review processes conducted for installation of grazing fences.

Future implementation of the proposed action would also provide mitigation strategies to protect and preserve cultural and historic resources. Archaeological sites would be protected from vandalism, looting, and other forms of human-caused deterioration (including visitor traffic). If cultural and historic resources are found to be impacted by recreation or other allowable uses, temporary closure to protect the affected sites would be employed until restorative measures could be identified and implemented. Tribal input would also be included in the criteria for monitoring and maintaining archaeological sites.

## Cumulative Effects9

The proposed action does not contribute to present effects, but instead guides future management of the proposed Apache Leap SMA.

There are three known reasonably foreseeable actions that may affect cultural and historic resources for the proposed action: the Resolution Copper Project and Land Exchange, Tonto National Forest Travel Management, and NDAA-authorized activities. Because the proposed action does not have any adverse effects on cultural and historic resources, implementation of the proposed action would not contribute to adverse cumulative effects of these reasonably foreseeable actions.

Cumulative effects from these potential future actions would be primarily related to reduced access to the Apache Leap SMA through road closure or restricted access. Decreasing motorized access may reduce the incentive for use by some, but would not restrict access to the Apache Leap SMA.

Resolution Copper Project and Land Exchange – If Resolution Copper mining activities are approved and implemented as currently proposed, development of the Resolution Copper Project East Plant Site would eventually require the closing of FR315. This is anticipated to occur in approximately the sixth year of mine operations, which could limit accessibility to Apache Leap for cultural and spiritual use, though this point of access is primarily used for rock climbing. As part of the Resolution Copper Project and Land Exchange, the Oak Flat area, east of the Apache Leap SMA, would be exchanged in a land swap with the Tonto National Forest, excluding this area from public access. Reduced access could lead to reduced recreation in the area, which would reduce human interaction and effects on natural, cultural, and historic resources.

**Tonto National Forest Motorized Travel Management** – The Tonto National Forest is currently considering motorized route designation changes through the Travel Management Final EIS. The Travel Management Final EIS proposes an *administrative use only* designation for FR2440 and FR282. If this designation were to be approved in the record of decision, these roads would no longer be available for public motorized travel.

This could make accessing cultural and historic resources in the Apache Leap SMA by non-motorized travel more difficult for tribal members; however, access to these areas would be ensured. Conversely, reduced motorized access could be seen as an enhancement to protection of cultural and historic resources.

**NDAA-Authorized Activities** – Future surface disturbance and motorized use in the Apache Leap SMA associated with the NDAA-authorized activities (e.g., installation of seismic monitoring, fences, and signs) would result in disturbance (surface and subsurface) that could impact cultural and historic resources in the Apache Leap SMA. As applicable during project-level environmental review for these actions, adverse effects on archaeological sites that may result would be mitigated.

## Access

**Affected Environment** 

The rugged and steep terrain of Apache Leap currently has limited access. Current access to the Apache Leap SMA is by motorized and non-motorized travel on gated roads and undesignated user-created

<sup>&</sup>lt;sup>9</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

routes. Access to the Apache Leap SMA is primarily for Native American traditional and cultural uses, recreation, and permitted administrative uses.

Visitors currently access the Apache Leap SMA through entry at the following locations (Figure 5):

**FR2440** – FR2440, also known as the Cross Canyon Road, extends approximately 1.75 miles from SR 177 on the east side of Superior, Arizona, into the western portion of the Apache Leap SMA. The road is gated at its junction with private land approximately 0.5 mile from the SR 177. Public users typically park at this gate and walk the roadbed, through the private land parcel, for the remaining 1.25 miles to enter the western portion of the Apache Leap SMA. When the gate is unlocked, motorized use into the special management area does occur. From various points along this route, users leave the roadway and hike overland farther into the Apache Leap SMA for dispersed recreation opportunities.

Resolution Copper holds a permit for the use of FR2440 for motorized access to two groundwater monitoring wells (MB-03 and QC-04) within the Apache Leap SMA, as permitted by the Resolution Copper Pre-feasibility Plan of Operations (Forest Service, 2010) (see Appendix B, Figure B-1). Resolution Copper conducts minimal maintenance on the road to provide the level of access necessary to collect monitoring data and maintain the wells.

**FR282** – FR282 extends approximately 1.75 miles from SR 177 toward the southwestern portion of the Apache Leap SMA. The road is gated at its junction with private land. Users park vehicles at this gate and access the southwestern portion of the Apache Leap SMA on undesignated user-created routes that cross private lands.

**U.S. 60/Queen Creek Corridor** – Users access the north and northwestern portion of the Apache Leap SMA from several undesignated access routes that originate along U.S. 60 east of Superior, Arizona. Users navigate the steep slopes to climb out of the Queen Creek drainage and into the Apache Leap SMA. Access from these points requires users to cross private lands to enter the area.

**FR315** – Several undesignated parking areas along FR315 provide access to the eastern portion of the Apache Leap SMA. Users travel overland on multiple undesignated user-created routes to the top of the Apache Leap escarpment. These routes provide the primary access for rock climbing in the Apache Leap area.

The Apache Leap SMA contains three small areas of abandoned roads that were used to access historic mining operations. Two of the abandoned mining road areas occur on private lands (southeastern and southwestern portions of the special management area) that the Forest Service may acquire through the Southeast Arizona Land Exchange process.

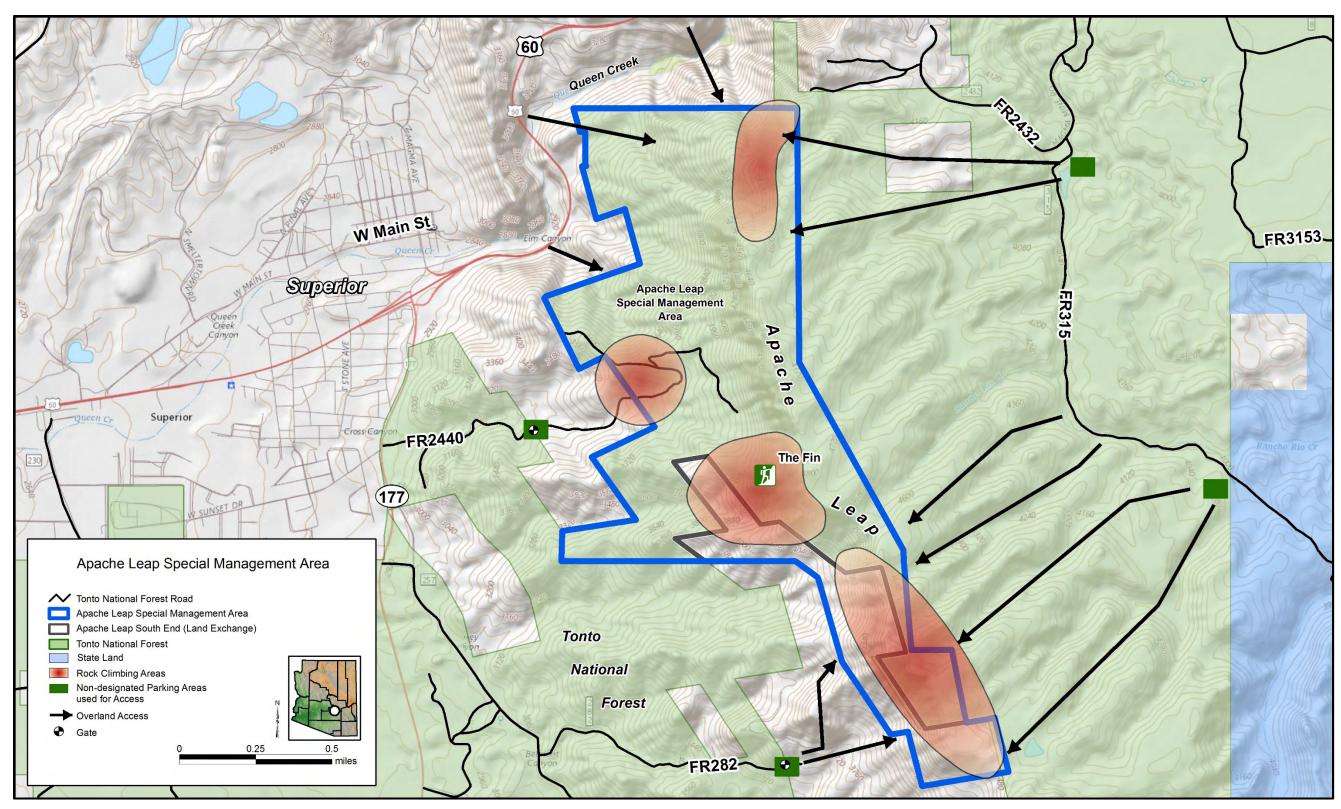


Figure 5. Existing access and recreation opportunities in the Apache Leap SMA.

Apache Leap Special Management Area Management Plan Environmental Assessment					
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## **Environmental Consequences**

#### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of access in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on access, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

## **Proposed Action**

#### Direct Effects

There would be no direct effects on access within the Apache Leap SMA as a result of the proposed action.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan. As management actions are implemented within the Apache Leap SMA, access conditions would move toward the desired conditions described in the management plan. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

Access to the Apache Leap SMA would continue as described above in the "Affected Environment" section. No access points would be closed, and road access to the undesignated parking areas outside the Apache Leap SMA would continue on the north and west sides of Apache Leap. The Forest Service would provide better communication with the public about road and trail access through improved signage and placement of barriers. This would help users better understand the status of roads and trails inside and outside the Apache Leap SMA.

Motorized access on National Forest System lands is managed through the Travel Management Rule process (36 CFR 212 Subpart B) (Forest Service, 2016b). See the "Access" cumulative effects discussion below for more information on the Tonto National Forest's travel management process.

The abandoned mine roads (approximately 0.35 mile) on private lands acquired by the Forest Service would either be decommissioned or converted to trails. If converted to trails, the abandoned routes would provide recreational access to the southern portion of the Apache Leap SMA.

## Cumulative Effects 10

**Resolution Copper Project and Land Exchange** – Development of the Resolution Copper Project East Plant Site, if approved as currently proposed, would eventually require the closing of FR315.

This is anticipated to occur in approximately year 6 of mine operations and would limit access to undesignated routes on the east side of the Apache Leap SMA. In addition, as part of the Resolution Copper Project and Land Exchange, the area east of the Apache Leap SMA would be exchanged with Resolution Copper and become private land, excluding public access. These eastern routes provide the primary rock climbing access routes and are very important to the public. If Resolution Copper mining activities are

<sup>&</sup>lt;sup>10</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

approved and implemented as currently proposed, virtually all existing access to the east side of Apache Leap would cease.

**Tonto National Forest Motorized Travel Management** – The Tonto National Forest is currently considering motorized route designation changes through the Travel Management Final EIS. After publishing the draft record of decision (June 30, 2016) and completing the objection process, the Tonto National Forest announced the preparation of a Supplemental EIS on June 8, 2017. The Final EIS proposes an *administrative use only* designation for FR2440 and FR282. If the final record of decision is approved with this designation in the future, these roads would no longer be available for public motorized travel. Under administrative use only, access on FR2440 would require persons to park at SR 177 and travel the road using non-motorized means (hiking, biking, horseback riding). On FR2440, this adds an additional 0.5 mile to the route into the special management area; on FR282, this adds an additional 1.75 miles.

**Queen Creek Bridge Rehabilitation** –Access to the Apache Leap SMA from the U.S. 60/Queen Creek Corridor could be temporarily affected by construction closures or detours associated with the Queen Creek Bridge project. In the long term, improvements to the Queen Creek Bridge would facilitate continued use of this corridor for accessing the Apache Leap SMA along its northern boundary (subject to permission from private landowners).

**Resolution Copper Pre-feasibility Hydrological Monitoring Wells** – Resolution Copper would continue to have permitted motorized administrative use of FR2440 in the Apache Leap SMA. Continued use of FR2440, including road maintenance, would facilitate the public's ability to continue using this route for motorized and non-motorized access into the Apache Leap SMA from the west.

**NDAA-Authorized Activity** – The NDAA-authorized activity of "installation of fences, signs, or other measures necessary to protect the health and safety of the public" could result in access restrictions in the Apache Leap SMA. While it is unknown at this time where or when this activity may occur, or which access routes could be affected, the activities would most likely occur on the east side of the Apache Leap SMA.

Cumulative effects from these anticipated future actions would limit access to the Apache Leap SMA. In particular, when these cumulative actions are combined, access to the climbing routes in the Apache Leap SMA would become extremely difficult and would substantially reduce rock climbing opportunities in the area. The cumulative impact of losing access to the east side of Apache Leap could result in increased access needs and/or pressure on other areas of Tonto National Forest, state lands, and private lands, particularly public access used for off-highway vehicle use and rock climbing.

The management plan addresses cumulative effects on access through inclusion of a management approach that encourages the Forest Service to collaborate with consulting parties, stakeholders, and the public to ensure that future opportunities are available for accessing the Apache Leap SMA.

The management approach also includes the potential to develop access "nodes" on the west and south side of the special management area, which could provide access for trailheads and parking areas.

## Recreation

## **Affected Environment**

The Apache Leap SMA is located in the Globe Ranger District of the Tonto National Forest in an area rich with opportunities for motorized and non-motorized recreation. Regionally, there are off-highway vehicle/off-road areas; designated hiking, biking, and horseback riding trails; climbing and canyoneering routes; designated campgrounds; and areas open for dispersed overnight camping.

The Apache Leap SMA provides an important recreation resource to the local Superior, Arizona, community and beyond. Recreation visitors come from the southern and central Arizona region, and the area provides nationally recognized climbing opportunities. The extremely rugged terrain limits recreation opportunities, but recreationists make the effort to visit the unique area.

The Apache Leap SMA offers dispersed recreation opportunities that emphasize non-motorized recreation. Recreation opportunities include rock climbing, hiking, mountain biking, horseback riding, dispersed camping, wildlife viewing, and hunting. Public motorized recreation is permitted on FR2440. The Forest Service has no data for the quantity of recreation use, but use is considered generally low, due to the rugged terrain and limited designated roads and trails.

The primary dispersed recreation uses of the Apache Leap SMA include the following (see Figure 5 above):

Rock Climbing – Rock climbing represents the primary recreation use of the Apache Leap SMA. According to the Queen Creek Coalition, a local climbing organization, Apache Leap contains many of the tallest climbing routes in the Queen Creek area. Climbing opportunities consist of 16 boulder problems and 80 bolted routes, including Lectra Area, Lost Horizon, Rim Gym, Staging Area, Punk Rock, Headstone, Citadel, The Draw, Musicland Wall, Geronimo Area, Skyscraper Area, and The Fin (Queen Creek Coalition, 2010). The majority of the climbing routes are located on the escarpment and are accessed from parking areas on FR315. Climbers hike to the east side of the Apache Leap SMA via overland undesignated routes and rappel into the climbing areas. Other areas in the central portion of the Apache Leap SMA, including a popular route called The Fin, are accessed via FR2440 and overland undesignated routes. Climbing within Queen Creek Canyon on private lands is accessed via U.S. 60 and requires permission from Resolution Copper.

**Hiking, Biking, Equestrian** – There are no designated trails within the Apache Leap SMA. However, hiking occurs throughout the area on undesignated routes. Recreation users hike, bike, and ride horses on the FR2440 roadbed beyond the gate at the private land boundary and into the Apache Leap SMA. There are multiple overland non-motorized routes that access various features throughout the Apache Leap SMA.

These routes include the access routes to the climbing areas from the east side and the west side as described above. Other undesignated routes occur on the north end from U.S. 60 and the Queen Creek area and on the south end from the FR282 area. The Apache Leap SMA includes a north-south undesignated route that traverses the top of the Apache Leap escarpment, which is used by hikers. Hikers also use routes that traverse east-west through the escarpment from the bottom to the top of Apache Leap.

**Hunting** – Limited hunting may occur within the Apache Leap SMA, which is part of AGFD Hunting Unit 24A. Hunted species that occur in the Apache Leap SMA include javelina (*Pecari tajacu*), mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), cottontail rabbit (*Sylvilagus audubonii*), and Gambel's quail (*Callipepla gambelii*) (AGFD, 2017). Hunting primarily occurs in the fall and winter. Hunters access the area as described above in the "Access" section.

**Camping** – Limited overnight dispersed camping (camping that occurs outside developed campgrounds) occurs within the Apache Leap SMA. Camping primarily occurs in the eastern portion of the special management area, on the flatter landscape at the top of the escarpment.

## Recreation Opportunity Spectrum (ROS)

The ROS is the Forest Service system for classifying and managing recreation opportunities; it represents a framework for understanding the relationships and interactions the public may experience with a particular area of public land (Forest Service, 1982). The ROS (ranging from primitive to urban) is based on the variation that exists in the physical, social, and administrative attributes of any landscape. The physical setting describes variations in components such as remoteness, naturalness, and facilities. The social setting

reflects the variations in components such as group size, number and types of contacts, encounters between individuals or groups, and the evidence of use by others. The administrative setting can reflect variations in the kind and extent of components such as visitor services, management controls, user fees, and mechanized use. When combined, the physical, social, and administrative attributes of a place provide a distinct set of recreation opportunities.

Table 5 shows the ROS setting framework used by the Tonto National Forest, as described in the forest plan.

**Table 5. ROS Class Description from Forest Plan** 

ROS Class	Characterization		
Primitive (P)	Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low, and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and control. Motorized use within the area is not permitted.		
Semi-Primitive Non- Motorized (SP)	Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restriction may be present, but are subtle. Motorized use is not permitted.		
Semi-Primitive Motorized (SPM)	Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restriction may be present, but are subtle. Motorized use is permitted.		
Roaded Natural (RN)	Area is characterized by predominantly natural-appearing environments with moderate evidence of the sight and sounds of humans. Such evidence usually harmonizes with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and use practices are evident but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.		
Rural (R)	Area is characterized by substantially modified natural environment. Resource modification and use practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sight and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided for away from developed sites. Facilities for intensified motorized use and parking are available.		
Urban (U)	Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resources modification and use practices are to enhance specific recreational activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans, on-site, are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor use and parking are available, with forms of mass transit often available to carry people throughout the site.		

The current ROS designations for Apache Leap, as designated in the forest plan, are semi-primitive motorized, roaded natural, and urban (Figure 6). The eastern portion, including the majority of the escarpment, is designated semi-primitive motorized (approximately 289 acres).

A small portion of the special management area on the western edge near FR2440 is designated urban (approximately 54 acres), with the remainder of the area designated roaded natural (approximately 496 acres).

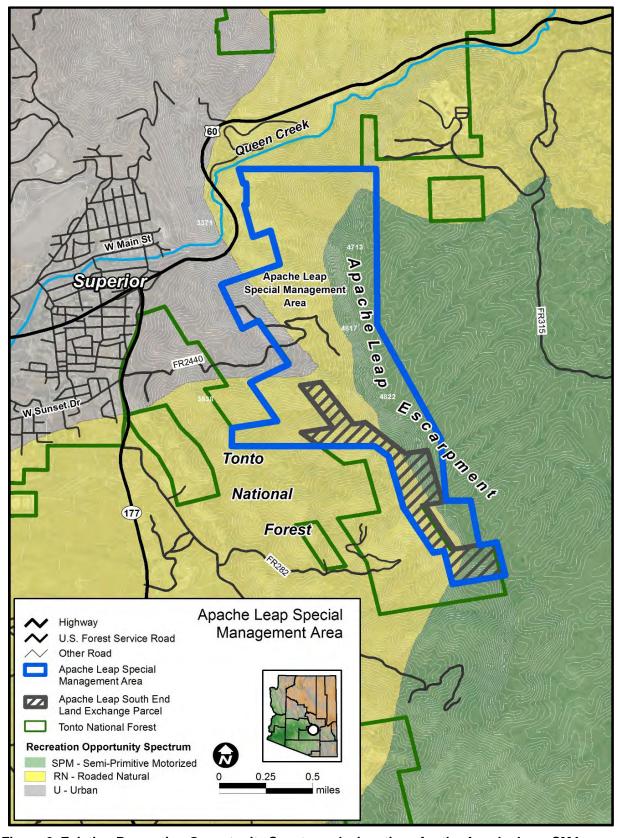


Figure 6. Existing Recreation Opportunity Spectrum designations for the Apache Leap SMA.

## **Environmental Consequences**

### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of recreation resources in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on recreation, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

## Proposed Action

#### Direct Effects

There would be no direct effects on recreation within the Apache Leap SMA as a result of the proposed action.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan. As management actions are implemented within the Apache Leap SMA, recreation conditions would move toward the desired conditions described in the management plan. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

The management plan would change the ROS settings considerably. The roaded natural and urban settings would be replaced with semi-primitive non-motorized and semi-primitive motorized settings around FR2440 (Figure 7). The semi-primitive non-motorized ROS setting would be managed for non-motorized activities such as hiking, biking, rock climbing, equestrian, and hunting. Current recreation activities, as described above in the "Affected Environment" section, would continue.

The ROS designation of semi-primitive motorized manages for the same uses as semi-primitive non-motorized, with the addition of motorized use on designated routes. The ROS setting of semi-primitive motorized was added to a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized setting would provide opportunities for future motorized route designation and development of a parking area or trailhead within the Apache Leap SMA.

Under the management plan, roads on private lands acquired by the Forest Service may be converted to trails. This would facilitate continued current hiking access on these routes and would improve hiking conditions by providing an improved trail bed.

Recreation management would emphasize offering day-use recreation opportunities within a predominantly undeveloped setting and concurrently discourage overnight camping. The plan includes an objective to establish a closure order and complete associated National Environmental Policy Act documentation to exclude overnight camping under Title 36, CFR Part 261, "Prohibitions," within 3 years of plan approval.

A prohibition on overnight camping would negatively affect the ability for recreation users to camp in the Apache Leap SMA.

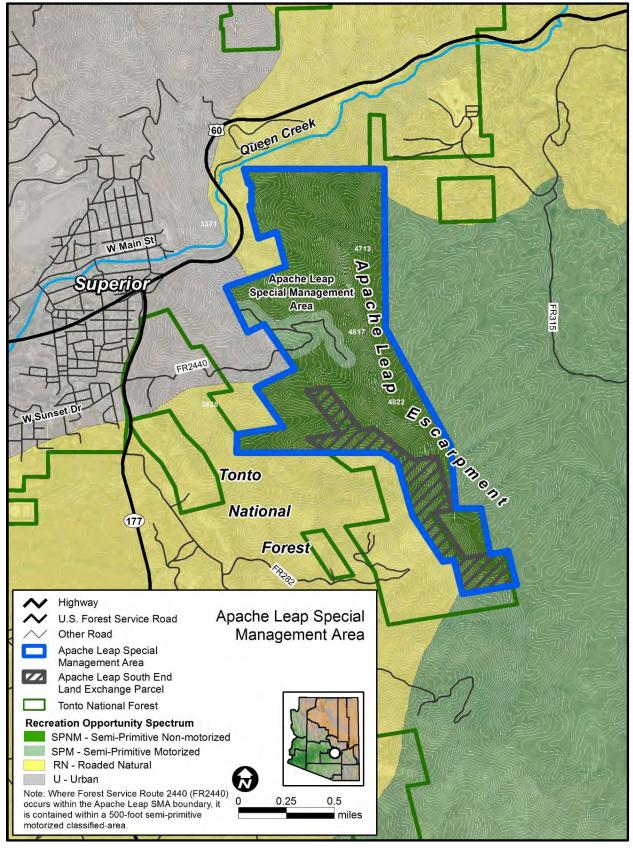


Figure 7. Proposed Recreation Opportunity Spectrum designations for the Apache Leap SMA.

Recreation management would emphasize offering day-use recreation opportunities within a predominantly undeveloped setting and concurrently discourage overnight camping. The plan includes an objective to establish a closure order and complete associated National Environmental Policy Act documentation to exclude overnight camping under Title 36, CFR Part 261, "Prohibitions," within 3 years of plan approval. A prohibition on overnight camping would negatively affect the ability for recreation users to camp in the Apache Leap SMA.

However, since there is currently minimal dispersed overnight camping occurring in the Apache Leap SMA, there would be little to no effect on recreation users from this closure. Opportunities for dispersed overnight camping on other Tonto National Forest lands in the region would not be affected by the management plan.

The management plan would allow for future facility development to support day-use dispersed recreation opportunities in the Apache Leap SMA. All future facilities (trails, parking areas, trailheads) would be authorized in accordance with the ROS settings and constructed to protect resources, including cultural, historic, and visual resources, within the Apache Leap SMA.

The management plan includes a management approach to consider ways to integrate and develop future non-motorized trails within the Apache Leap SMA, with the goal of collaborating with consulting parties, stakeholders, and the public to ensure that future trail development, analysis, and construction activities are consistent with the purposes of the Apache Leap SMA.

Additionally, the management plan encourages collaborative involvement with local non-governmental organizations, local governments, and recreation groups to develop an Apache Leap SMA Climbing Management Plan. An Apache Leap SMA Climbing Management Plan would facilitate resource protection and sustainable rock climbing and bouldering opportunities in the Apache Leap SMA.

## Cumulative Effects 11

Resolution Copper Project and Land Exchange—If Resolution Copper mining activities are approved and implemented as currently proposed, development of the Resolution Copper Project East Plant Site would eventually require the closing of FR315 due to anticipated surface subsidence in the area. This is anticipated to occur in approximately year 6 of mine operations. In addition, as part of the Resolution Copper Project and Land Exchange, the area east of the Apache Leap SMA would be exchanged with Resolution Copper and become private land, excluding public access. These eastern routes provide the primary rock climbing access routes and are very important to the public. If Resolution Copper mining activities are approved and implemented as currently proposed, virtually all recreation and rock climbing access to the east side of Apache Leap would cease.

Tonto National Forest Motorized Travel Management – The Tonto National Forest is currently considering motorized route designation changes through the Travel Management Final EIS. After publishing the draft record of decision (June 30, 2016) and completing the objection process, the Tonto National Forest announced the preparation of a Supplemental EIS on June 8, 2017. The Final EIS proposes an *administrative use only* designation for FR2440 and FR282. If approved as proposed in the Final EIS, these roads would no longer be available for public motorized travel. Under administrative use only, access on FR2440 would require persons to park at SR 177 and travel the road via non-motorized travel (hiking, biking, horseback riding). On FR2440, this adds an additional 0.5 mile to the route into the special management area; on FR282, this adds an additional 1.75 miles. This will make accessing the Apache Leap by non-motorized travel more difficult for recreationists and thus limit these dispersed recreation opportunities within the Apache Leap SMA. The management plan addresses cumulative effects through inclusion of a management

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<sup>&</sup>lt;sup>11</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

approach that encourages the Forest Service to review travel management road designations to consider allowing for motorized access to the Apache Leap SMA.

**NDAA-Authorized Activity** – The NDAA-authorized activity of "installation of fences, signs, or other measures necessary to protect the health and safety of the public" could detrimentally affect access to areas within the Apache Leap SMA, which in turn could affect opportunities for recreation. It is unknown at this time where or when this activity may occur or which recreation opportunities could be affected.

Cumulative effects from these anticipated future actions would limit access to the Apache Leap SMA. In particular, when these cumulative actions are combined, access to the escarpment rock climbing routes would become extremely difficult and reduce rock climbing opportunities in the area substantially. These future actions would severely limit access and thus dispersed recreation opportunities within the special management area. The management plan addresses cumulative effects through inclusion of a management approach that encourages the Forest Service to facilitate continued access opportunities for dispersed recreation.

As opportunities arise, the Forest Service would consider ways to integrate and develop non-motorized trails within the Apache Leap SMA, review trail proposals as they are received from non-governmental organizations, local governments, and citizen initiatives and work with all consulting parties, stakeholders, and the public to ensure that any future trail development is consistent with the purposes for which the Apache Leap SMA was designated, and consider existing and proposed non-motorized trails that are adjacent (e.g., the LOST [Legends of Superior Trails]) for connectivity to future proposed trails within the Apache Leap SMA.

The Forest Service would work with local non-governmental organizations, local governments, tribes, and recreation groups to establish sustainable rock climbing and bouldering expectations in the Apache Leap SMA, and develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA. Within the Climbing Management Plan, the Forest Service would consider designating approaches to the escarpment from the west side, designating climbing routes, and prohibiting new bolting on select climbing routes to minimize environmental impacts.

## Mineral Resources

## Affected Environment

Hardrock mining in and around the Superior area is marked by two distinct periods: an early period dominated by silver mining from 1875 to 1893, and a later copper mining era from 1902 to present (WestLand Resources, 2004). Mineral survey plats and Arizona Bureau of Mines data indicate that lands within the Apache Leap SMA were federally patented in the 1910s and early 1920s (WestLand Resources, 2004); however, no major operations were ever erected. Nevertheless, portions of the Apache Leap SMA are located entirely or partially within a number of patented lode claims. Historically, these lode claims were explored for the presence of economic minerals using surface methods (open cuts) and underground methods (shafts and tunnels), and in a few cases, exploration appears to have led to actual development (WestLand Resources, 2004).

Many of the past mining features remain on the landscape today. More than 50 historic mine features have been identified in the Apache Leap SMA, with the highest concentration of features found on the west side of the Apache Leap SMA below the Apache Leap escarpment. Remnants of historic mining features include mine shafts and waste rock piles, cleared and flat areas, prospect pits, trenches, adits, and portions of an abandoned rail system.

Subject to valid existing rights, the NDAA, Section 3003(f), withdrew the Apache Leap SMA from location, entry, and patent of mineral resources. There are 83 mineral claims in the Apache Leap SMA, 24 of which are patented and 59 of which are unpatented. All patented and unpatented mineral claims are owned by Resolution Copper. There are no active mines or exploratory mining activities occurring within the Apache Leap SMA.

## Management Direction

The current mineral resource management direction for the Tonto National Forest in the forest-wide direction in the forest plan is to support environmentally sound energy and minerals development. The forest plan does not contain specific mineral resources management prescriptions pertaining to MA 2F, in which the Apache Leap SMA is located.

## **Environmental Consequences**

### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of mineral resources in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on mineral resources, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

## **Proposed Action**

#### Direct Effects

There would be no direct effects on mineral resources within the Apache Leap SMA as a result of the proposed action. The NDAA withdrew the Apache Leap SMA from location, entry, and patent of all mineral resources, subject to valid existing rights.

#### Indirect Effects

The NDAA withdrawal is incorporated into the management plan as desired conditions and standards. As a result of this withdrawal, the management plan would have no direct or indirect effects on mineral resources because there are no active mines or exploratory mining activities occurring in the Apache Leap SMA.

Implementation of the desired conditions and guidelines would have an indirect beneficial effect on public health and safety in the Apache Leap SMA. The indirect effects of mitigating public safety hazards associated with historic mine features on wildlife are discussed in the "Wildlife" section, below. Because the historic mine features in the Apache Leap SMA are abandoned, future actions to mitigate public safety hazards would have no effect on mineral resources. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

## Cumulative Effects 12

**Resolution Copper Project and Land Exchange** – NDAA Section 3003(g)(3) authorizes the Southeast Arizona Land Exchange by directing Resolution Copper to surrender "all rights held under the mining laws

<sup>&</sup>lt;sup>12</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

and any other law to commercially extract minerals under Apache Leap." Surrendering all valid existing rights would provide long-term protection for mineral resources in the Apache Leap SMA and would comply with the management plan desired conditions and standards restricting the development or exploration of mineral resources in the Apache Leap SMA. Cumulatively, there would be a beneficial effect on mineral resources in the Apache Leap SMA from this action.

NDAA-Authorized Activities – With regard to the public safety hazards discussion above, the NDAA authorizes uses in the Apache Leap SMA related to public safety and monitoring concerns associated with the proposed adjacent mine, including the installation of seismic monitoring equipment, necessary measures for public safety (e.g., fences, signs, etc.), and the operation of an underground tunnel adjacent to the northern boundary of the Apache Leap SMA. Some of the activities, including fences and signs, are intended to mitigate potential future public health and safety issues resulting from the Resolution Copper Project and Land Exchange.

## Wildlife

### Affected Environment

## Regulatory Framework

Protections for wildlife resources at the federal level are shaped by several laws and regulations, which are discussed below.

## Endangered Species Act

Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), requires federal agencies to ensure any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of Endangered Species Act-listed species or modify listed species' critical habitat. Section 7 consultation with the U.S Fish and Wildlife Service is required if listed species under its jurisdiction or their critical habitat could be affected by a proposed action. Since this project will have no effect on species listed under the Endangered Species Act, consultation with the U.S. Fish and Wildlife Service is not required for this project.

### Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 made it unlawful to take, kill, or possess migratory birds or their parts, nests, or eggs. Executive Order 13186 (issued in 2001) further defines the responsibility of federal agencies to consider the effects of land management planning and project implementation on migratory birds, particularly those for which there is conservation concern. Factors such as naturally small ranges, loss of habitat, or observed population declines influence the listing of species as being of conservation concern. These species are identified in the "Arizona Partners in Flight Bird Conservation Plan" (Latta et al., 1999) and included on the Tonto National Forest Migratory Bird Species of Concern list (Forest Service, 2016c), which is the migratory bird list analyzed in this document.

### Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (50 CFR Part 22), enacted in 1940, and amended several times since then, prohibits anyone without a permit issued by the Secretary of the Interior from taking eagles or their parts, nests, or eggs, and provides criminal penalties for persons who violate the limitations outlined in this Act. "Take" is defined in the Bald and Golden Eagle Protection Act as "pursue, shoot, shoot at, poison, would, kill, capture, trap, collect, molest, or disturb." While bald and golden eagles may potentially use the project area for foraging, the project area does not contain suitable breeding habitat for bald eagles. It may provide potential breeding habitat for golden eagles, though the closest potential nest site is approximately

4 miles west of the project area, and the nearest known breeding territory is approximately 8 miles to the south (personal communication, K. Jacobson, 2016).

## National Forest Management Act

National Forest Management Act of 1976 regulations direct the Forest Service to identify and actively monitor management indicator species in order to assess the effects of forest management activities on plant and animal communities. The forest plan identifies 27 wildlife species and one macroinvertebrate species group as management indicator species (Forest Service, 1985). Nine species from this list serve as indicators of habitat changes brought about by the proposed action.

## Forest Service Regulations

Forest Service regulations (Forest Service Manual 2670.32) require a review of proposed activities as part of an environmental review to determine their potential effect on sensitive species. Sensitive species are defined in Forest Service Manual 2670.5as "those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by: a. Significant current or predicted downward trends in population numbers or density. b. Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution." The sensitive species reviewed as part of this proposed action are identified in the 2016 Tonto National Forest species list (Forest Service, 2016c).

### Management Direction

The forest plan provides forest-wide standards for special status wildlife species. <sup>13</sup> These standards apply to project decisions for all areas of the Tonto National Forest, including the Apache Leap SMA.

## General Wildlife Species

The project area provides habitat for species associated with two biotic communities: the Arizona Upland subdivision of the Sonoran Desertscrub community in the lower elevations (approximately 412 acres); and the Interior Chaparral community along the top of the Apache Leap escarpment (approximately 422 acres) (Brown, 1994). Interior Chaparral species also occur on north-facing slopes in lower elevations west of the Apache Leap escarpment (vegetation communities are described in detail in the "Vegetation" section).

Common wildlife species that inhabit the Sonoran Desertscrub biome include:

- 1. mammals such as coyote (*Canis latrans*), ring-tailed cat (*Bassariscus astutus*), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), Merriam's kangaroo rat (*Dipodomys merriami*), white-throated wood rat (*Neotoma albigula*), desert pocket mouse (*Chaetodipus penicillatus*), and a variety of bat species, discussed below;
- 2. birds such as roadrunner (*Geococcyx californianus*), mourning dove (*Zenaida macroura*), lesser nighthawk (*Chordeiles acutipennis*), verdin (*Auriparus flaviceps*), cactus wren (*Campylorhynchus brunneicapillus*), black-tailed gnatcatcher (*Polioptila melanura*), phainopepla (*Phainopepla nitens*), black-throated sparrow (*Amphispiza bilineata*), Gambel's quail (*Callipepla gambelii*), Costa's hummingbird (*Calypte costae*), Gilded flicker (*Colaptes auratus*), and Gila woodpecker (*Melanerpes uropygialis*); and
- 3. reptiles such as Morafka's desert tortoise (*Gopherus morafkai*), chuckwalla (*Sauromalus obesus*), desert iguana (*Dipsosaurus dorsalis*), rosy boa (*Lichanura trivirgata*), glossy snake (*Arizona elegans*), and western diamondback (*Crotalus atrox*) (Brown, 1994).

<sup>&</sup>lt;sup>13</sup> Special status wildlife species includes federal endangered, threatened, and Forest Service sensitive species, as well as migratory bird species of concern, bald and golden eagles, and management indicator species.

Common wildlife species that inhabit the Interior Chaparral biome include:

- 1. mammals such as eastern cottontail (*Sylvilagus floridanus*), cliff chipmunk (*Tamias dorsalis*), white-footed mouse (*Peromyscus leucopus*), rock mouse (*Peromyscus difficilis*), white-throated wood rat (*Neotoma albigula*), mule deer (*Odocoileus hemionus*), and brush mouse (*Peromyscus boylii*);
- 2. birds such as Woodhouse's scrub jay (*Aphelocoma woodhouseii*), bushtit (*Psaltriparus minimus*), canyon wren (*Catherpes mexicanus*), Crissal thrasher (*Toxostoma crissale*), spotted towhee (*Pipilo erythrophthalmus*), rufous-crowned sparrow (*Aimophila ruficeps*), and black-chinned sparrow (*Spizella atrogularis*); and
- 3. reptile species such as side-blotched lizard (*Uta stansburiana*), glossy snake (*Arizona elegans*), night snake (*Hypsiglena torquata*), western black-headed snake (*Pantherophis obsoletus*), eastern fence lizard (*Sceloporus undulatus*), Arizona alligator lizard (*Elgaria kingii nobilis*), Sonora lyre snake (*Trimorphodon lambda*), and coachwhip (*Coluber flagellum*) (Brown, 1994).

There are known abandoned mines in the project area, and the likelihood of locating additional abandoned mines within the project area is fairly high. Abandoned mines and adits (the entrance to a mine that is horizontal or nearly horizontal) have the potential to provide habitat for a variety of species, such as javelina, pack rat, and snake species. They are of particular importance to some bat species, which can use these habitats as hibernacula or maternity colonies. Bat species may also use the exceptional crevice habitat that is naturally occurring within the project area.

Bat species that have been recorded within the project area include pale Townsend's big-eared bat (Corynorhinus townsendii pallescens), cave myotis (Myotis velifer), and California myotis (Myotis californicus). Species that have been recorded in the vicinity of the project area include pallid bat (Antrozous pallidus), big brown bat (Eptesicus fuscus), western small-footed myotis (Myotis ciliolabrum), Mexican free-tailed bat (Tadarida brasiliensis), canyon bat (Parastrellus hesperus), greater western mastiff bat (Eumops perotis), pocketed free-tailed bat (Nyctinomops femorosaccus), California leaf-nosed bat (Macrotus californicus), western red bat (Lasiurus blossevillii), hoary bat (Lasiurus cinereus), silver-haired bat (Lasionycteris noctivagans), and Yuma myotis (Yuma myotis) (WestLand Resources, 2004; 2012). Of these species, four species are tree-roosting bats, while the remainder are crevice and/or cavern roosting bats.

## Threatened and Endangered Species

There are 15 Endangered Species Act—listed wildlife species in Pinal County (U.S. Fish and Wildlife Service, 2017a). Of the 15 species listed, 14 are unlikely to occur and one species, ocelot (*Leopardus pardalis*), is not known to occur within the project area. There is no designated critical habitat for listed species within the project area. The species determinations for potential occurrence are described in detail in the Wildlife and Vegetation Specialist Report in the project record.

The ocelot has been recorded within 5 miles of the project area in 2010; this was a roadkill individual and may have been an extreme occurrence that had dispersed well beyond its reasonable range (Heritage Data Management System, 2017). Since that time, no additional sightings have been confirmed on the numerous game cameras in the vicinity of the Apache Leap SMA. The ocelot is a nocturnal and highly secretive medium-sized spotted cat. The current distribution of this species extends from Mexico into southern Arizona, though dispersing individuals may range more widely. Dispersal in areas of fragmented habitat is facilitated by densely vegetated movement corridors and small, semi-isolated habitat patches (U.S. Fish and Wildlife Service, 2016). Habitats used by this species can be variable, ranging from tropical semi-deserts to brushy forests and semiarid deserts, particularly in the northern part of its range, though little is known about habitat use in Arizona. Vegetation in the project area does not appear suitable to attract or hold this species. According to the U.S. Fish and Wildlife Service (2010), ocelots in south Texas prefer greater than

95% canopy cover and avoid areas of intermediate (50%–75%) to no cover. Though recent sightings of the species have occurred in southern Arizona, limited connectivity appears to have limited the range of dispersing individuals. Habitat, other than critical habitat, is not specifically protected under the Endangered Species Act. Therefore, within the project area, only the ocelot species is protected, and potentially suitable habitat is used as a proxy in this analysis for estimating impacts to the species and is not a legal designation.

## Tonto National Forest Sensitive Wildlife Species and Migratory Birds of Concern

Seven sensitive wildlife species have either been recorded or determined to have potential to occur within the project area. These species include four bat species, Allen's big-eared bat (*Idionycteris phyllotis*), pale Townsend's big-eared bat, spotted bat (*Euderma maculatum*), and western red bat; one bird species, peregrine falcon (*Falco peregrinus*); and two reptile species, Bezy's night lizard (*Xantusia bezyi*) and Morafka's (Sonoran) desert tortoise. Of these species, a pair of peregrine falcons was observed flying near and perched on the Apache Leap escarpment during site visits, the pale Townsend's big-eared bat was observed roosting in abandoned mines in the project area, the western red bat was captured in the vicinity of the project area during bat-specific surveys, and the Morafka's desert tortoise was observed/recorded in the Sonoran Desertscrub biotic community (western portion) of the project area.

Twenty-one migratory bird species of concern have been determined to have potential to occur within the project area, five of which were recorded during site visits in support of this analysis.

## Tonto National Forest Management Indicator Species

Habitats for a moderate number of Tonto National Forest management indicator species occur in the project area. Site-specific occurrence records are not available for most management indicator species, but each species' occurrence in its respective habitat is assumed, as documented in the "Tonto National Forest Land and Resource Management Plan: Management Indicator Species Status Report" (Klein et al., 2005).

Nine management indicator species (ash-throated flycatcher [Myiarchus cinerascens], gray vireo [Vireo vicinior], Townsend's solitaire [Myadestes townsendii], juniper titmouse [Baeolophus ridgwayi], northern flicker [Colaptes auratus], spotted towhee [Pipilo maculatus], black-chinned sparrow, black-throated sparrow, and canyon towhee [Melozone fusca]) were selected based upon their associations with the habitat types present in the project area and their suitability as indicators of habitat changes brought about by the proposed action. Details about these species, their associated vegetation indicators, and habitat and population trends are described in the Wildlife and Vegetation Specialist Report, found in the project record.

# **Environmental Consequences**

### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of wildlife resources in the Apache Leap SMA would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on wildlife.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

### **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surfacedisturbing activities. The removal of livestock grazing from the portions of the Superior and Devil's Canyon Allotments within the Apache Leap SMA would result in direct beneficial effects on wildlife resources, including Threatened and Endangered Species, Tonto National Forest Sensitive Wildlife Species, Migratory Bird Species of Concern, and Management Indicator Species. Livestock grazing has the potential to adversely impact wildlife through direct competition for forage; and to impact wildlife habitat by altering soil and vegetation density and structure, and species composition (Trimble and Mendel, 1995). The amount of habitat available to prey species may also be less as a result of livestock grazing, resulting in fewer prey species and/or increased predation pressure upon those species. Exclusion of grazing activities would reduce these impacts and would improve soil and vegetation conditions over time, directly benefiting wildlife species and wildlife habitat.

### Indirect Effects

Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

Indirect effects would result from future implementation of the management plan. As management actions are implemented within the Apache Leap SMA, wildlife conditions would move toward the desired conditions described in the management plan. Because the management plan is designed to maintain the natural character within the entire Apache Leap SMA, the proposed action is not anticipated to result in adverse indirect effects. Therefore, the approval and implementation of the plan would have an overall beneficial impact to wildlife and habitat within the Apache Leap SMA.

The indirect, overall effects on wildlife resources from the management plan components, as outlined in the proposed action, are discussed below.

#### **General Wildlife**

The potential to decommission existing roads on acquired private lands would result in an overall indirect benefit to wildlife resources within an approximately 0.35-mile area within the Arizona Upland subdivision – Sonoran Desertscrub vegetation community. Roads generally degrade native vegetation, and these damaging effects have been well documented (Forman and Alexander, 1998; Jones et al., 2008; Trombulak and Frissell, 2000; Walker and Everett, 1987). Decommissioning activities would have a minor, localized, indirect impact to the vegetation community in the approximately 0.35-mile area by allowing the native vegetation to return over time and reducing the fragmentation of the area as a benefit to wildlife species and their habitat in that particular area.

Maintenance of existing transmission infrastructure and construction of new trails would be performed in a manner consistent with the guidelines to protect the natural character and values of the Apache Leap SMA; and to blend with the natural setting to the greatest extent possible without compromising their function or resource benefit. Implementation of these guidelines would reduce potential degradation to wildlife habitat where these activities are authorized. Construction and non-motorized use of new trails could result in minor increases in human–wildlife encounters and contribute to the spread of non-native plant species impacting wildlife and wildlife habitat. Implementing the management approaches for vegetation would provide for the treatment of invasive plant species with the intent to protect the natural values of the special management area; therefore, the risk of establishment and spread of invasive as a result of trail uses would be minor and is not anticipated to result in wildlife habitat degradation.

The limits on construction of new communication sites, utility and transmission lines (referred to as utility infrastructure), and implementation of the NDAA withdrawal from mineral location, entry, and patent within the Apache Leap SMA would result in a net benefit to wildlife resources in the project area. These limits on construction would reduce potential habitat loss for wildlife resources. There would be no potential for new

construction related to communications or utilities, and there would be no potential for mining and associated mining infrastructure, such as roads, to impact wildlife resources as a result of habitat loss.

The prohibition of overnight camping within the proposed Apache Leap SMA would result in beneficial effects on wildlife in the project area by limiting human intrusion and related disturbances. Overnight camping activities can result in the trampling of vegetation at camp sites, which can result in reductions of vegetative cover with repeated use over time (Marion and Cole, 1996).

The evaluation for wildlife use of remnants of historic mining features that do not pose a public safety hazard would indirectly benefit wildlife species.

### **Threatened and Endangered Wildlife Species**

Overall, the proposed action would result in minor, beneficial, indirect effects on potentially suitable ocelot habitat within the project area. Long-term, beneficial effects would result from increases in vegetative cover, and revegetation of existing disturbed areas or areas currently occupied by non-native plant species. These long-term, beneficial changes could result in an increase in available habitat or an increase in the quality of existing habitat for ocelot and prey species. Owing to the lack of occurrence information, indirect, beneficial effects on potentially suitable habitat for this species as a result of the proposed action would likely be limited.

## **Tonto National Forest Sensitive Wildlife Species**

The proposed action would result in long-term, minor, beneficial effects on bat species in the project area. The proposed action would manage the project area to protect the natural character of the area, and management activities such as decommissioning and/or conversion of roads to trails, limits on new construction of utility infrastructure, and implementation of the NDAA withdrawal from mineral location, entry, and patent would maintain and protect vegetative communities in the project area and reduce the potential for human disturbance due to presence or noise. An increase in the vegetative cover within the project area could provide an increase in the quantity and quality of insect habitat, which is an important prey species for many bat species. Additionally, the protection of and/or increase in, vegetation as a result of the proposed action could result in additional roosting habitat for tree or foliage-roosting bat species, such as the western red bat. Overall, the proposed action would result in beneficial effects on availability of prey and some roosting habitat.

The proposed action could result in indirect effects on cave-roosting bat species, such as the Allen's big-eared bat, pale Townsend's big-eared bat, and spotted bat. The management plan includes guidelines to identify and mitigate public safety hazards posed by abandoned mining infrastructure, which could result in loss of habitat for cave-roosting bat species. Wildlife guidelines direct that any proposed closures would be evaluated for continued wildlife use, thus reducing the risk of lost habitat due to abandoned mining infrastructure closures. Further, the extensive existing natural rock and crevasse habitat within the project area could also provide suitable roosting sites for bat species that use those habitats. The loss of a limited number of abandoned mining infrastructure sites for roosting is not likely to result in the loss or degradation of any one bat species or population within the proposed Apache Leap SMA and is not anticipated to be adverse.

The proposed action would also result in indirect, long-term, beneficial effects on peregrine falcon breeding areas. Prohibition of overnight camping as well as prohibition of construction of new sites or infrastructure could contribute to increased vegetative cover, in turn resulting in an increase in the availability of prey species. This increased availability of prey could contribute to an increase in breeding success for peregrine falcons. The potential for increased vegetative cover related to the prohibition these activities that could be detrimental to habitat of prey species' quantity and/or quality, could result in an increase in availability of prey, which could contribute to an increase in breeding success for peregrine falcons.

The proposed action would result in indirect, beneficial effects on habitat for reptile species, such as Morafka's (Sonoran) desert tortoise and Bezy's night lizard. Management activities, including decommissioning and/or conversion of roads to trails and limits on new construction of utility infrastructure, would maintain and protect burrowing and rock habitat for these species within the Apache Leap SMA. Future invasive plant species control could result in more native species, which would have indirect, beneficial effects on foraging habitat for Morafka's (Sonoran) desert tortoise. An increase in the vegetative cover within the project area could provide an increase in the quantity and quality of insect habitat, which is an important prey species for Bezy's night lizard. Overall, the proposed action would result in indirect, beneficial effects on habitat and forage quantity and quality for both species within the project area.

### **Migratory Bird Species of Concern**

Impacts on migratory bird species of concern due to the implementation of the proposed action would be similar to those described for general wildlife. Some additional impacts are described below. Impacts on peregrine falcons are discussed above, under "Tonto National Forest Sensitive Wildlife Species."

The proposed action would result in indirect, beneficial effects on migratory birds within the project area. The limitation of ground- or vegetation-disturbing activities would increase ground cover and reduce the potential for disturbance to migratory bird nesting habitat within the project area. The proposed project would have an indirect, long-term, beneficial effect on raptors such as golden eagle, American peregrine falcon, Swainson's hawk (*Buteo swainsoni*), elf owl (*Micrathene whitneyi*), and flammulated owl (*Psiloscops flammeolus*). Limitation of ground- or vegetation-disturbing activities would increase ground cover and available forage for prey species, which could result in an increase in availability of prey.

## **Management Indicator Species**

The proposed action limits the types of ground-disturbing or vegetation-modifying activities that would be permitted. Management activities such as decommissioning and/or conversion of roads to trails and limits on new construction of utility infrastructure would help to maintain and protect vegetative communities of the project area. This could improve herbaceous and shrub density, cover, and diversity, which would directly benefit wildlife but is less likely to affect snags or tree diversity. Overall, the proposed action would contribute to beneficial changes over time in habitat but would not likely result in a change in landscape-level habitat or population trends for management indicator species.

## Cumulative Effects 14

There are three known reasonable and foreseeable actions that may affect wildlife resources: the Resolution Copper Project and Land Exchange, Resolution Copper Pre-feasibility Hydrological Monitoring Wells, and NDAA-authorized activities. However, because the proposed action does not have any adverse effects on wildlife or vegetation, it would not contribute to adverse cumulative effects of these projects.

Resolution Copper Project and Land Exchange – If the Resolution Copper Project and Land Exchange is approved and implemented as currently proposed, future activities associated with the construction and operation of the Resolution Copper Project East Plant Site (e.g., land clearing, equipment and motor vehicle use, operation of surface facilities, mining subsidence) would affect wildlife species through direct and indirect impact to the species themselves, as well as to their habitat. These impacts could extend into the Apache Leap SMA, including impacts from noise, dust, night lighting, and loss of habitat connectivity. The management approach for wildlife in the management plan encourages the Forest Service to "develop and implement a monitoring plan to assess impacts to wildlife from mining activities, including low-frequency effects from blasting, conveyor and machinery operation, and mining-induced micro-seismic responses," which would help mitigate the impacts of potential future mine operations on wildlife habitat.

<sup>&</sup>lt;sup>14</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

Additionally, the environmental review process for the Resolution Copper Project and Land Exchange would likely include mitigation measures to reduce the impacts on wildlife and habitat.

Resolution Copper Pre-feasibility Hydrological Monitoring Wells – Resolution Copper would continue to have permitted administrative use of FR2440 in the Apache Leap SMA. Continued administrative use of FR2440, including road maintenance, could impact wildlife and habitat through noise, dust, and human disturbance. The administrative use would continue to be subject to environmental protection measures, including those for biological resources, as described in the "Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Activities Plan of Operations Final Environmental Assessment" (Forest Service, 2016d).

NDAA-Authorized Activities – The NDAA-authorized activities of "installation of fences, signs, or other measures necessary to protect the health and safety of the public" and "installation of seismic monitoring equipment on the surface and subsurface" could result in impacts to wildlife and habitat in the Apache Leap SMA. An additional NDAA-authorized activity is operation of an underground tunnel and associated workings. The proposed location of the tunnel is adjacent to the northern boundary of the Apache Leap SMA. This activity and potential impacts is under review as part of the Resolution Copper Project and Land Exchange EIS. Potential impacts for NDAA-related activities would be addressed under the management approach for natural character and scenery that calls for the Forest Service to develop and implement a monitoring plan for wildlife in conjunction with Resolution Copper. In addition, a separate environmental review for these NDAA-authorized activities could include mitigation measures as appropriate to reduce these impacts.

# Vegetation

## Affected Environment

## **General Vegetation**

Major biotic communities within the project area include the Arizona Upland subdivision – Sonoran Desertscrub vegetation community in lower elevations and Interior Chaparral along the top of the Apache Leap escarpment (Brown, 1994). Interior Chaparral species also occur on north-facing slopes in lower elevations west of the Apache Leap escarpment. Table 6 describes the acreages of vegetation communities within the project area.

Vegetation found in the Arizona Upland subdivision typically consists of shrubs, cacti, and leguminous trees such as foothill paloverde (*Parkinsonia microphylla*), saguaro (*Carnegiea gigantea*), and velvet mesquite (*Prosopis velutina*). Additional species common to this area include golden flower century plant (*Agave chrysantha*), Mormon tea (*Ephedra* sp.), fairyduster (*Calliandra eriophylla*), barrel cactus (*Ferocactus* spp.), catclaw mimosa (*Mimosa aculeaticarpa*), jojoba (*Simmondsia chinensis*), catclaw acacia (*Senegalia greggii*), wolfberry (*Lycium* spp.), brittlebush (*Encelia farinosa*), teddybear cholla (*Cylindropuntia bigelovii*), buckhorn cholla (*C. acanthocarpa*), cactus apple (*Opuntia engelmannii*), Engelmann's hedgehog (*Echinocereus engelmannii*), shrubby buckwheat (*Eriogonum wrightii*), flattop buckwheat (*E. fasciculatum*), Louisiana sagewort (*Artemisia ludoviciana*), desert marigold (*Baileya multiradiata*), Coues' cassia (*Senna covesii*), desert globemallow (*Sphaeralcea ambigua*), and purple three-awn (*Aristida purpurea*).

Table 6. Special Status Plant Species Occurrence in the Project Area

Common Name	Status	Habitat	Potential for Occurrence
Arizona hedgehog cactus (Echinocereus triglochidiatus var. arizonicus)	U.S. Fish and Wildlife Service Endangered Species Act– Endangered	Found on open slopes of rugged, steep-walled canyons with granite or dacite bedrock among boulder piles in Arizona desert grassland and in the understory of shrubs in the ecotone between Madrean Evergreen Woodland and Interior Chaparral at elevations between 3,400 and 5,300 feet above mean sea level (amsl). Its range is restricted to the Superstition Mountains on the Tonto National Forest.	Not known to occur. Suitable habitat for the species is present in the northern portion of the project area, and the project area is near known populations of the species. However, the species' presence was not confirmed during site visits or during informal surveys specifically searching for the species by Forest Service biologists over the past several years.
Pima Indian mallow (Abutilon parishii)	Tonto National Forest Sensitive	Occurs on bouldery, rocky, shallow soils in lower Sonoran Desertscrub, the transition zone of upper Sonoran grassland communities, and Sonoran deciduous riparian forest, at elevations between 1,700 to 5,000 feet amsl. This species is widespread and is known from the Superstition, Santa Catalina, Rincon, Silverbell, Tucson, Mineral Hills, Picacho, Tortolita, Dripping Springs, Santa Rita, and Tumacacori Mountains, as wells as Cottonwood Creek, Little Shipp Wash, and Sabino Canyon.	May occur. The project area contains bouldery, rocky, shallow soils in lower Sonoran Desertscrub, and is within the elevational range for the species.
Mapleleaf false snapdragon ( <i>Mabrya</i> acerifolia)	Tonto National Forest Sensitive Species List	Occurs on rock overhangs, on shaded cliffs and rock ledges in rhyolite rock crevices on north- and east-facing canyon walls, at elevations between 1,800 and 3,350 feet amsl. This endemic species is known from the Superstition and Pinal Mountains, above Canyon Lake, near Horse Mesa Dam in Arizona.	May occur. Rock overhangs, shaded cliffs, and rock ledges are present in the project area providing habitat elements, though this species is not known occur in the area.

Note: Range or habitat information is from Heritage Data Management System (2017); U.S. Fish and Wildlife Service Arizona Ecological Services Field Office (U.S. Fish and Wildlife Service, 2017b); "Arizona Rare Plant Field Guide" (Arizona Rare Plant Committee n.d., [2000]).

Endangered Species Act = Listed as Endangered (U.S. Fish and Wildlife Service, 2017a)

Tonto National Forest Sensitive = Tonto National Forest Sensitive Species List (Forest Service, 2016c)

The Interior Chaparral vegetation type is characterized by dense stands of woody evergreens and shrubs. A common (diagnostic) species of Interior Chaparral in central Arizona is scrub live oak (*Quercus turbinella*). In the Apache Leap SMA, this community is best represented by scrub live oak, pointleaf manzanita (*Arctostaphylos pungens*), red barberry (*Berberis haematocarpa*), alderleaf mountain mahogany (*Cercocarpus montanus*), deerbrush (*Ceanothus integerrimus*), and sugar sumac (*Rhus trilobata*). Other common species include crucifixion thorn (*Canotia holacantha*), hopbush (*Dodonaea viscosa*), Wright's silktassel (*Garrya wrightii*), and broom snakeweed (*Gutierrezia sarothrae*). Drainages within the project area do not contain permanent surface water features and do not support riparian vegetation. Instead, the drainages generally contain greater densities of the same species that are present in the adjacent uplands. Additionally, no known springs occur within the project area. Two cattle tanks occur approximately 100 feet east of the southeastern border of the project area, and a third cattle tank occurs approximately 600 feet east of the southeast corner of the project area.

#### Threatened and Endangered Species

There are three Endangered Species Act–listed plant species in Pinal County (U.S. Fish and Wildlife Service, 2017a). All are unlikely to occur and one species, the Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus* <sup>15</sup>), is not known to occur within the special management area. Individual plants are known to occur north and east of the special management area, though this species is more abundant north of U.S. 60, adjacent to the project area. The species has not been observed during site visits of the project area or during

<sup>&</sup>lt;sup>15</sup> Recent nomenclature changed the species to *Echinocereus arizonicus*; however, the federally listed name is still *Echinocereus triglochidiatus* var. *arizonicus*.

numerous site visits to the area by Forest Service biologists over the years (see Table 6). There is no designated critical habitat for listed species within the project area.

## Tonto National Forest Sensitive Plant Species

Two sensitive plant species have been determined to have potential to occur within the project area. These determinations are described in Table 6. These species include the Pima Indian mallow (*Abutilon parishii*) and mapleleaf false snapdragon (*Mabrya acerifolia*).

## Non-native Plant Species

Non-native species are also present in the project area, including red brome (*Bromus rubens*), an annual grass that presents a wildfire hazard. Additional non-native species include Mediterranean grass (*Schismus* sp.), buffelgrass (*Pennisetum ciliare*), fountain grass (*Pennisetum setaceum*), red-stem stork's (*Erodium cicutarium*), Malta starthistle (*Centaurea solstitialis*), prickly Russian thistle (*Salsola tragus*), silver-leaf nightshade (*Solanum elaeagnifolium*), and wild oats (*Avena fatua*).

Field surveys observed extensive proliferation of red brome throughout the lower elevations of the project area, with other species present primarily in disturbed areas, including roadways and mining exploration areas. However, species-specific surveys have not been conducted. Buffelgrass is listed as a noxious weed species in the state of Arizona. The Tonto National Forest Weed List classifies red brome, Mediterranean grass, buffelgrass, fountain grass, Malta starthistle, prickly Russian thistle, and wild oats as Class C weeds, which "have spread beyond our ability to eradicate them. Management goal is to contain spread to present size, then decrease the population if possible" (Forest Service, n.d. [2005]).

## **Environmental Consequences**

#### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of vegetation resources in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on vegetation, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

## **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surface-disturbing activities. Removal of livestock grazing from the portions of the Superior and Devil's Canyon Allotments pastures within the Apache Leap SMA would result in direct beneficial effects on vegetation resources, including general vegetation and suitable habitat for threatened and endangered and Tonto National Forest Sensitive plant species. Grazing can directly affect vegetation by altering soil and vegetation composition, density and structure, and species composition (Trimble and Mendel, 1995). The removal of grazing would improve soil conditions, directly benefiting vegetation resources. This would result in an increase in herbaceous and shrub density, cover, and diversity. The removal of grazing from portions of the project area would have a direct and indirect beneficial impact to vegetation and habitats.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the

forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA. Implementation of the management plan would have an overall beneficial impact to vegetation within the Apache Leap SMA.

The indirect, overall effects on vegetation resources from the management plan components, as outlined in the proposed action, are discussed below.

### **General Vegetation**

The decommissioning of roads on acquired private lands to non-motorized trail would result in minor, localized, indirect benefits to vegetation resources within an approximately 0.35-mile area proposed for decommissioning in the Arizona Upland subdivision – Sonoran Desertscrub vegetation community within the Apache Leap SMA. Roads generally degrade native vegetation, and these effects have been well documented (Forman and Alexander, 1998; Jones et al., 2008; Trombulak and Frissell, 2000; Walker and Everett, 1987). Vegetation degradation improvements from these decommissioning activities would have a minor, localized, indirect impact to the vegetation community in the approximately 0.35-mile area by allowing the native vegetation to return over time and reducing the fragmentation of the area as a benefit to plant species in that particular area.

Maintenance of existing transmission infrastructure and/or trails within the proposed Apache Leap SMA would be performed in a manner consistent with the protection of the natural character and values of the Apache Leap SMA. The long-term effects of constructing and maintaining trails could include the continued risk of establishment and spread of invasive plant species, which in turn could potentially adversely affect the natural character and scenery. As the plan components described in the management plan include the treatment of invasive plant species with the intent to protect the natural values of the special management area, the risk from establishment and spread of invasive species as a result of trail construction and maintenance would be minor.

The limits on construction of new communication sites, utility and transmission lines (referred to as utility infrastructure), and implementation of the NDAA withdrawal from mineral location, entry, and patent within the Apache Leap SMA would result in a net benefit to vegetation resources in the project area. There would be no potential for new construction related to communications or utilities, and there would be no potential for mining and associated mining infrastructure, such as roads, drill pads, or test pits, to impact vegetation resources. The proposed action would maintain the ecological values of the project area.

The prohibition of overnight camping within the proposed Apache Leap SMA would result in beneficial effects on vegetation in the project area. Overnight camping activities can result in the trampling of vegetation at camp sites, which could result in reductions of vegetative cover with repeated use over time (Marion and Cole, 1996). The prohibition of overnight camping would have a beneficial effect on vegetation resources in the project area.

### **Threatened and Endangered Plant Species**

The proposed action would have indirect long-term, beneficial effects on suitable habitat for the Arizona hedgehog cactus. Although Arizona hedgehog cacti have not been recorded within the project area, suitable habitat is present, and the species is more abundant to the north and east. The proposed action would manage the project area to protect the natural character of the area, and management activities such as conversion of existing roads to trails and limits on new construction of utility infrastructure would maintain, protect, and potentially increase suitable habitat for the species. Therefore, the proposed action would have no effect on the Arizona hedgehog cactus and would have an indirect beneficial impact on potentially suitable habitat for the species.

### **Tonto National Forest Sensitive Plant Species**

No sensitive plant species for the Tonto National Forest were observed within the project area during site visits. Species-specific surveys have not been performed, and potentially suitable habitat is present within the project area for both the Pima Indian mallow and mapleleaf false snapdragon. Therefore, these species may be present. The proposed action would have indirect, beneficial effects on potential habitat for Tonto National Forest Sensitive plant species, similar to the effects described for general vegetation.

### **Non-native Plant Species**

The proposed action would have indirect, beneficial effects on the risk of spread and/or establishment of populations of non-native plant species in the project area. The management approaches outlined in the management plan encourages the Forest Service to inventory existing populations of invasive plants and develop an integrated approach for preventing, controlling, or eradicating invasive species where they are currently present or may be present in the future. Treatments would result in a long-term, direct, beneficial effect on vegetation resources in the project area, as native vegetation could reestablish in areas currently occupied by invasive species, thereby improving and potentially increasing available habitat for native plants, compared with the current condition. The proposed action would result in a long-term, beneficial impact on the risk of spread and/or establishment of populations of invasive plants, thereby having a beneficial impact by maintaining and improving the ecological values of the project area.

### Cumulative Effects 16

Resolution Copper Project and Land Exchange – If the Resolution Copper Project and Land Exchange is approved and implemented as proposed, future activities associated with the construction and operation of the Resolution Copper Project East Plant Site (e.g., land clearing, equipment and motor vehicle use, operation of surface facilities, mining subsidence) would affect plant species and vegetation communities through direct and indirect impacts to the species themselves, as well as to their habitat. These impacts could extend into the Apache Leap SMA, including impacts from dust during mine construction and operation. However, the environmental analysis process is likely to include numerous mitigation measures to reduce these impacts.

Resolution Copper Pre-feasibility Hydrological Monitoring Wells – Resolution Copper would continue to have permitted administrative use of FR2440 in the Apache Leap SMA. Continued administrative use of FR2440, including road maintenance, could impact plant species from dust and vehicle crushing. The administrative use would continue to be subject to environmental protection measures, including those for biological resources, as described in the "Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Activities Plan of Operations Final Environmental Assessment" (Forest Service, 2016d).

NDAA-Authorized Activities – The NDAA-authorized activities of "installation of fences, signs, or other measures necessary to protect the health and safety of the public" and "installation of seismic monitoring equipment on the surface and subsurface" could result in impacts to plant species and vegetation communities in the Apache Leap SMA. However, the environmental review process for these NDAA-authorized activities would include mitigation measures to reduce these impacts.

Cumulative effects from these three anticipated future actions would contribute to impacts to vegetation resources, primarily from vegetation removal and risk of spreading of invasive and noxious weeds. The management plan addresses cumulative effects on vegetation through inclusion of desired conditions for retaining the natural ecological processes and native plant communities that are inherent to the area.

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<sup>&</sup>lt;sup>16</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

### Livestock Grazing

### Affected Environment

Livestock grazing is a historic and currently permitted use in the Apache Leap SMA. Portions of two cattle grazing allotments occur within the Apache Leap SMA: Devil's Canyon Allotment and Superior Allotment (Figure 8). The Devil's Canyon Allotment totals 26,605 acres, approximately 218 acres of which are located within the Apache Leap SMA boundary on the east side. The grazing permittee for this allotment is Resolution Copper. Currently, minimal grazing occurs on this allotment. Of the 58,671-acre Superior Allotment, approximately 621 acres are located in the Apache Leap SMA boundary on the west side. Herron Ranch holds the grazing permit for this allotment. However, the portion of the allotment within the Apache Leap SMA is steep and rugged, and minimal grazing occurs. Additional cattle grazing occurs on the private lands owned by Resolution Copper that would become part of the Apache Leap SMA through the Southeast Arizona Land Exchange.

Existing grazing infrastructure located throughout the Apache Leap SMA includes pasture fences (e.g., four-string barbed wire) and gates. There are three cattle tanks located adjacent to the southeastern border of the Apache Leap SMA (see Figure 8). Grazing permittees' access to the Apache Leap SMA allotments is provided as described above under access.

### Management Direction

Current management direction for Tonto National Forest rangeland resources is found in the forest plan. Range management direction includes the following:

Emphasize a program of range administration which will bring the range resource under proper management and improve range forage conditions. Investigate, control, minimize, and eliminate unauthorized livestock use as priority range management job. (Forest Service, 1985)

Suitable rangelands in MA 2F are managed at Level D, rangeland in less than satisfactory condition will be treated with improved grazing management along with the installation of structural and non-structural improvements (Forest Service, 1985).

### **Environmental Consequences**

### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of livestock grazing resources in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on livestock grazing, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

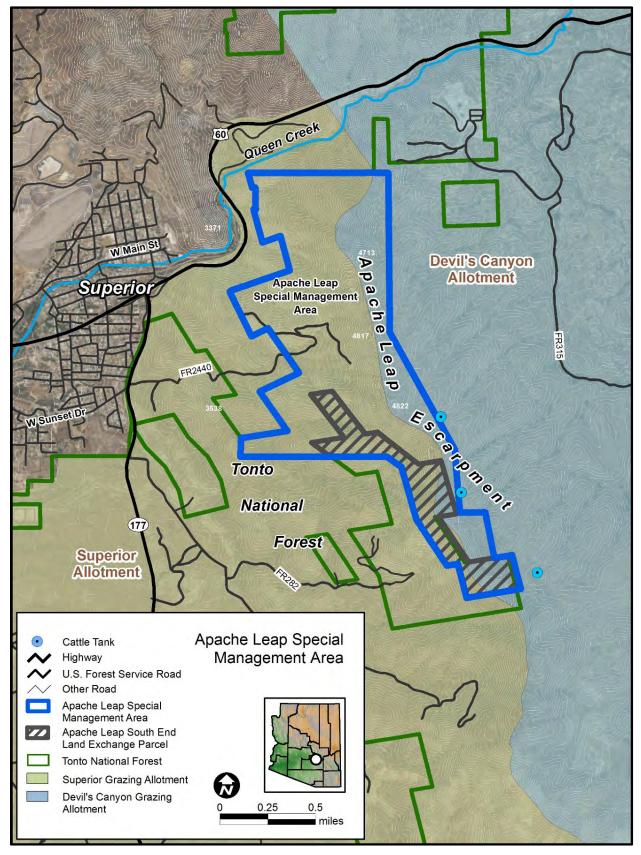


Figure 8. Existing livestock grazing allotments in the Apache Leap SMA.

### **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surface-disturbing activities. The proposed action would exclude livestock grazing on the Superior and Devil's Canyon Allotments within the Apache Leap SMA boundary (0.01% of the total Superior Allotment and 0.01% of the total Devil's Canyon Allotment). Livestock grazing exclusion from the Apache Leap SMA would have a direct, adverse effect on the ability to graze livestock on a small portion of the Superior and Devil's Canyon Allotments.

Effects on the allotment permittees would be minor as the excluded pastures constitute only 0.01% of each allotment, and the pastures are currently minimally grazed. The Forest Service would work with the existing permittees to identify the necessary adjustments to existing grazing allotment plans and to remove livestock from pastures in the Apache Leap SMA.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan. As management actions are implemented within the Apache Leap SMA, livestock grazing conditions would move toward the desired conditions described in the management plan. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

Future implementation actions and their direct effects of ground-disturbing activities and/or changes in management strategy, such as removal of existing range improvements, would be analyzed under a separate environmental review process. Future actions to implement livestock exclusion may include the installation of livestock exclusion fencing (e.g., four-string barbed wire). Fencing may be used in areas where livestock activity would be more likely, such as the three stock ponds located along the southeastern boundary of the Apache Leap SMA. Fencing would be installed consistent with the management plan standards and guidelines for the protection of natural, cultural, and scenic resources in the Apache Leap SMA. Future allotment plans and permits would exclude livestock grazing from pastures within the Apache Leap SMA.

### Cumulative Effects 17

**Resolution Copper Project and Land Exchange** – If the Resolution Copper Project and Land Exchange is approved and implemented as currently proposed, grazing would be excluded and/or significantly limited from the current Forest Service lands associated with the Resolution Copper Project and Land Exchange (approximately 6,822 acres). Cumulatively, the proposed action and the Resolution Copper Project and Land Exchange would exclude and/or significantly limit livestock grazing from approximately 7,661 acres of Forest Service lands.

### Wildland Fire

### Affected Environment

The wildlands of the arid Southwest include ecosystems that are adapted to fire as well as ones that have evolved without fire's influence. Within the project area, both kinds of ecosystems are represented as summarized below (see also the descriptions in the "Vegetation" section). Each ecosystem contributes uniquely to wildland fire management and wildfire risk.

<sup>&</sup>lt;sup>17</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

The Arizona Upland subdivision of the Sonoran Desertscrub vegetation community is characterized by shrubs, cacti, and leguminous trees and comprises the western portions of Apache Leap SMA—those areas below the escarpment. The Sonoran Desertscrub vegetation community is not fire adapted and is historically resistant to fires owing to variability in vegetation productivity and low fuel levels. The number of fires in this vegetation type has increased over the past 45 years with changes in climactic conditions and anthropogenic influences (Alford et al., 2005).

The Interior Chaparral vegetation type is a fire-adapted ecosystem characterized by dense stands of shrubs with thick, stiff, waxy evergreen leaves. The natural Interior Chaparral fire frequency varies from 30 to 100 years, depending upon specific site conditions. The shrub species that occupy Interior Chaparral are able to regenerate quickly following fires (Schalau and Twaronite, 2010) because of their ability to re-sprout from their root crowns. These fast-growing species form dense thickets after only 10 to 15 years post-fire. Mature stands become more susceptible to fire over time from the accumulation of dead stems and leaves in their crowns and on the ground below. As a result, when fires occur, they are intense surface fires affecting mostly the mature stands.

Fire history studies show that human-caused and naturally ignited fires in the area of Apache Leap are infrequent. Tonto National Forest fire records indicate that the last wildfire occurrence within the Apache Leap SMA was in 2012.

#### Wildfire Risk

There are several existing wildfire risk factors in the Apache Leap SMA. Non-native species are present in the Apache Leap SMA, including an extensive proliferation of the annual grass red brome, which contributes to fine fuel loads. Changes to the vegetation composition of the Sonoran Desertscrub and Interior Chaparral vegetation communities from the prevalence of fine fuels such as red brome and other non-native grasses have contributed to an increased wildfire risk. An increase in fine fuels is particularly evident in years with high rainfall (Alford et al., 2005). Livestock grazing can potentially reduce the abundance of fine fuels (Davies et al., 2010); however, the present minimal level of grazing occurring in the Apache Leap SMA is not observed to have an effect on the abundance of fire fuels.

An activity occurring in the Apache Leap SMA that contributes to an increased risk of human-caused wildfires is unmanaged, unattended, and/or improperly extinguished campfires. Pursuant to 16 U.S.C. 551 and 36 CFR 261.50(a) and (b), the Forest Supervisor may implement emergency fire restrictions to provide for the public's health and safety and to protect National Forest System lands, resources, and facilities from periods of severe fire danger. The Apache Leap SMA is subject to forest-wide policies for implementing emergency fire restrictions.

#### Management Direction

The policies of the National Wildfire Coordinating Group provide broad interagency direction for managing wildfires on public lands, including the Apache Leap SMA. Wildland fire starts on public lands are evaluated to determine an appropriate response and management objective (e.g., protection, resource enhancement). Wildland fire responses often involve resources from cooperating federal, state, and municipal fire protection units.

The project area occurs in forest plan MA 2F, which is currently designated as a General Management Area. Forest plan wildland fire management emphasis for MA 2F includes the following:

Wildland fires will be managed consistent with resource objectives. Wildland fires will be managed with an appropriate suppression response. Fire management objectives for this area include: providing a mosaic of age classes within the total type which will provide for a mix of successional states, and to allow fire to resume its natural ecological role within ecosystems. Wildland fires or portions of fires will be suppressed when they adversely affect forest resources, endanger public safety or have a potential to damage significant capital investments. (Forest Service, 1985)

### **Environmental Consequences**

#### No Action

Under the no action alternative, the management plan would not be approved or incorporated into the forest plan. Current management of wildland fire in the Apache Leap area would continue as prescribed in the forest plan and other guiding regulations and documents. Therefore, under this alternative, there would be no effects on wildland fire, as described above in the "Affected Environment" section.

The no action alternative would not comply with NDAA Section 3003(g), which mandates the preparation of an Apache Leap SMA management plan.

### **Proposed Action**

#### Direct Effects

The proposed action is a management plan and forest plan amendment and does not direct any surface-disturbing activities. Removal of livestock grazing from the portions of the Superior and Devil's Canyon Allotments pastures within the Apache Leap SMA would result in direct, beneficial effects on wildland fire resources. Exclusion of livestock grazing from the Apache Leap SMA would beneficially impact vegetation, as described above in the "Vegetation" section. Improvements to the vegetation composition of the Apache Leap SMA from livestock exclusion would have a direct, beneficial impact on wildland fire risk.

#### Indirect Effects

Indirect effects would result from future implementation of the management plan. As management actions are implemented within the Apache Leap SMA, wildland fire conditions would move toward the desired conditions described in the management plan. Indirect effects from the forest plan amendment are limited to the Apache Leap SMA and MA 2F. All other relevant direction from the forest plan, such as forest-wide standards and guidelines, would still apply to the Apache Leap SMA.

The desired condition for wildland fire is the protection of human life, property, and natural and cultural resources from damaging wildfires within and adjacent to the Apache Leap SMA. The management plan includes guidelines for determining the appropriate response to wildfires based on risk assessments, and the management approach encourages the Forest Service to manage wildfires for one or more objectives (e.g., protection, resource enhancement), which can change as the fire spreads across the landscape.

The management plan guidelines for wildfire are consistent with the natural fire regime of the vegetation types found in the Apache Leap SMA. Wildfires would be suppressed in the Sonoran Desertscrub vegetation type. In the Interior Chaparral vegetation type, wildland fire (wildfire and prescribed fire) would be managed to restore and maintain the natural fire regime. The future implementation of these guidelines would beneficially affect these vegetation communities by responding to and managing wildfires consistent with the natural wildfire regime.

The management plan also includes a guideline for wildland fire management that states that firelines, helispots, and fire camps should be located outside the Apache Leap SMA when feasible to avoid disturbance to critical species and impacts to cultural resources. Implementation of this guideline would have a beneficial effect on critical species and cultural resources.

#### Wildfire Risk

Future implementation of management actions for vegetation and livestock grazing would have an indirect, beneficial effect on the vegetation composition in the Apache Leap SMA through the eradication and control of invasive species and the reestablishment of native vegetation. Improvements to the vegetation composition, including a reduction in fine fuels such as red brome and other non-native grasses, would beneficially affect wildland fire conditions by reducing the risk of fine fuels' contributing to uncharacteristically high-severity fires for the Sonoran Desertscrub vegetation type.

The management plan would not change the current management of campfires in the Apache Leap SMA. There would be no change in wildfire risk from unmanaged, unattended, and/or improperly extinguished campfires.

### Cumulative Effects 18

Resolution Copper Project and Land Exchange – If Resolution Copper mining activities are approved and implemented as currently proposed, future activities associated with the construction and operation of the Resolution Copper Project East Plant Site (e.g., land clearing, equipment and motor vehicle use, operation of surface facilities) could increase the potential risk of human-caused wildfires on adjacent forested lands, including the Apache Leap SMA. If the Resolution Copper Project is approved as currently proposed, the project would include fire prevention measures, such as vegetation maintenance and worker policies for smoking and vehicle use, to lessen the risk of human-cause fires.

**NDAA-Authorized Activities** – Future surface disturbance and motorized use in the Apache Leap SMA associated with the NDAA-authorized activities (e.g., installation of seismic monitoring, fences, and signs) would increase the potential risk of human-caused wildfires in the Apache Leap SMA. During project-level environmental review for these actions, mitigation measures to reduce risk would be evaluated.

Ongoing and future activities occurring in the Apache Leap SMA and on adjacent lands would increase the risk of human-caused wildfires in the Apache Leap SMA. As implementation of the management plan occurs over time, the Apache Leap SMA would move toward the desired conditions, and the potential for future wildfires to develop into uncharacteristically high-severity fires would be reduced.

### **Finding of No Significant Impact**

The following is a summary of the project analysis to determine significance, as defined by the Council on Environmental Quality regulations (40 CFR 1508.27) and Forest Service Handbook 1909.15\_05. The significance of environmental impacts must be considered in terms of context and intensity. The significance of an action must be analyzed in the context of effects occurring on a local, regional, or global scale and the affected interests. Intensity refers to the severity of degree of impact.

### Context

For the proposed action and no action alternatives, the context of the environmental effects is based on the environmental analysis in this EA. Impacts associated with the proposed action would be local and are not

<sup>&</sup>lt;sup>18</sup> A description of the cumulative effects activities is provided in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."

likely to have international, national, regional, or state-wide importance. There are generally no direct impacts to resources from the proposed action because no ground-disturbing activities would be involved in amending the forest plan and implementing the management plan. Direct effects of the proposed action are limited to the "suitability of lands" designation in the management plan. The Apache Leap SMA management direction is restricted in geographic extent to the Apache Leap SMA and forest plan MA 2F only and would not have wide-ranging effects across the Tonto National Forest. The proposed action could have potential direct and indirect effects, identified in this EA, on various environmental and cultural resources found within the approximately 839-acre special management area.

### Intensity

Intensity is a measure of the severity, extent, or quantity of effects and is based on information from the effects analysis presented in this EA and references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. The finding of no significant impact is based on the context of the project and intensity of effects using the 10 factors identified in the Council on Environmental Equality regulations (40 CFR 1508.27(b)), described below.

# 1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The Apache Leap SMA management plan would affect resources as described in this EA. The proposed action is the adoption of a management plan and amendments to the existing forest plan to incorporate new plan components for the Apache Leap SMA. It does not direct any surface-disturbing activities. Direct effects of the proposed action are limited to the "suitability of lands" determinations; therefore, direct effects of the proposed action would only occur from the exclusion of livestock grazing from the portions of the Superior and Devil's Canyon Allotments that are in the Apache Leap SMA. Livestock grazing exclusion would have both adverse and beneficial effects on resources, as described in this EA. Indirect beneficial and adverse effects could additionally result from implementation of future actions, as described in this EA. The management plan components were designed to reduce adverse impacts and promote beneficial impacts from plan implementation; therefore, on balance, direct and indirect impacts are largely beneficial. Mitigation measures to reduce impacts to environmental and cultural resources would be incorporated in the design of any future activities, with associated resource studies and appropriate environmental review to disclose any adverse effects. None of the environmental effects presented in this EA are considered significant.

### 2. The degree to which the proposed action affects public health or safety.

The Apache Leap SMA management plan is designed to have no substantial effect on public health or safety. The management plan includes guidelines to mitigate public safety hazards associated with the historic mine features in the Apache Leap SMA (see "Mineral Resources" section). Future implementation of these mitigation actions would have a beneficial effect on public health and safety in the Apache Leap SMA. Potential future implementation of projects proposed in the Apache Leap SMA (including the NDAA-authorized activities in Section 3003(g)(4)(b)(ii) related to fences, signs, and other measures) would be designed and mitigated in a manner that would not result in adverse effects on public health and safety. The environmental review process and adherence to federal, state, and local regulations, laws, permits, and policy ensure safety standards and protocols.

## 3. Unique characteristics of the geographic area such as the proximity to historical or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The EA discloses the potential for impacts to unique characteristics of the geographic area. The Apache Leap SMA contains areas with unique vegetation (two distinct biotic communities), regionally distinct natural character and scenery, unique opportunities for dispersed recreation use, and important cultural resources. The majority of the Apache Leap SMA lies within the boundaries of *Chi'chil Bildagoteel* Historic District. Ninety-four percent of the Apache Leap SMA has been surveyed for cultural or historical sites. As described in this EA, the approval and implementation of the plan would have an overall beneficial impact to cultural and historic resources within the Apache Leap SMA. The following unique characteristics are not affected because they are not present within Apache Leap SMA: designated wilderness, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

## 4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects on the quality of the human environment are not likely to be highly controversial. The term "controversial" in this context refers to cases where there is substantial scientific dispute regarding the effects of a proposed action, rather than opposition to its adoption. Though many public comments received during preparation of the Apache Leap SMA management plan indicated opposition to the proposed Resolution Copper Project and Land Exchange EIS process, there is no known credible scientific controversy over the impacts of the proposed action described in this EA. Site-specific environmental review would be performed to address specific effects on resources at the time of any future project development.

# 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The EA analysis shows that there are no unique, highly uncertain, or unknown environmental risks associated with approval of the Apache Leap SMA management plan. The proposed action is similar to other planning actions proposed on the Tonto National Forest. As such, effects from this type of proposed planning action are well known to the interdisciplinary team. Many public comments raised concerns about the proposed Resolution Copper Project and Land Exchange (located directly east of the Apache Leap SMA); those concerns will be analyzed as part of the Resolution Copper Project and Land Exchange EIS.

# 6. The degree to which the action may establish precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The proposed action does not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. It contains a management strategy for preserving and managing the natural character of the Apache Leap SMA and its values, pursuant to the terms set forth in the NDAA (NDAA Section 3003(g)(1–6)). The plan components for the Apache Leap SMA form a strategic management plan that is programmatic in nature and does not authorize specific projects or activities. All future proposed actions within the Apache Leap SMA would be subject to the appropriate level of environmental review and analysis, public involvement, and pre-decisional administrative review procedures. In response to NDAA direction and public concerns about potential future impacts of the Resolution Copper proposed "General Plan of Operations," the management plan includes plan components that would apply in the event that the proposed "General Plan of Operations" is approved. However, approval of the "General Plan of Operations" and the land exchange will be analyzed separately in the Resolution Copper Project and Land Exchange EIS (see intensity item 7), and this decision does not represent a decision in principle about the future EIS.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Commenters expressed concern that the Apache Leap SMA management plan proposed action is connected to the Resolution Copper Project and Land Exchange EIS. The EA discusses the cumulative effects of the proposed Resolution Copper Project and Land Exchange on the resources analyzed. The Forest Service does not consider the management plan and the Resolution Copper Project and Land Exchange connected because of the following reasons. (1) The Apache Leap SMA is a statutorily designated area that came into existence through enactment of the NDAA. The Forest Service is complying with the direction at NDAA Section 3003(g)(5)(a) to prepare a management plan that furthers the purposes for which the area was designated within 3 years from the date of enactment of the Act. Land exchange activities are not required for the Apache Leap SMA to come into existence. (2) The Forest Service has exercised its discretion, consistent with NDAA Section 3003(c)(9)(D), to use separate environmental review documents prepared in accordance with the National Environmental Policy Act to assess the effects of the management plan and associated forest plan amendment. (3) The proposed action does not involve (i) the land exchange decision and activities or (ii) the extraction of minerals in commercial quantities by Resolution Copper on or under federal land.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The majority of the Apache Leap SMA lies with the boundaries of the *Chi'chil Bildagoteel* Historic District, listed in the National Register of Historic Places as a Traditional Cultural Property (January 4, 2016). Currently, four archaeological sites within Apache Leap SMA are considered contributing to the district's eligibility. The approval and implementation of the plan would have an overall beneficial impact to cultural and historic resources within the Apache Leap SMA because the proposed action is designed to maintain the natural character and would protect and conserve cultural and historic resources within the entire Apache Leap SMA. Indirect beneficial effects would result from future implementation of the management plan, which includes modified desired conditions, standards, guidelines, and management approaches to protect archaeological sites within the *Chi'chil Bildagoteel* Historic District, thereby preserving the significance of the historic and cultural resources of the Apache Leap SMA, as recognized in the National Register of Historic Places.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Federally listed endangered or threatened wildlife species are unlikely to occur within the project area. The ocelot (*Leopardus pardalis*) has been recorded within 5 miles of the Apache Leap SMA but is not known to occur in the Apache Leap SMA. Habitat for the species is lacking in the Apache Leap SMA, and connectivity to known occurrences is also lacking. As discussed in this EA (see "Wildlife" section), the proposed action would result in minor, beneficial, direct and indirect effects on potentially suitable ocelot habitat within the project area.

One federally listed plant species, the Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus*), is not known to occur within Apache Leap SMA. However, it has been recorded in the vicinity, and suitable habitat is present within the Apache Leap SMA. As discussed in this EA, the proposed action would have no effect on the Arizona hedgehog cactus and would have an indirect, beneficial impact on potentially suitable habitat for the species (see "Vegetation" section). The 2017 biological evaluation (SWCA Environmental Consultants, 2017) regarding the ocelot and Arizona hedgehog cactus supports this conclusion.

# 10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Implementation of the Apache Leap SMA management plan and forest plan amendment does not violate any known federal, state, or local law or requirement imposed for the protection of the environment. Additionally, following the proposed plan amendment, the special management area would be consistent with applicable land management planning policies and programs.

### Conclusion

The environmental effects described in the EA and documentation included in the project record have been reviewed and considered. The responsible official (Neil Bosworth, Forest Supervisor) has examined the context and intensity of impacts (40 CFR 1508.27) described above and determined that the Apache Leap SMA management plan and forest plan amendment will not have a significant effect on the quality of the human environment. As a result, no environmental impact statement will be prepared.

### **Agencies and Persons Consulted**

The Forest Service has engaged with Resolution Copper, the Town of Superior, and interested members of the public through the following efforts:

- Public input period from October 6, 2016, through January 31, 2017;
- Public workshop held in Superior on October 20, 2016;
- Development of the Apache Leap SMA website (www.ApacheLeapSMA.us), which went live on October 7, 2016;
- A presentation to the Community Working Group on November 9, 2016;
- A presentation to the Recreation User Group, a subcommittee of the Community Working Group, on December 7, 2016;
- A presentation to the Superior Town Council on January 12, 2017;
- Public meeting on the proposed management plan and scoping for the EA on April 4, 2017; and
- A presentation to the Community Working Group on May 10, 2017.

Consultation with Indian tribes was initiated regarding the Apache Leap SMA management plan via letter on September 26, 2016, with the following tribes:

- San Carlos Apache Tribe
- Tonto Apache Tribe
- Mescalero Apache Tribe
- White Mountain Apache Tribe
- Yavapai-Apache Nation
- Fort McDowell Yavapai Nation
- Yavapai Prescott Indian Tribe
- Gila River Indian Community
- Salt River Pima-Maricopa Indian Community

- Hopi Tribe
- Pueblo of Zuni

Between September 2016 and July 2017, the Forest Service held tribal consultation meetings to discuss the Apache Leap SMA management plan on the following dates:

- November 29, 2016, with the Fort McDowell Yavapai Nation and Yavapai Prescott Indian Tribe
- December 9, 2016, with the Mescalero Apache Tribe, San Carlos Apache Tribe, and Tonto Apache Tribe
- December 13, 2016, with the Pueblo of Zuni
- December 14, 2016, with the San Carlos Apache Tribe
- December 20, 2016, with the Fort McDowell Yavapai Nation and Yavapai-Apache Nation
- December 30, 2016, with the Salt River Pima-Maricopa Indian Community and Gila River Indian Community
- January 10, 2017, with the Salt River Pima-Maricopa Indian Community and Gila River Indian Community
- February 16, 2017, with the Yavapai-Apache Nation
- March 8, 2017, with the Mescalero Apache Nation
- March 29, 2017, with the Hopi Tribe
- April 27, 2017, with the Mescalero Apache Tribe, San Carlos Apache Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, Ak-Chin Indian Community, Gila River Indian Community, and Salt River Pima-Maricopa Indian Community
- May 16, 2017, with the Mescalero Apache and Ak-Chin Indian Community
- July 5, 2017, with the Yavapai-Apache Nation

The Forest Service and the Arizona State Historic Preservation Office coordinated the determinations of the Heritage Specialist Report, as required by Section 106 of the National Historic Preservation Act, in June 2017.

The Forest and the U.S. Fish and Wildlife Service coordinated the findings of the biological evaluation, as required by Section 7 of the Endangered Species Act, in June 2017.

### **Acronyms**

AGFD Arizona Game and Fish Department

Apache Leap SMA Apache Leap Special Management Area

CFR Code of Federal Regulations

EA environmental assessment

EIS environmental impact statement

EPA U.S. Environmental Protection Agency

forest plan Tonto National Forest Land and Resource Management Plan

FR Forest Road

MA Management Area

NDAA the Carl Levin and Howard P. "Buck" McKeon National Defense

Authorization Act for Fiscal Year 2015

PL Public Law

Resolution Copper Resolution Copper Mining, LLC

ROS Recreation Opportunity Spectrum

SIO scenic integrity objective

SR State Route

Travel Management Final EIS Travel Management on the Tonto National Forest Final

**Environmental Impact Statement** 

U.S. Route

U.S.C. United States Code

VQO visual quality objective

### **Glossary**

### Α

Adit—A horizontal passage leading into a mine or tunnel for the purposes of access, ventilation, or drainage.

Affected environment—The resource values potentially affected by the proposed action and alternatives, analyzed in a National Environmental Policy Act document.

Access road—A motorized route giving access to a place or to another motorized route.

Archaeological resources—See Cultural resources.

### C

Closure (management area)—An order that may be made by the Authorized Officer restricting public access and use of a specified portion or parts of the special management area for a specified time.

Consultation (Section 106 of the National Historic Preservation Act)—See National Historic Preservation Act Section 106 consultation.

Council on Environmental Quality—An advisory council to the President of the United States established by the National Environmental Policy Act of 1969. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the President on environmental matters.

Cultural resources—An object or definite location of human activity, occupation, or use identifiable through field survey, historical documentation, or oral evidence. Cultural resources are prehistoric, historic, archaeological, or architectural sites, structures, places, or objects and traditional cultural properties.

### D

Decision notice—A concise written record of a responsible official's decision when an environmental assessment and a finding of no significant impact (FONSI) have been prepared (36 CFR 220.3).

Decommissioned road—A road that is or may have been part of the National Forest System road network but that is proposed for decommissioning or has been decommissioned by abandoning the road and removing it from the National Forest System road database. Decommissioning activities may range from simply closing the road administratively, to actively closing and scarifying the road surface, to recontouring the road.

Designation (road)—A National Forest System road that is designated by vehicle class, and if appropriate, by time of year, pursuant to 36 CFR 212.51 on a motor vehicle use map.

Desired condition—A desired condition is a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described

in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates (36 CFR 219.7(e)(1)(i)).

Dispersed recreation opportunities—In contrast to developed recreation sites, dispersed recreation areas are the lands and waters under Forest Service jurisdiction that are not developed for intensive recreation use. Dispersed areas include general undeveloped areas, roads, trails, and water areas not treated as developed sites.

### Ε

Endangered species (federally listed)—Any species that is in danger of extinction throughout all or a significant portion of its range.

Environmental assessment (EA)—A concise public document for which a federal agency is responsible that briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

### F

Forest land and resource management plan—A plan written for the management of a National Forest. These plans were mandated by the National Forest Management Act of 1976.

### G

Game management unit—An area established by the Arizona Game and Fish Department Commission for management purposes, commonly referred to as GMU or Unit.

General plan of operations—A description of proposed mineral exploration or mining, including name and address of the operator, location of the operation, access to the operation, the period in which the operation would take place, and other information as required by the Forest Service in accordance with agency regulations at 36 CFR 228.4.

Grazing allotment—A designated area of land available for livestock grazing.

Grazing permit—Any document authorizing livestock to use National Forest System or other lands under Forest Service control for the purpose of livestock production, including temporary grazing permits and term permits.

Guidelines—A constraint on project and activity decision-making that allows for departure from its terms, so long as the purpose of the guideline is met (36 CFR 219.15(d)(3)). Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7(e)(1)(iv)).

### Н

Heritage resources—See Cultural resources.

### J

Jurisdiction—The legal right to control or regulate use of land or a facility. Jurisdiction requires authority but not necessarily ownership.

### I

Land exchange (federal)—An exchange of federal land for a package of multiple ownership parcels of non-federal land consolidated for purposes of one land exchange transaction (36 CFR 254).

Landscape character—The combination of physical, biological, and cultural features that makes each landscape visually identifiable and unique.

### M

Management area—An area that has common direction throughout that differs from neighboring areas. The entire national forest is divided into management areas. Each is described, and policies and prescriptions relating to their use are listed.

Management direction—A statement of multiple use and other goals and objectives, management prescriptions, and associated standards and guidelines for governing them.

Mineral development—Extraction and processing of certain mineral materials (locatable minerals) that is legally conducted under the Mining Law of 1872.

Mineral entry—The right under the Mining Law of 1872 to enter nonwithdrawn public domain land, such as national forests, and to explore for, extract, and sell certain mineral materials (locatable minerals), protected by the filing of a lode, placer, or mill site claim.

Mineral exploration—Testing, drilling, or measuring of certain mineral materials (locatable minerals) that is legally conducted under the Mining Law of 1872 to determine suitability of mineral development.

Mineral reserves—Known mineral deposits that are recoverable under present conditions but are as yet undeveloped.

Mineral rights—An ownership interest in minerals that may or may not be owned by the person or party having title to the surface estate.

Mineral withdrawal—An action that withdraws federal public domain land from any mining and mineral development activity or staking of a mining claim within the boundaries of the designated area, excluding areas with valid prior existing rights.

Mitigate, mitigation—To cause to become less severe or harmful; actions to avoid, minimize, rectify, reduce, eliminate, or compensate for impacts to environmental resources.

Motor vehicle use map—A map reflecting designated roads, trails, and areas on an administrative unit or a Ranger District of the National Forest System.

Motorized trail—A National Forest System trail that is designated by vehicle class, and if appropriate, by time of year, pursuant to 36 CFR 212.51 on a motor vehicle use map.

Motorized use area—A National Forest System area that is designated by vehicle class, and if appropriate, by time of year, pursuant to 36 CFR 212.51 on a motor vehicle use map.

### Ν

National Environmental Policy Act of 1969—The national charter for protecting the environment. The National Environmental Policy Act establishes policy, sets goals, and provides means for carrying out the policy. Regulations from 40 CFR 1500 to 1508 implement the act.

National Historic Preservation Act Section 106 consultation—If historic properties are found to be affected by an undertaking, the responsible federal official must identify the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer to consult with during the process, involving the public, and identify other potential consulting parties. If the responsible federal official determines that it has no undertaking, or that its undertaking is a type of activity that has no potential to affect historic properties, the agency has no further Section 106 obligations.

National Register of Historic Places—A listing (maintained by the National Park Service) of areas that have been designated as being of historical significance.

Non-motorized—Activity or equipment that is not operated by motor, engine, or other power source.

### O

Objective—An objective is a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets (36 CFR 219.7(e)(1)(ii)).

Objection period—The allotted filing period following publication of a public notice in the applicable newspaper of record (or the Federal Register, if the responsible official is the Chief) of the availability of the appropriate environmental documents and draft decision document, including a plan, plan amendment, or plan revision during which an objection may be filed with the reviewing officer (36 CFR 219.62).

### Р

Patent—A document by which the United States conveys, to those entitled thereto, legal title to some portion of the public lands.

Patented claims—A mining claim to which the federal government has granted the claimant all surface and some or all mineral rights. Patented mining claims are private land and may be sold or used for other than mining activity, such as residential or recreational use.

Plan of operations—See General plan of operations.

Property boundary—A landownership division line between two parcels of land. A separation of real property rights.

Proposed plan of operations—See General plan of operations.

### R

Ranger District—Administrative subdivisions of the forest supervised by a district ranger who reports to the forest supervisor.

Recreation Opportunity Spectrum—A land classification system that categorizes National Forest System land into six classes, each class being defined by its setting and by the probable recreation experiences and activities it affords. The six classes in the spectrum are: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban. Recreation Opportunity Spectrum classes present within and in the immediate surroundings of the Apache Leap SMA include:

Roaded natural—Characterized by providing for a wide range of recreation activities that are generally focused along the primary and secondary travel routes in a natural-appearing, roaded, motorized setting

Semi-primitive motorized—Characterized by moderately dominant alterations by man, with strong evidence of primitive roads and/or trails

Semi-primitive non-motorized—Characterized by few and/or subtle modifications by man, and with a high probability of isolation from the sights and sounds of man

Urban—Characterized by areas or recreation sites that can be used by large numbers of people at one time

Region 3—A Forest Service organizational unit—the Southwestern Region—consisting of all national forests in New Mexico and Arizona, plus four national grasslands in Texas, Oklahoma, and New Mexico.

Road closure—Not allowing motorized vehicles on a road by physically blocking access and/or posting notices and/or signs. The road remains on the forest transportation inventory system with the intent of reusing the road at a future time.

Roaded natural—See Recreation Opportunity Spectrum definition.

### S

Scenery Management System—A Forest Service tool for integrating the benefits, values, desires, and preferences regarding aesthetics and scenery for all levels of land management planning on all National Forest System lands. It provides an overall framework for the orderly inventory, analysis, and management of scenery.

Scenic integrity—The degree to which the landscape character is, or appears to be, intact, unaltered, and natural appearing. High scenic integrity means the human activities and impacts are not obviously visible in the landscape; low scenic integrity means that the landscape has been obviously altered and impacted by human activity.

Scenic quality—The attributes of a landscape that, when viewed by individuals, can elicit a sense of the beauty of nature and a sense of pleasure. This response to the landscape can help to produce and maintain psychological and physical health.

Scoping—A term used to identify the process for determining the range of issues related to a proposed action and for identifying significant issues to be addressed in an environmental impact statement. Scoping may involve public meetings, field interviews with representatives of agencies and interest groups, discussions with resource specialists and managers, and comments received by the lead federal agency in response to news releases, direct mailings, articles, and Internet postings about the proposed action.

Scoping period—An early and open process with an allotted time period for determining the scope of the issues to be addressed by the environmental assessment, seeking input from affected federal agencies, Indian tribes, state agencies, local governments and non-governmental organizations, stakeholders, and the general public.

Semi-primitive motorized—See Recreation Opportunity Spectrum definition.

Semi-primitive non-motorized—See Recreation Opportunity Spectrum definition.

Sensitive species—Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by: 1. Significant current or predicted downward trends in population numbers or density; and 2. Significant current or predicted downward trends in habitat capability that would reduce a species existing distribution (Forest Service Manual 2670.5.19).

Special management area—An area or feature identified and managed to maintain its unique special character or purpose (36 CFR 219.19).

Special use permit—A permit that grants rights or privileges of occupancy and use subject to specified terms and conditions on National Forest System land. These permits are used to authorize a broad range of activities.

Standard—A standard is a mandatory constraint on project and activity decision-making, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7(e)(1)(iii)).

State Historic Preservation Office—A state governmental function created by the federal government in 1966 under Section 101 of the National Historic Preservation Act.

Suitability of lands—Specific lands within a plan area will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. The suitability of lands need not be identified for every use or activity. Suitability identifications may be made after consideration of historic uses and of issues that have arisen in the planning process. Every plan must identify those lands that are not suitable for timber production (36 CFR 219.11 and 219.7(e)(1)(v)).

### U

Unpatented claim—A claim made by a qualified person for possession of locatable minerals on public land (e.g., national forests). A properly recorded claim entitles the claimant to reasonable access to the claim and exclusive right to extract and sell valuable minerals from the claim. Unpatented mining claims may be occupied and used solely for mining and related activity.

Urban—See Recreation Opportunity Spectrum definition.

### V

Visual or scenic resources—The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area. Used to describe the landscapes and scenery in a given area. Visual resources encompass all the visible natural features in the landscape, such as mountains, forests, rocks, open water, estuaries,

and streams. Visual resources also include the existing manmade structures on the landscape, such as cabins, houses, commercial buildings, utility corridors, and roads.

Visual quality objectives—The degree of acceptable alteration of the characteristic landscape.

Visual sensitivity—Areas or landscapes that are most interesting and appealing to the public and whose changed scenic values would be of concern to the public.

### W

Wildfire—Any fire on wildlands that was not intentionally set for management purposes and confined to a predetermined area.

Withdraw, withdrawn—See Mineral withdrawal.

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# Appendix A: Section 3003 of the NDAA NDAA Section 3003

### Sec. 3003 Southeast Arizona Land Exchange and Conservation.

- (a) Purpose. The purpose of this section is to authorize, direct, facilitate, and expedite the exchange of land between Resolution Copper and the United States.
- (b) Definitions. In this section:
  - (1) APACHE LEAP. The term "Apache Leap" means the approximately 807 acres of land depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Apache Leap" and dated March 2011
  - (2) FEDERAL LAND. The term "Federal land" means the approximately 2,422 acres of land located in Pinal County, Arizona, depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Federal Parcel-Oak Flat" and dated March 2011.
  - (3) INDIAN TRIBE. The term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).
  - (4) NON-FEDERAL LAND. The term "non-Federal land" means the parcels of land owned by Resolution Copper that are described in subsection (d)(1) and, if necessary to equalize the land exchange under subsection (c), subsection (c)(5)(B)(i)(I).
  - (5) OAK FLAT CAMPGROUND. The term "Oak Flat Campground" means the approximately 50 acres of land comprising approximately 16 developed campsites depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-0ak Flat Campground" and dated March 2011.
  - (6) OAK FLAT WITHDRAWAL AREA. The term "Oak Flat Withdrawal Area" means the approximately 760 acres of land depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-0ak Flat Withdrawal Area" and dated March 2011.
  - (7) RESOLUTION COPPER. The term "Resolution Copper" means Resolution Copper Mining, LLC, a Delaware limited liability company, including any successor, assign, affiliate, member, or joint venturer of Resolution Copper Mining, LLC.
  - (8) SECRETARY. The term "Secretary" means Secretary of Agriculture.
  - (9) STATE. The term "State" means the State of Arizona.
  - (10) TOWN. The term "Town" means the incorporated town of Superior, Arizona.
  - (11) RESOLUTION MINE PLAN OF OPERATIONS. The term "Resolution mine plan of operations" means the mine plan of operations submitted to the Secretary by Resolution Copper in November, 2013, including any amendments or supplements.

### (c) LAND EXCHANGE

- (1) IN GENERAL. Subject to the provisions of this section, if Resolution Copper offers to convey to the United States all right, title, and interest of Resolution Copper in and to the non-Federal land, the Secretary is authorized and directed to convey to Resolution Copper, all right, title, and interest of the United States in and to the Federal land.
- (2) CONDITIONS ON ACCEPTANCE. Title to any non-Federal land conveyed by Resolution Copper to the United States under this section shall be in a form that-

- A. is acceptable to the Secretary, for land to be administered by the Forest Service and the Secretary of the Interior, for land to be administered by the Bureau of Land Management; and
- B. conforms to the title approval standards of the Attorney General of the United States applicable to land acquisitions by the Federal Government.
- (3) CONSULTATION WITH INDIAN TRIBES.
  - A. IN GENERAL. The Secretary shall engage government-to-government consultation with affected Indian Tribes concerning issues of concern to the affected Indian tribes related to the land exchange.
  - B. IMPLEMENTATION. Following the consultations under paragraph (A), the Secretary shall consult with Resolution Copper and seek to find mutually acceptable measures to
    - i. address the concerns of the affect Indian tribes; and
    - ii. minimize adverse effects on the affected Indian tribes resulting from mining and related activities on the Federal land conveyed to Resolution Copper under this section.

#### (4) APPRAISALS. –

- A. IN GENERAL. As soon as practicable after the date of enactment of this Act, the Secretary and Resolution Copper shall select an appraiser to conduct appraisals of the Federal land and non-Federal land in compliance with the requirements of section 254.9 of title 36, Code of Federal Regulations.
- B. REQUIREMENTS. -
  - i. IN GENERAL. Except as provided in clause (ii), an appraisal prepared under this paragraph shall be conducted in accordance with national recognized appraisal standards, including
    - I. the Uniform Appraisals Standards for Federal Land Acquisitions; and
    - II. the Uniform Standards of Professional Appraisal Practice.
  - ii. FINAL APPRAISED VALUE. After the final appraised values of the Federal land and non-Federal land are determined and approved by the Secretary, Secretary shall not be required to reappraise or update the final appraised value –
    - I. for a period of 3 years beginning on the date of the approval by the Secretary of the final appraised value; or
    - II. at all, in accordance with section 254.14 of title 36, Code of Federal Regulations (or a successor regulation), after an exchange agreement is entered into by Resolution Copper and the Secretary.
  - iii. IMPROVEMENTS. Any improvements made by Resolution Copper prior to entering an exchange agreement shall not be included in the appraised value of the Federal land.
  - iv. PUBLIC REVIEW. Before consummating the land exchange under this section, the Secretary shall make the appraisals of the land to be exchange (or a summary thereof) available for public review.

- C. APPRAISAL INFORMATON. The appraisal prepared under this paragraph shall include a detailed income capitalization approach analysis of the market value of the Federal land which may be utilized, as appropriate, to determine the value of the Federal land, and shall be the basis for calculation of any payment under subsection (e).
- (5) EQUAL VALUE LAND EXCHANGE. -
  - A. IN GENERAL. The value of the Federal land and non-Federal land to be exchanged under this section shall be equal or shall be equalized in accordance with this paragraph.
  - B. SURPLUS OF FEDERAL LAND VALUE. -
    - i. IN GENERAL. If the final appraised value of the Federal land exceeds the value of the non-Federal land, Resolution Copper shall –
      - convey additional non-Federal land in the State to the Secretary or the Secretary of the Interior, consistent with the requirements of this section and subject to the approval of the applicable Secretary;
      - II. make a cash payment to the United States; or
      - III. use a combination of the methods described in subclauses (I) and (II), as agreed to by Resolution Copper, the Secretary, and the Secretary of the Interior.
    - ii. AMOUNT OF PAYMENT. The Secretary may accept a payment in excess of 25 percent of the total value of the land or interests conveyed, notwithstanding section 206(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716(b)).
    - iii. DISPOSITION AND USE OF PROCEEDS. Any amounts received by the United States under this subparagraph shall be deposited in the fund established under Public Law 90-171 (commonly known as the "Sisk Act" 16 U.S.C. 484a) and shall be made available to the Secretary for the acquisition of land or interests in land in Region 3 of the Forest Service.
  - C. SURPLUS OF NON-FEDERAL LAND. If the final appraised value of the non-Federal land exceeds the value of the Federal land
    - i. the United States shall not make a payment to Resolution Copper to equalize the value; and
    - ii. except as provided in subsection (h), the surplus value of the non-Federal land shall be considered to be a donation by Resolution Copper to the United States.
- (6) OAK FLAT WITHDRAWAL AREA. -
  - A. PERMITS. Subject to the provisions of this paragraph and notwithstanding any withdrawal of the Oak Flat Withdrawal Area from the mining, mineral leasing, or public land laws, the Secretary, upon enactment of this Act, shall issue to Resolution Copper-

- i. if so requested by Resolution Copper, within 30 days of such request, a special use permit to carry out mineral exploration activities under the Oak Flat Withdrawal Area from existing drill pads located outside the Area, if the activities would not disturb the surface of the Area; and
- ii. if so requested by Resolution Copper, within 90 days of such request, a special use permit to carry out mineral exploration activities within the Oak Flat Withdrawal Area (but not within the Oak Flat Camp- ground), if the activities are conducted from a single exploratory drill pad which is located to reasonably minimize visual and noise impacts on the Campground.
- B. CONDITIONS. Any activities undertaken in accordance with this paragraph shall be subject to such reason- able terms and conditions as the Secretary may require.
- C. TERMINATION. The authorization for Resolution Copper to undertake mineral exploration activities under this paragraph shall remain in effect until the Oak Flat Withdrawal Area land is conveyed to Resolution Copper in accordance with this section.
- (7) COSTS. As a condition of the land exchange under this section, Resolution Copper shall agree to pay, without compensation, all costs that are –
  - A. associated with the land exchange and any environ- mental review document under paragraph (9); and
  - B. agreed to by the Secretary.
- (8) USE OF FEDERAL LAND. The Federal land to be conveyed to Resolution Copper under this section shall be available to Resolution Copper for mining and related activities subject to and in accordance with applicable Federal, State, and local laws pertaining to mining and related activities on land in private ownership.
- (9) ENVIRONMENTAL COMPLIANCE.
  - A. IN GENERAL. Except as otherwise provided in this section, the Secretary shall carry out the land exchange in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
  - B. ENVIRONMENTAL ANALYSIS. Prior to conveying Federal land under this section, the Secretary shall prepare a single environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), which shall be used as the basis for all decisions under Federal law related to the proposed mine and the Resolution mine plan of operations and any related major Federal actions significantly affecting the quality of the human environment, including the granting of any permits, rights-of-way, or approvals for the construction of associated power, water, transportation, processing, tailings, waste disposal, or other ancillary facilities.
  - C. IMPACTS ON CULTURAL AND ARCHAEOLOGICAL RESOURCES. The environmental impact statement prepared under subparagraph (b) shall –

- assess the effects of the mining and related activities on the Federal land conveyed to Resolution Copper under this section on the cultural and archeological resources that may be located on the Federal land; and
- ii. identify measures that may be taken, to the extent practicable, to minimize potential adverse impacts on those resources, if any.
- D. EFFECT. Nothing in this paragraph precludes the Secretary from using separate environmental review documents prepared in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) or other applicable laws for exploration or other activities not involving
  - i. the land exchange; or
  - ii. the extraction of minerals in commercial quantities by Resolution Copper on or under the Federal land.
- (10) TITLE TRANSER. Not later than 60 days after the date of publication of the final environmental impact statement, the Secretary shall convey all right, title, and interest of the United States in and to the Federal land to Resolution Copper.
- (d) CONVEYANCE AND MANAGEMENT OF NON-FEDERAL LAND. -
  - (1) CONVEYANCE. On receipt of title to the Federal land, Resolution Copper shall simultaneously convey-
    - A. to the Secretary, all right, title, and interest that the Secretary determines to be acceptable in and to
      - the approximately 147 acres of land located in Gila County, Arizona, depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-Turkey Creek" and dated March 2011;
      - ii. the approximately 148 acres of land located in Yavapai County, Arizona, depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-Tangle Creek" and dated March 2011;
      - iii. the approximately 149 acres of land located in Maricopa County, Arizona, depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-Cay e Creek" and dated March 2011;
      - iv. the approximately 640 acres of land located in Coconino County, Arizona, depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-East Clear Creek" and dated March 2011; and
      - v. the approximately 110 acres of land located in Pinal County, Arizona, depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-Apache Leap South End" and dated March 2011; and
    - B. to the Secretary of Interior, all rights, title, and interest that the Secretary of Interior determines to be acceptable in and to
      - i. the approximately 3,050 acres of land located in Pinal County, Arizona, identified as "Lands to DOI" as generally depicted on the map entitled "Southeast Arizona Land Exchange and

- Conservation Act of 2011- Non-Federal Parcel-Lower San Pedro River" and dated July 6, 2011;
- ii. the approximately 160 acres of land located in Gila and Pinal Counties, Arizona, identified as "Lands to DOI" as generally depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-Dripping Springs" and dated. July 6, 2011; and
- iii. the approximately 940 acres of land located in Santa Cruz County Arizona identified as "Lands to DOI" as generally 'depicted' on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Non-Federal Parcel-Appleton Ranch" and dated July 6, 2011.
- (2) MANAGEMENT OF ACQUIRED LAND. -
  - A. LAND ACQUIRED BY THE SECRETARY.
    - i. IN GENERAL. Land acquired by the Secretary under this section shall
      - (I) become part of the national forest in which the land is located; and
      - (II) be administered in accordance with laws applicable to the National Forest System.
    - ii. BOUNDARY REVISION. On the acquisition of land by the Secretary under this section, the boundaries of the national forest shall be modified to reflect the inclusion of the acquired land.
    - iii. LAND AND WATER CONSERVATION FUND.—For purposes of section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601-9), the boundaries of a national forest in which land acquired by the Secretary is located shall be deemed to be the boundaries of that forest as in existence on January 1 1965.
  - B. LAND ACQUIRED BY THE SECRETARY OF INTERIOR.
    - i. SAN PEDRO NATIONAL CONSERVATION AREA. -
      - (I) IN GENERAL. The land acquired by the Secretary of the Interior under paragraph (1)(B)(i) shall be added to, and administered as part of, the San Pedro National Conservation Area in accordance with the laws (including regulations) applicable to the Conservation Area.
      - (II) MANAGEMENT PLAN. Not later than 2 years after the date on which the land is acquired, the Secretary of the Interior shall update the management plan for the San Pedro National Conservation Area to reflect the management requirements of the acquired land.
    - ii. DRIPPING SPRINGS. Land acquired by the Secretary of the Interior under paragraph (1)(B)(ii) shall be managed in

- accordance with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and applicable land use plans.
- iii. LAS CIENEGAS NATIONAL CONSERVATION AREA. Land acquired by the Secretary of the Interior under paragraph (1)(B)(iii) shall be added to, and administered as part of, the Las Cienegas National Conservation Area in accordance with the laws (including regulations) applicable to the Conservation Area.
- (e) VALUE ADJUSTMENT PAYMENT TO UNITED STATES.
  - (1) ANNUAL PRODUCTION REPORTING.
    - A. REPORT REQUIRED. As a condition of the land exchange under this section, Resolution Copper shall submit to the Secretary of the Interior an annual report indicating the quantity of locatable minerals produced during the preceding calendar year in commercial quantities from the Federal land conveyed to Resolution Copper under subsection (c). The first report is required to be submitted not later than February 15 of the first calendar year beginning after the date of commencement of production of valuable locatable minerals in commercial quantities from such Federal land. The reports shall be submitted February 15 of each calendar year thereafter.
    - B. SHARING REPORTS WITH STATE. The Secretary shall make each report received under subparagraph (A) available to the State.
    - C. REPORT CONTENTS. The reports under subparagraph (A) shall comply with any recordkeeping and reporting requirements prescribed by the Secretary or required by applicable Federal laws in effect at the time of production.
  - (2) PAYMENT OF PRODUCTION. If the cumulative production of valuable locatable minerals produced in commercial quantities from the Federal land conveyed to Resolution Copper under subsection (c) exceeds the quantity of production of locatable minerals from the Federal land used in the income capitalization approach analysis prepared under subsection (c)(4)(C), Resolution Copper shall pay to the United States, by not later than March 15 of each applicable calendar year, a value adjustment payment for the quantity of excess production at the same rate assumed for the income capitalization approach analysis prepared under subsection (c)(4)(C).
  - (3) STATE LAW UNAFFECTED. Nothing in this subsection modifies, expands, diminishes, amends, or otherwise affects any State law relating to the imposition, application, timing, or collection of a State excise or severance tax.
  - (4) USE OF FUNDS. -
    - A. SEPARATE FUNDS. All funds paid to the United States under this subsection shall be deposited in a special fund established in the treasury and shall be available, in such amounts as are provided in advance in appropriation Acts, to the Secretary and the Secretary of the Interior only for the purposes authorized by subparagraph (B).
    - B. AUTHORIZED USES. Amounts in the special fund established pursuant to subparagraph (A) shall be used for maintenance, repair, and rehabilitation projects for Forest Service and Bureau of Land Management assets.

- (f) WITHDRAWAL. Subject to valid existing rights, Apache Leap and any land acquired by the United States under this section are withdrawn from all forms of
  - (1) entry, appropriation, or disposal under the public land laws;
  - (2) location, entry, and patent under the mining laws;
  - (3) disposition under the mineral leasing, mineral materials, and geothermal leasing laws.
- (g) APACHE LEAP SPECIAL MANAGEMENT AREA. -
  - (1) DESIGNATION. To further the purpose of this section, the Secretary shall establish a special management area consisting of Apache Leap, which shall be known as the "Apache Leap Special Management Area" (referred to in this subsection as the "special management area").
  - (2) PURPOSE. The purposes of the special management area are-
    - A. to preserve the natural character of Apache Leap;
    - B. to allow for traditional uses of the area by Native American people; and
    - C. to protect and conserve the cultural and archeological resources of the area.
  - (3) SURRENDER OF MINING AND EXTRACTION RIGHTS. As a condition of the land exchange under subsection (c), Resolution Copper shall surrender to the United States, without compensation, all rights held under the mining laws and any other law to commercially extract minerals under Apache Leap.
  - (4) MANAGEMENT.
    - A. IN GENERAL. The Secretary shall manage the special management area in a manner that furthers the purposes described in paragraph (2).
    - B. AUTHORIZED ACTIVITIES. The activities that are authorized in the special management area are
      - installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area;
      - installation of fences, signs, or other measures necessary to protect the health and safety of the public; and
      - operation of an underground tunnel and associated workings, as described in the Resolution mine plan of operations, subject to any terms and conditions the Secretary may reasonably require.
  - (5) PLAN.
    - A. IN GENERAL. Not later than 3 years after the date of enactment of this Act, the Secretary, in consultation with affected Indian tribes, the Town, Resolution Copper, and other interested members of the public, shall prepare a management plan for the Apache Leap Special Management Area.
    - B. CONSIDERATIONS. In preparing the plan under subparagraph (A), the Secretary shall consider whether additional measures are necessary to
      - protect the cultural, archaeological, or historical resources of Apache Leap, including permanent or seasonal closures of all or a portion of Apache Leap; and
      - provide access for recreation.
  - (6) MINING ACTIVITIES. The provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules and regulations.

- (h) CONVEYANCES TO TOWN OF SUPERIOR, ARIZONA.
  - (1) CONVEYANCES. On request from the Town and subject to the provisions of this subsection, the Secretary shall convey to the Town the following:
    - A. Approximately 30 acres of land as depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Federal Parcel-Fairview Cemetery" and dated March 2011.
    - B. The reversionary interest and any reserved mineral interest of the United States in the approximately 265 acres of land located in Pinal County, Arizona, as depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Federal Reversionary Interest-Superior Airport" and dated March 2011.
    - C. The approximately 250 acres of land located in Pinal County, Arizona, as depicted on the map entitled "Southeast Arizona Land Exchange and Conservation Act of 2011-Federal Parcel-Superior Airport Contiguous Parcels" and dated March 2011.
  - (2) PAYMENT. The Town shall pay to the Secretary the market value for each parcel of land or interest in land acquired under this subsection, as determined by appraisals conducted in accordance with subsection (c)(4).
  - (3) SISK ACT. Any payment received by the Secretary from the Town under this subsection shall be deposited in the fund established under Public Law 90-171 (commonly known as the "Sisk Act") (16 U.S.C. 484a) and shall be made available to the Secretary for the acquisition of land or interests in land in Region 3 of the Forest Service.
  - (4) TERMS AND CONDITIONS. The conveyances under this subsection shall be subject to such terms and conditions as the Secretary may require.
- (i) MISCELLANEOUS PROVISIONS.
  - (1) REVOCATION OF ORDERS; WITHDRAWAL. -
    - A. REVOCATION OF ORDERS. Any public land order that withdraws the Federal land from appropriation or disposal under a public land law shall be revoked to the extent necessary to permit disposal of the land.
    - B. WITHDRAWAL. On the date of enactment of this Act, if the Federal land or any Federal interest in the non-Federal land to be exchanged under subsection (c) is not withdrawn or segregated from entry and appropriation under a public land law (including mining and mineral leasing laws and the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.)), the land or interest shall be withdrawn, without further action required by the Secretary concerned, from entry and appropriation. The withdrawal shall be terminated
      - i. on the date of consummation of the land exchange; or
      - ii. if Resolution Copper notifies the Secretary in writing that it has elected to withdraw from the land exchange pursuant to section 206(d) of the Federal Land Policy and Management Act of 1976, as amended (43 U.S.C. 1716(d)).
    - C. RIGHTS OF RESOLUTION COPPER. Nothing in this section shall interfere with, limit, or otherwise impair, the unpatented mining claims or rights currently held by Resolution Copper on the Federal land, nor in any way change, diminish, qualify, or otherwise impact Resolution Copper's right- and ability to conduct activities on the Federal land under such unpatented mining claims and the

- general mining laws of the United States, including the permitting or authorization of such activities.
- (2) MAPS, ESTIMATES, AND DESCRIPTIONS. -
  - A. MINOR ERRORS. The Secretary concerned and Resolution Copper may correct, by mutual agreement, any minor errors in any map, acreage estimate, or description of any land conveyed or exchanged under this section.
  - B. CONFLICT. If there is a conflict between a map, an acreage estimate, or a description of land in this section, the map shall control unless the Secretary concerned and Resolution Copper mutually agree otherwise.
  - C. AVAILABILITY. On the date of enactment of this Act, the Secretary shall file and make available for public inspection in the Office of the Supervisor, Tonto National Forest, each map referred to in this section.
- (3) PUBLIC ACCESS IN AND AROUND OAK FLAT CAMPGROUND. As a condition of conveyance of the Federal land, Resolution Copper shall agree to provide access to the surface of the Oak Flat Campground to members of the public, including Indian tribes, to the maximum extent practicable, consistent with health and safety requirements, until such time as the operation of the mine precludes continued public access for safety reasons, as determined by Resolution Copper.

# Appendix B: Projects, Activities, and Factors Considered in Cumulative Effects

### **Cumulative Effects Analysis**

A cumulative effect is an impact on the environment that results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or non-federal) or private citizen/group undertake such actions. These effects can result from individually minor, but collectively significant, actions taking place over a period of time (40 Code of Federal Regulations [CFR] 1508.7).

Cumulative effects are evaluated in terms of the specific resource, ecosystem, and human community being affected. The cumulative effects analysis boundary is approximately 15 miles in diameter and encompasses the Apache Leap Special Management Area (Apache Leap SMA) and surrounding area (Figure B-1). <sup>19</sup> This analysis area represents a reasonable region in which existing resource conditions within the Apache Leap SMA boundary, when assessed in combination with other cumulative actions, may be impacted if the proposed action were implemented. Guidance from the Council on Environmental Quality's "Considering Cumulative Effects under the National Environmental Policy Act" was used in identifying geographic boundaries (1997). The location of the Apache Leap SMA, along with external public scoping and internal scoping comments, provided the foundation for identifying this analysis area, as well as for identifying the other actions that could lead to cumulative effects. Figure B-1 shows the cumulative effects assessment area and location of reasonably foreseeable actions.

The geographic cumulative effects area (the Globe Ranger District) is appropriate for the assessed resources and land management. This is because it incorporates areas potentially affected by amending the 1985 Tonto National Forest Land and Resource Management Plan (forest plan), thereby creating a new management area (MA 2G Globe Ranger District – Apache Leap SMA) and implementing the Apache Leap SMA management plan (Forest Service, 2107). The area evaluated considers potential effects on resources from surface disturbance to the extent where impacts become non-measurable. The cumulative effects assessment area encompasses approximately 100,000 acres currently under federal and private ownership.

Cumulative effects in the analyses are assessed in terms of how the impacts from the alternative would add to the past, present, and reasonably foreseeable future actions. U.S. Environmental Protection Agency (EPA) guidance ("Consideration of Cumulative Impacts in EPA Review of NEPA Documents") also recommends taking the scale into account when assessing cumulative effects: "small scale projects that have minimal impacts that are of short-duration would not likely contribute significantly to cumulative impacts" (EPA, 1999). Thus, small-scale projects (e.g., day-to-day Tonto National Forest, Town of Superior, or other agency activities) are not considered in the cumulative effects analysis. The contribution of past and present actions on the environment is already taken into account in the existing environmental conditions (affected environment) because existing conditions reflect the aggregate impact of all prior and ongoing human actions and natural events that have affected the environment.

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<sup>&</sup>lt;sup>19</sup> The East Plant site subsidence zone location information is based on information contained in the Resolution Copper Project proposed "General Plan of Operations" and the report "Assessment of Surface Subsidence Associated with Caving—Resolution Copper Mine Plan of Operations" (Itasca Consulting Group, 2017).

Apache Leap Special Management Area Management Plan Environmental Assessment
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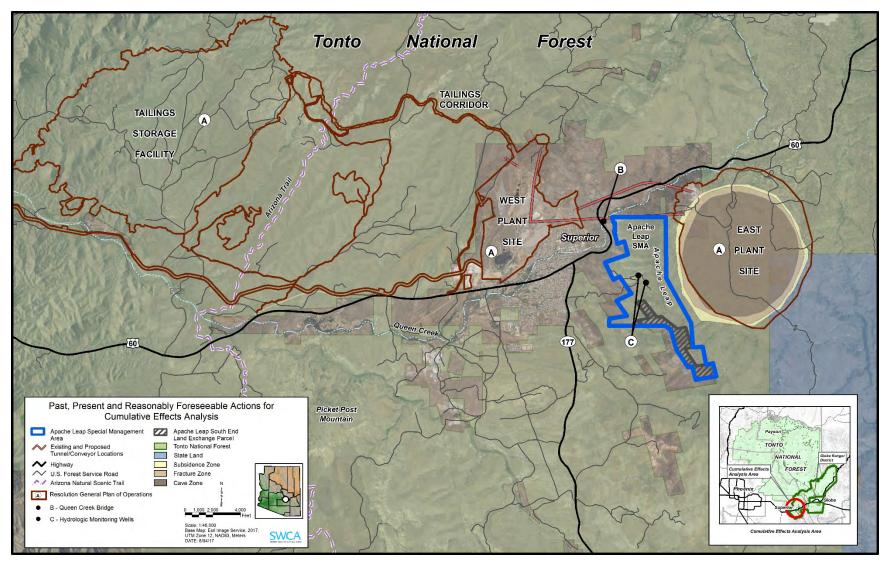
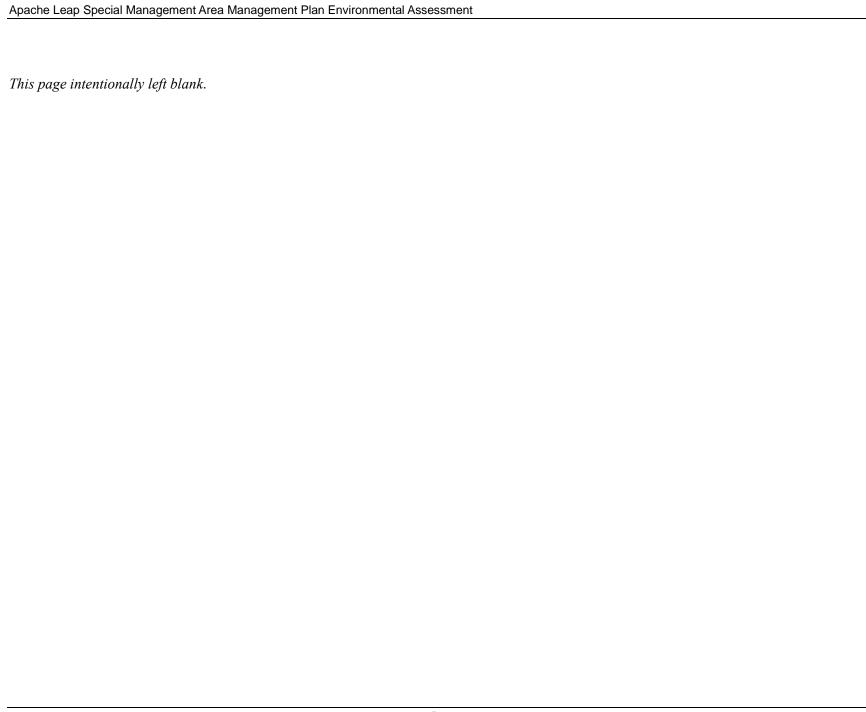


Figure B-1. Cumulative effects assessment area and location of reasonably foreseeable actions.



The temporal boundary of cumulative effects is also taken into consideration when determining the appropriate reasonably foreseeable future actions. The temporal boundary is 20 years, when a new forest plan revision would likely be needed (regulations indicate forest plan revisions are required as conditions warrant or every 15 years). EPA guidance states,

Determining the temporal scope requires estimating the length of time the effects of the proposed action will last. More specifically, this length of time extends as long as the effects may singly, or in combination with other anticipated effects, be significant on the resources of concern. (EPA, 1999)

When reviewing projects to be included in the cumulative effects discussion, projects that were included were determined to overlap in time and space pursuant to Council on Environmental Quality and EPA guidance.

## **Resolution Copper Project and Land Exchange**

The Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) would have geographic and temporal overlap (Table B-1) because the mine is in close proximity to the Apache Leap SMA (between 450 and 1,000 feet east of the Apache Leap SMA). The Resolution Copper Project and Land Exchange consists of a mining proposal (i.e., "General Plan of Operations") and a land exchange between Resolution Copper Mining, LLC (Resolution Copper), and the United States. Resolution Copper proposes to conduct underground mining of a copper-molybdenum deposit located 5,000 to 7,000 feet below the ground surface. Resolution Copper estimates that the mine would take approximately 10 years to construct, would have an operational life of approximately 40 years, and would be followed by 5 to 10 years of reclamation activities. The mining operations would take place under the Oak Flat land exchange parcel (East Plant Site) on lands to be transferred to private ownership within the Globe Ranger District. Mined ore would be crushed underground and then transported underground approximately 2.5 miles to the West Plant Site, just north of the Town of Superior (see Figure B-1). The Resolution Copper Project and Land Exchange EIS is underway; thus, there is the possibility for a cumulative effect or contribution to the cumulative effect when considering the Apache Leap SMA.

## **Tonto National Forest Motorized Travel Management**

In accordance with the Final Travel Management Rule (36 CFR 212 Subpart B), the Tonto National Forest is undergoing a travel management process wherein all roads, trails, and areas located within the Tonto National Forest are designated to indicate allowable public motorized use (open, closed, or limited). These designations will be finalized and provided on the motor use vehicle map. The Tonto National Forest Travel Management Final EIS (Forest Service, 2016b) was determined to have both geographic and temporal overlap because routes subject to the Travel Management Final EIS are located within Apache Leap SMA (see Table B-1). The Travel Management Final EIS is undergoing supplemental analysis and could occur or overlap the project; therefore, there is the potential to have a cumulative or contribution to the cumulative effect within Apache Leap SMA. Forest Road 2440 is currently designated "open to public use" within the Apache Leap SMA boundary.

## **Queen Creek Bridge Rehabilitation**

The Queen Creek Bridge Rehabilitation Project is expected to begin construction in 2020, with potential temporal and geographic overlap because bridge repairs could possibly interrupt the ability to access the Apache Leap SMA from both the east and west, depending on the direction of travel and the destination (e.g., traveling from the west to the east side of Apache Leap or, conversely, traveling east to the west side of Apache Leap SMA).

# Tonto National Forest Land and Resource Management Plan Revision (Forest Plan Revision)

Tonto National Forest has indicated that revision of the 1985 Tonto National Forest Land and Resource Management Plan (Forest Service, 1985) will be complete by 2019. The forest plan provides a comprehensive strategy to guide management decisions over the next 15 years, in order to maintain and restore forest land and water ecosystems while providing for ecosystem services and multiple uses. The forest plan includes objectives, standards, and guidelines for the desired conditions to be achieved through land management. The forest plan also identifies areas that are or may be suitable for special designations, such as the Apache Leap SMA, wilderness, research natural areas, or wild and scenic rivers. The management direction found in the forest plan applies to National Forest System lands within the boundaries of the Tonto National Forest but also considers the goals, uses, and resources of the adjacent lands and surrounding communities. The forest plan revisions are expected to include the new management area plan components identified for the Apache Leap SMA.

#### Resolution Copper Pre-feasibility Hydrological Monitoring Wells

Resolution Copper's pre-feasibility hydrological monitoring wells were previously permitted by the Forest Service consistent with the 2010 Pre-feasibility Plan of Operations (Forest Service, 2010), which included National Environmental Policy Act analysis and associated consultation and coordination with stakeholders (Forest Service, 2016d). Resolution Copper has the statutory right to conduct operations (36 CFR 228(A)) that are reasonably incident to exploration and development of mineral deposits on its unpatented mining claims pursuant to U.S. mining laws. The purpose of the monitoring wells is to collect hydrological, geochemical, and geotechnical data associated with the West Boundary Fault located below the Apache Leap area. These wells are permitted until 2025, at which time their use would be determined through modification of the "General Plan of Operations."

#### **NDAA-Authorized Activities**

Section 3003 (g)(4)(B) of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) authorized specific activities in the special management area. These authorized activities are directed by the Secretary of Agriculture to Resolution Copper, permit No. 03-12-02-006.

- installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area;
- installation of fences, signs, or other measures necessary to protect the health and safety of the public; and
- operation of an underground tunnel and associated workings, as described in the Resolution Copper "General Plan of Operations," subject to any terms and conditions the Secretary may reasonably require.

Figure B-1 shows the locations of these projects to the extent possible. These projects are included because, when combined with the proposed action or no action alternative, there could be a discernible effect on resources and/or the management area. Council on Environmental Quality (1997) guidance states, "For cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully." If the proposed action does not result in direct or indirect impacts on a resource or forest management area, it would not contribute to a cumulative effect on that resource.

Table B-1. List of Present and Reasonably Foreseeable Future Actions Considered in the Cumulative Impacts Analysis

Project/Action Name	Project Proponent	Project Size	Project/Action Location	Project/Action Description	Anticipated Project/Action Schedule	Sources
Resolution Copper Project and Land Exchange EIS	Resolution Copper	2,422 acres in exchange for 5,344 acres throughout Arizona	Tonto National Forest, Globe and Mesa Ranger Districts	The Tonto National Forest is preparing an EIS to disclose the environmental effects from (1) a mining proposal submitted by Resolution Copper; and (2) the exchange of land between Resolution Copper and the United States.	Currently under analysis 3/18/2016: Notice of intent 6/1/2019: Comment period	https://www.fs.usda.gov/ project/?project=48956
Tonto National Forest Travel Management Final EIS	Forest Service	~5,000 miles of road/trail	Tonto National Forest, all districts	The Tonto National Forest is in the process of implementing the Travel Management Rule, which calls for establishing a system of roads, trails, and areas designated for motorized vehicle use and determining suitable locations for dispersed camping.	Currently under analysis	http://data.ecosystem- management.org/nepaw eb/fs-usda- pop.php?project=28967
Queen Creek Bridge Rehabilitation	Arizona Department of Transportation	~0.4 mile	U.S. Route 60, milepost 227.70 to 228.10	This study is developing and evaluating alternatives for the potential rehabilitation or replacement of the bridge to enhance safety and traffic operations and to meet future traffic demands. The purpose of the project assessment is to evaluate a no action alternative, a Bridge Rehabilitation Alternative, and a Bridge Replacement Alternative for the Queen Creek Bridge. The existing bridge deck is experiencing cracking and delamination and has been patch repaired in the past. The Queen Creek Bridge sufficiency rating is \$36.21. The "S" signifies that the bridge is structurally deficient.	To be constructed in fiscal year 2020	Arizona Department of Transportation 2017

Table B-1. List of Present and Reasonably Foreseeable Future Actions Considered in the Cumulative Impacts Analysis (Continued)

Project/Action Name	Project Proponent	Project Size	Project/Action Location	Project/Action Description	Anticipated Project/Action Schedule	Sources
Forest Plan Revision	Forest Service	2,873,200 acres	Tonto National Forest, all districts	The Forest Service is currently drafting a revised Tonto National Forest Land and Resource Management Plan. The plan guides forest management for the next 15 years "to maintain and restore forest land and water ecosystems while providing for ecosystem services and multiple uses." The plan identifies areas that are or may be suitable for special designations.	6/14–6/22/2017: Public meetings  Late 2017: Second round of public meetings  2018: Draft EIS and proposed plan  2019: Record of decision	http://www.tontoplan.org/
Resolution Copper Pre-feasibility Hydrological Monitoring Wells	Resolution Copper	Two wells, each with an approximate disturbed area of 100 × 100 feet (total 0.50 acre)	Located along Forest Road 2440 within the Apache Leap SMA	Collect sample data at existing exploratory bore holes.	Data collection through December 31, 2025	Resolution Copper's Pre- feasibility Activities Plan of Operations (#03-12-02- 006)
NDAA-Authorized Activity	Resolution Copper	Unknown size, distribution, or location(s) at this time	Throughout Apache Leap SMA	Installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area.	Future item expected at Apache Leap SMA	https://www.congress.go v/bill/113th- congress/house- bill/3979/text
NDAA-Authorized Activity	Resolution Copper	Unknown length, size, or area at this time	Throughout Apache Leap SMA	Installation of fences, signs, or other measures necessary to protect the health and safety of the public.	Future item expected at Apache Leap SMA	https://www.congress.go v/bill/113th- congress/house- bill/3979/text
NDAA-Authorized Activity	Resolution Copper	The tunnel originates at the West Plant Site and continues to approximately 3,400 feet below grade to the East Plant Site for approximately 2.5 miles	The tunnel does not cross underneath the Apache Leap SMA but is adjacent to the northern boundary of the SMA	Operation of an underground tunnel and associated workings, as described in the Resolution Copper "General Plan of Operations," subject to any terms and conditions the Secretary may reasonably require.	Future item expected at Apache Leap SMA	https://www.congress.go v/bill/113th- congress/house- bill/3979/text

## **Appendix C: Public Scoping Comment Response**

Apache Leap Special Management Area Management Plan Environmental Assessment
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## **Public Scoping Comment Response**

The Tonto National Forest (Forest Service) provided a 45-day public scoping period on the proposed management plan ("Apache Leap SMA Management Plan – Proposed") between March 17, 2017, and May 1, 2017; the content of the proposed management plan was published on April 1, 2017.

The following is a summary of the public comments received during the public scoping period and the Forest Service responses to those comments. The "Submittal Number Identification" table provides a commenter submittal identification number to assist commenters in locating their comments in the "Public Scoping Comment Response" table below.

#### **Submittal Number Identification**

Submittal Number	Last Name	First Name	Organization / Affiliation
1	Huling	Don	Individual
2	O'Keeffe	Sean	Individual
3	Filsinger	Erik	Individual
4	McClellan	Evon	Individual
8	Eversole	Richard	Individual
22	Vonrabenau	Cele	Individual
6	Duster	George	Individual
15	O'Keeffe	Sean	Individual
18	Stanley	Andrew	Individual
13	Logan	Toni	Individual
14	Meadows	Mindy	Individual
21	Van Zee	Lee	Individual
7	Ehrhardt	Carole	Individual
20	Valentine	Jennifer	Individual
23	Watters	Ann	Individual
9	Gershten	Mitchell	Individual
17	Spence	Susan	Individual
10	Giannone	Robert	Individual
16	Omans	Jeff	Individual
24	Whitfield	Chuck	Individual
12	Lanskey	Marcus	Individual
11	Kesich	John	Individual
19	Turner	George Erwin	Individual

#### **Submittal Number Identification (Continued)**

Submittal Number	Last Name	First Name	Organization / Affiliation
5	Christensen	Joan	Individual
25	Kalavity	Karen	Individual
33	Spitz	Jon	Individual
30	Pryor	Todd	Individual
31	Pryor	Todd	Individual
32	Pryor	Todd	Individual
27	Miramon	Freddie	Individual
28	Nelson	Berta	Individual
29	unsigned		Individual
26	Krieg	John	Individual
34	Vangorp	Sandra	Individual
35	Erickson	Karl	Individual
36	Krieg	John	Individual
38	Singh-Bowman	Nan	Individual
39	Sohocki	Dena and Dennis	Individual
37	Pauk	George	Individual
40	Barnett	Justin	Individual
41	McLaughlin	Jim	Individual
43	Krieg	John	Individual
42	Gross	Randy	Individual
45	Gamine	Viola	Individual
44	Filsinger	Erik	Individual
46	Keedy	John	Queen Creek Coalition
47	Butler	Elizabeth	Individual
48	Krieg	Karen	Individual
49	Summers	Shannon and Gary	Individual
50	Warnecke	Dana	Arizona Game and Fish Department
51	Allen	Michaell	Individual
52	Homquist	Steve	Individual
53	McCormick	Gene	Individual

#### **Submittal Number Identification (Continued)**

Submittal Number	Last Name	First Name	Organization / Affiliation
54	Solamito	Marilyn	Individual
55	Canright	Rebecca	Individual
Duplicate of submittal 50	Cook	Jay	Arizona Game and Fish Department
56	Marks	Diane	Individual
57	Duerr	Debra	Superior Community Working Group
58	Frye	Bob	Individual
59	Diefenderfer	Paul	Phoenix Rock Gym
61	Schenck	James	Individual
60	Gessaman	Deborah	Individual
62	Gessaman	Deborah	Individual
63	Levine	Lisa	Individual
65	Sacher	Maggie	Individual
66	Wright	Tom	Individual
64	Flahart	Patricia	Individual
68	Featherstone	Roger	Arizona Mining Reform Coalition
Signatory to submittal 68	Serraglio	Randy	Center for Biological Diversity
Signatory to submittal 68	Chavez	Roy	Concerned Citizens and Retired Miner Coalition
Signatory to submittal 68	Russell	Wendy	Patagonia Area Resource Alliance
Signatory to submittal 68	Krieg	John	Save Tonto National Forest
Signatory to submittal 68	Bahr	Sandy	Sierra Club
67	Robinson	Brady	Access Fund
69	Rambler	Terry	San Carlos Apache Tribe
70	Peacey	Vicky	Resolution Copper Mining, LLC
71	Horlings	Mark	Maricopa Audubon Society
72	Campos	Josie	Individual

## **Public Scoping Comment Response**

#### **Natural Character and Scenery**

Original Comment Text	Forest Service Response	Submittal Number
Please preserve and protect the land and animals within	The management plan complies with the requirements in the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	20
My concern is that there would not be a fence across the front of the west side of the Picket Post I mean not Picket Post by Apache Leap, and I can't imagine even a nice-looking fence being an attractive thing to the natural beauty of the mountain.	The management plan contains standards and guidelines in Section 3.1, "Natural Character and Scenery," that require that all future proposed projects be designed to blend with the natural setting by remaining consistent with the form, line, color, and texture, and pattern common to the landscape character. All fencing will be designed to comply with this requirement.  The NDAA authorizes installation of fences in the Apache Leap Special Management Area (Apache Leap SMA) as necessary to protect public health and safety. Fences may also be necessary to manage livestock grazing. The management plan contains standards and guidelines in Section 3.1, "Natural Character and Scenery," that require that all future proposed projects be designed to blend with the natural setting by remaining consistent with the form, line, color, and texture, and pattern comment to the landscape character. All fencing in the special management area will be designed to comply with this requirement.	34
Apache Leap is truly "scenically unique" and creates much of the visual, natural beauty of the town of Superior. It should never be threatened.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	39
Visibility I have experience as a representative of City planning as well as a volunteer in jurisdictions where professional trail builders have been able to design low impact multi-user trails. I support the ALSMP's attempts to keep trails at a low visible impact. That being said, I would hope that sustainable trail design and construction is not thwarted by the words used.	The management plan language in Section 3.1.3, "Guidelines," for Natural Character and Scenery requires that developments "blend with the natural setting to the greatest extent possible without compromising their function or resource benefit." This plan language encourages protection of natural character and scenery in consideration of function and resource protection. This language does not impede future development of sustainably designed trails.	44

## **Natural Character and Scenery (Continued)**

Original Comment Text	Forest Service Response	Submittal Number
Visibility – QCC supports the sensitivity of visibility minimization in any constructed projects in the Apache Leap SMA. In the Apache Leap Trail Feasibility study the nationally recognized trail construction company, Okanagan Trail Construction, was able to walk the land and find routes that would minimize the trail impact and keep visibility consistent with the low impact goals.	The management plan language in Section 3.1.3, "Guidelines," for Natural Character and Scenery requires that developments "blend with the natural setting to the greatest extent possible without compromising their function or resource benefit." This plan language encourages protection of natural character and scenery in consideration of function and resource protection.	46
I was just up by Apache Leaf last week and it is so beautiful.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	54
*The Apache Leap SMA's combination of ecological values, scenic resources, and recreation use make it unique in southeastern Arizona. (USFS, page 8)  The latter quote by the USFS requires you to protect the ecological and environmental basis for scenic and recreational activities. What are the limitations and precautions the USFS is including in the SMA Plan to ensure these protections?	The quote is from a section in Chapter 2 of the management plan describing the area and the resource values taken into consideration as the management plan was developed. Section 3003(g) of the NDAA was the primary source for guidance as the plan was prepared. Section 3003(g)(2) lists the purposes for which the special management area was designated: to preserve the natural character of Apache Leap; to allow for traditional uses of the area by Native American people; and to protect and conserve the cultural and archaeological resources of the area. The desired conditions, objectives, standards, guidelines and suitability of land descriptions in the management plan have all been developed specifically to meet the values the special management area was designated to protect.	56
The loss of the "Desired Condition" should be made known to all visitors, present and future. Views from the Apache Leap escarpment of the 360-degree landscape should be documented. Visitors should know landscape character as it exists today. Visitors should know what the future holds and the 360-degree landscape should be presented as it will be. See Figures 1 to 4 attached, prepared by Dr. James Wells, L. Everett & Associates. This perspective is necessary to present a balanced presentation of the attribution of "High scenic integrity" according to the Forest Service's scenery management system. See Section 3.2.1.  [See submittal letter for attached Figures 1 to 4]	The management plan includes descriptions of the area's existing natural character and scenery. Desired conditions for natural character and scenery are provided to guide future decisions for management of the land and resources within the special management area.  The potential cumulative effects of the Resolution Copper Project and Land Exchange on scenery resources of the Apache Leap SMA are discussed in the environmental assessment (EA) section titled "Natural Character and Scenery."  Full disclosure of the scenery impacts of the Resolution Copper Project and Land Exchange, including visualizations of anticipated mine operation components, will be analyzed in the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS).	69

## **Natural Character and Scenery (Continued)**

Original Comment Text	Forest Service Response	Submittal Number
Section 3.2.2 refers to "natural quiet, dark skies, and limited encounters with other visitors." The Proposed Plan must also reference, define, delineate values and desired conditions for, and identify management actions to conserve clean air, near-surface water, noise levels and other elements of the SMA's natural character. Failure to reference and incorporate such integral elements of natural character in a plan for managing a place of outstanding natural character suggests a serious imbalance in management priorities.	Additional background information was added to management plan Section 3.1, "Natural Character and Scenery," to further clarify the physical, biological, and landscape characteristics of the Apache Leap SMA that contribute to the areas natural character and scenery. These characteristics include the dominant west-facing Apache Leap escarpment, the eastern slopes containing canyons and drainages leading to Oak Flat, the arid climate, the relatively undisturbed landscape, the open space, the dominant backdrop of the Town of Superior, the adjacent U.S. Route 60 (a designated State Scenic Highway), and abundant dispersed recreation activities. The management plan standards, guidelines, and management actions provide the direction for the preservation of the Apache Leap SMA's natural character and scenery characteristics.  There are overriding U.S. Forest Service (Forest Service) policies and federal regulations addressing air quality, water quality, and other physical and biological resources to which actions in the Apache Leap SMA would be subject to (e.g., Clean Air Act, Clean Water Act, and various Forest Service Manuals [FSMs] and Handbooks [FSHs]). The management plan does not attempt to duplicate or override these existing policies and regulations. The potential for impacts to the resources listed in the comment will be considered when assessing the impacts of future actions in the Apache Leap SMA.	69
The Tribe agrees with the statement at Section 3.2.3 that "new communications sites, utility lines, or transmission lines should not occur within the Apache Leap SMA," but this statement alone provides no management guidance. The Proposed Plan must clarify what if any "proposed developments" are referenced in or authorized on the basis of Section 3.2.3. The Proposed Plan should note that no alterations to the SMA are proposed then proceed to list the conditions and standards under which alterations would be considered and managed.	The management plan is a planning-level document that establishes management approach for all future projects proposed in the Apache Leap SMA. Proposed developments, as stated in Section 3.1.3, "Guidelines," for Natural Character and Scenery represent all future project proposals within the special management area that will be required to comply with all components contained in the management plan. The management plan contains direction that fosters preservation of the area's natural character.	69
Please leave Apache Leap as is.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	72

#### Tribal

Original Comment Text	Forest Service Response	Submittal Number
That mountain makes Superior and it is unique. I live just below the mountain and want to be able to enjoy the beauty of Apache Leap. To me it is something that God created and should not be destroyed.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	72
SMA proposed plan, Section 3.1.4, page 14, states that when access to traditional Native American use areas is "hampered" by actions outside of the Apache Leap SMA, "the responsible line officer will work with tribes, landowners, and other pertinent agencies to allow reasonable access while protecting the natural character and values of the Apache Leap SMA". In other words: "trust us, we're with the government, we're here to help you, just be reasonable". The statement is far too vague and conditional to have any real meaning or assure anybody of any positive outcome.	Section 3003(g) of the NDAA requires the Forest Service to manage the Apache Leap SMA in a manner that "allow(s) for traditional use of the area by Native American peoples." FSH 2309.12, "Heritage Program Management Handbook," also directs the Forest Service to consult with Native American tribes on Forest Service undertakings, as required by Section 106 of the National Historic Preservation Act (NHPA). To that end, the Forest Service has been working with the tribes through formal consultation, scoping, and meetings to address issues of access. The Forest Service is currently in formal government-to-government consultation with 12 Native American tribes. Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns. Section 3.2.3, "Guidelines," for Tribal has been revised to state that "the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and values of the Apache Leap SMA."	66

Original Comment Text	Forest Service Response	Submittal Number
Please explain what is meant by the management objective of "additional emphasis given to identifying and nominating cultural resources for the National Register of Historic Places." It is our understanding that the Apache	The reader is referring to slide 15 of the presentation given at the April 4, 2017, scoping meeting.  Section 3003 of the NDAA directs the Forest Service to protect and conserve	57
cultural property under several provisions of the National Historic  Preservation Act. What further "emphasis" is needed, and what specific	the cultural and archaeological resources of the area. Current Forest Service guidelines in FSH 2309.12, "Heritage Management," include the following:	
actions would be required? We think that the presentation and explanation of this at the recent public meetings were unclear.	1. Consider cultural resources for National Register nomination based on the property's order of importance, allocation recommendation, and long-term plans for retention.	
	2. Consider nominating properties in groups according to historic or cultural themes or associations. Sometimes a site may not appear to be eligible when considered in isolation but may be eligible as part of a district or group of sites.	
	3. Do not nominate properties that are of marginal significance and would normally be subjected to data recovery when threatened.	
	4. Where documentation of a property is necessary for interpretive purposes or as part of the planning process, combine it with nomination requirements and avoid redundancy.	
	In order to provide clarity and be in line with Forest Service guidelines, Section 3.2.3, "Guidelines," for Tribal states that: "If additional cultural resources within the Apache Leap SMA that are not currently included in the existing Historic District, are determined eligible for listing in the National Register of Historic Places, and Forest Service guidelines for National Register nominations are met, nomination(s) should be prepared and submitted to the Keeper of the National Register for consideration in the National Register of Historic Places within 5 years of initial determination of eligibility."	

Original Comment Text	Forest Service Response	Submittal Number
SMA proposed plan, Section 2.2, page 9: "The Apache Leap SMA falls within the boundaries of the Chi'chil Bildagoteel Historic District, which is listed in the National Register of Historic Places (January 4, 2016) as an Apache Traditional Cultural Property." The District was listed after being found eligible under all four of the National Register criteria, two of which (Criteria A and B) are linked with real but intangible associations, one of which Criterion C) recognizes a tangible assemblage of distinctive and meaningful features, and one of which (Criterion D) addresses the scientific value of archaeological sites. Of these, only the values identified under Criterion D can be recovered through mitigation. The SMA plan appropriately addresses Criterion D, but it does not suggest any meaningful attempt to maintain or enhance the District's eligibility under Criterion A, B, or C – i.e., those aspects of significance that are most likely to suffer from the loss of associations and identities that exist independently of mere archaeological data. The proposed listing of additional eligible sites does nothing to protect them from these foreseeable losses.	The purposes of Apache Leap SMA under the NDAA (Section 3003(g)(2)) are to (1) preserve the natural character of Apache Leap; (2) allow for traditional uses of the area by Native American people; and (3) protect and conserve the cultural and archaeological resources of the area. The Forest Service must manage the Apache Leap SMA in a manner that is consistent with the NDAA.  In addition, under Section 106 of the NHPA, adverse effects of an undertaking on historic properties must be avoided, minimized, or mitigated. It does not prevent disturbance to or ensure protection of a historic property. The NHPA provides a process for dealing with adverse effects but does not prevent them from occurring. As a federal agency, the Forest Service must comply with Section 106 of the NHPA. Adverse effects on historic properties that are eligible for the National Register of Historic Places (NRHP) under Criterion A, B, or C will be dealt with through the Section 106 process.  Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns. The "Tribal" and "Cultural/Historic" resource sections of the EA analyze the potential impacts to all tribal and cultural resources.	66
Budgets permitting, nominations of additional cultural resources to the Keeper of the National Register for consideration in the National Register of Historic Places should occur as soon as possible but not more than 5 years of initial determination of eligibility. See Section 3.1.2.	The Forest Service must follow the regulations found in 36 Code of Federal Regulations (CFR) 60 for nominating a property to the NRHP. This process takes no less than 2 years to complete. The Forest Service would welcome any additional information that may make the process move faster.	69
I urge you to find that the whole Apache Leap mountain is a "sacred site" and therefore deserving of protection and preservation in as pristine a condition as possible today. Of course, the representatives of the Tribes/Nations should have the last and only word on this matter.	The Forest Service has already acknowledged that Apache Leap is a sacred site. The majority of Apache Leap is within the boundaries of the NRHP-listed <i>Chi'chil Bildagoteel</i> Historic District, which is classified as a Traditional Cultural Property. The Forest Service has been engaged in government-to-government consultation regarding the effects of the proposed management plan on the Historic District. The Forest Service is currently working under a memorandum of understanding executed in 2012 between the Departments of Defense, Interior, Agricultural, and Energy and the Advisory Council on Historic Preservation to improve access to sacred sites.	56

Original Comment Text	Forest Service Response	Submittal Number
Having eleven Native American tribes designated within this plan's purview makes these 807 acres of land extremely significant for cultural values that must be protected on behalf of the tribes, the Town of Superior, Resolution Copper, andthe public in the State of Arizona and in the United States. First Peoples' rights to their precious traditional and ceremonial sites need to be valued and protected, as well as conservation of American cultural and archeological resources.	The NDAA directs the Forest Service to allow for traditional uses of the area by Native American people and to protect and conserve the cultural and archaeological resources of the area. The Forest Service must also comply with the NHPA, which requires federal agencies to consider the effects of an undertaking on historic properties. This includes the NRHP-listed <i>Chi'chil Bildagoteel</i> Historic District Traditional Cultural Property.  The management plan includes Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic," as a programmatic framework for addressing protections of tribal cultural values and concerns associated with the Apache Leap SMA.	59
given the legislative priorities for the Apache Leap SMA. Recreational closures should be used during times of cultural and resource use.	Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns. Section 3.2.2, "Standards," for Tribal states, "Traditional use shall take precedence over recreation uses where conflicts occur." Section 3.2.3, "Guidelines," for Tribal in the management plan includes the following:  1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation Authority (25 U.S.C. 3054).	69
	2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.	
	The Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at:  https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations	
	"Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	

<sup>&</sup>lt;sup>1</sup> In response to internal comments on the modified management plan, the Forest Service revised the modified management plan by removing Section 3.2.2, "Standards," #1 referenced in this comment response. The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

Original Comment Text	Forest Service Response	Submittal Number
traditional use areas are impacted by recreation or other permitted uses.  The Plan should explicitly authorize permanent closings if necessary.	Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns. Section 3.2.3, "Guidelines," for Tribal in the management plan includes the following: <sup>2</sup>	68
arise from mining in the area of the proposed land exchange. Sections 3.1.4 and 3.1.5 should explicitly identify mining as an activity which may impact or hamper traditional uses.	1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation Authority (25 U.S.C. 3054).	
	2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.	
	3. When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and cultural values of the Apache Leap SMA.	
	Additionally, the Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at: https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations	
	"Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	
	Please note that under the NDAA the Apache Leap SMA is closed to mining and that Section 3.6.1, "Desired Conditions," for Mineral Resources states, "Exploration and development of mineral resources does not occur within the Apache Leap SMA. Evidence of historic mining exists, but it does not dominate the landscape. Lands where past mineral development or exploration has occurred recover to more stable natural conditions over time. Areas requiring site-specific reclamation measures are rare or non-existent."	

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<sup>&</sup>lt;sup>2</sup> The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

Original Comment Text	Forest Service Response	Submittal Number
	[Comment response continued from above] Additionally, Section 3.11, "Suitability of Lands," specifies that the lands within the Apache Leap SMA are unsuitable for mining, consistent with the NDAA legislation withdrawing the area from all forms of mineral location, entry, and patent.	68
Measures: The PMP (at 4) acknowledges that Congress directed the Forest Service to consider whether additional measures are needed to protect the cultural, archaeological and historical resources of Apache Leap SMA. Congress specifically directed the Forest Services to consider whether seasonal or permanent closings were necessary to insure these resources are preserved.  The Plan states this requirement to consider additional protective measures but was apparently written with little attention to it. The PMP does not establish a process for further study of additional measures to protect the Apache Leap SMA or mention whether closures of a portion of Apache Leap SMA was studied, or will be studied in the future. The Plan lacks any mechanism for changes in the future, or any procedures for Indian Tribes, the Town of Superior or other parties to address the need for additional protective measures. MAS believes this requirement was an important positive feature of the legislation, and that the PMP should include a method to act upon it.	Section 30003(g)(5)(B) of the NDAA directs the Forest Service to "consider whether additional measures are necessary to protect cultural, archaeological, or historic resources of Apache Leap, including permanent or seasonal closures of all or a portion of Apache Leap." The management plan includes guidance for considering temporary and permanent closures for the protection of sites and traditional use areas in Sections 3.2 and 3.3. For example, Section 3.2.3, "Guidelines," for Tribal states, "If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented."  Additionally, the Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at: https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations  "Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	71

Original Comment Text	Forest Service Response	Submittal Number
Comments on PMP Section 3.1 Section 3.1.4 and 3.1.5 provide for temporary closings if traditional use areas are impacted by recreation or other permitted uses. The Plan should explicitly authorize permanent closings if necessary. Over time,	Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns. Section 3.2.3, "Guidelines," for Tribal resources in the management plan includes the following: <sup>3</sup>	71
the greatest threat to traditional use areas will presumably arise from mining in the area of the proposed land exchange. Sections 3.1.4 and 3.1.5 should explicitly identify mining as an activity which may impact or hamper traditional uses.	1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation Authority (25 U.S.C. 3054).	
	2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.	
	3. When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and cultural values of the Apache Leap SMA.	
	Additionally, the Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at: https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations	
	"Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	

<sup>&</sup>lt;sup>3</sup> The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

Original Comment Text	Forest Service Response	Submittal Number
[Comment continued from above]	[Comment response continued from above]  Please note that under the NDAA, the Apache Leap SMA is closed to mining.  Section 3.6.1, "Desired Conditions," for Mineral Resources states, "Exploration and development of mineral resources does not occur within the Apache Leap SMA.  Evidence of historic mining exists, but it does not dominate the landscape. Lands where past mineral development or exploration has occurred recover to more stable natural conditions over time. Areas requiring site-specific reclamation measures are rare or non-existent." Additionally, Section 3.11, "Suitability of Lands," specifies that the lands within the Apache Leap SMA are unsuitable for mining, consistent with the NDAA legislation withdrawing the area from all forms of mineral location, entry, and patent.	71
Religious Freedom Act (1978) which provides for protection and preservation of "sacred sites" of Native Americans to have "access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites". If the whole Apache Leap mountain is sacred land to the 11 Tribes/Nations, there must not be any "equipment and tunnel, etc." on this sacred land. Please include a review in your EA of the limitations the AIRF A could place on any development whatsoever on Apache Leap mountain, because it may be	The American Indian Religious Freedom Act is one of many federal laws and regulations with which the Forest Service must comply. Pertinent federal laws and regulations, including the American Indian Religious Freedom Act, are addressed in the "Tribal" and "Cultural/Historic" resource sections of the EA.  Section 3003((g)(4)(B)) of the NDAA authorizes several uses of the Apache Leap SMA, including: the installation of seismic monitoring equipment; the installation of fences, signs, or other measures necessary to protect the health and safety of the public; and operation of an underground tunnel and associated workings. While the Forest Service may require terms and conditions regarding implementation of these uses, it does not have the authority to prohibit these uses. Any of these authorized activities are subject to review under Section 106 of the NHPA, as well as compliance with the 1985 Tonto National Forest Land and Resource Management Plan (forest plan).	56

Original Comment Text	Forest Service Response	Submittal Number
Native American Concerns  I would hope that the ALSMP would contain opportunities for resolving potential conflicts. I'm sure that rock climbers will be happy to either to respect specific time closures and/or leave certain areas untouched. As such I would hope the document could accommodate future agreements, e.g., "if the Native American special places are identified climbers will stay 50 yards away from them and leave them undisturbed."	Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns.  Section 3.2.3, "Guidelines," for Tribal in the management plan includes the following:  1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation Authority (25 U.S.C. 3054).  2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.  Additionally, the Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at: https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations  "Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	44

<sup>&</sup>lt;sup>4</sup> The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

Original Comment Text	Forest Service Response	Submittal Number
traditions and believes with proper project planning it can work with	Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns.	46
rock climbers have been willing to support certain closures as well as stay away from specific sites, e.g., a minimal distance from sites that	Section 3.2.3, "Guidelines," for Tribal in the management plan includes the following: <sup>5</sup>	
might remain. QCC would also point out that the development of some road access to the vicinity of the Apache Leap SMA (e.g., FR 2440) would enable Native Americans to visit the Leap and replace their historic access from the top.	1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation Authority (25 U.S.C. 3054).	
instance decess from the top.	2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.	
	3. When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and cultural values of the Apache Leap SMA.	
	Additionally, the Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at: https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations	
	"Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	
	Public access is discussed in Section 3.4 of the Apache Leap SMA management plan.	

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<sup>&</sup>lt;sup>5</sup> The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

Original Comment Text	Forest Service Response	Submittal Number
Management Area should be considered a compatible use with the	Section 3.2, "Tribal," was added to the management plan. The section includes desired conditions, guidelines, standards, and management approaches specific to tribal resources and concerns.	65
most climbers, hikers and bicyclists regard the land that they recreate upon as 'special'. I, personally and many other outdoor enthusiasts feel	Section 3.2.3, "Guidelines," for Tribal in the management plan includes the following: <sup>6</sup>	
closest to their God or creator while they are out on the land. Facing the challenge of climbing a wall, hiking or biking a trail or enjoying the dark starlit skies is a sacred experience. Recreation like this has taken place on this land for generations.	1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation Authority (25 U.S.C. 3054).	
	2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.	
	3. When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and cultural values of the Apache Leap SMA.	
	Recreation is discussed in Section 3.5, "Recreation," of the management plan.  Section 3.5.1, "Desired Conditions," for Recreation states, "The Apache Leap SMA offers dispersed recreation opportunities that emphasize non-motorized recreation. Recreation activities occur at appropriate locations and intensities such that cultural and natural values are protected. Recreation opportunities and activities are primarily nature based and offer opportunities for experiencing scenic beauty, and the intrinsic cultural and natural resources associated with the Apache Leap SMA."  The management plan does not consider recreation to be an incompatible use of the Apache Leap SMA.	

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<sup>&</sup>lt;sup>6</sup> The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

#### Cultural/Historic

Original Comment Text	Forest Service Response	Submittal Number
If there are additional resources that are identified that the USFS feels should be included in the historic registry the town and the public must be notified early enough in the process to make their input known.	According to the NHPA, when nominating a historic property for the NRHP, a federal agency must consult the State Historic Preservation Officer (SHPO) and the Keeper of the NRHP.	31
Our understanding of cultural resources includes historic sites and associations to historic uses of the area by non-Native Americans. If this is not true, please clarify that in the plan. If it is true, we point out that Apache Leap has a long history and culture of mining. The proposed plan makes references to removing evidence of mining, but does not address if or how the historic aspects of this mining evidence would be treated except as they might relate to wildlife habitat. Some clarification of this issue is needed.	Cultural resources under NEPA include historic properties, as well as other resources. As defined in the implementing regulations of Section 106 of the NHPA (36 CFR 800.16(l)(1)), a "historic property" is "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places." As required under the National Environmental Policy Act (NEPA), both prehistoric and historic resources, including historic mining sites, are discussed in the "Cultural/Historic" section of the EA. Currently, all recorded historic mining sites within the Apache Leap SMA have been determined not eligible for the NRHP and therefore are not considered historic properties; therefore, no further action is required under Section 106 of the NHPA. If other historic mining sites are identified within the Apache Leap SMA, in accordance with Section 106 of the NHPA, the Forest Service will evaluate those resources for their NRHP eligibility and implement any necessary mitigation measures.	57
Generally, historic mining should not be given a significant platform in the Proposed Plan, including in Section 2.1. The Proposed Plan notes that Apache Leap was largely untouched by historical mining. Section 2.1. The historic mining in the Copper Triangle area had no significance to the uniqueness of Apache Leap. The only role historic mining played in the area and Apache Leap specifically was to drive Native Americans out of the area because of the Anglo-European fixation for silver.	Section 3003(g) of the NDAA requires the Forest Service to manage the Apache Leap SMA in a manner that "allow(s) for traditional use of the area by Native American peoples." However, the Forest Service must manage both prehistoric and historic in a manner that complies with Section 106 of the NHPA.  Mining sites qualify as historic-age cultural resources that must be considered under NEPA and Section 106 of the NHPA. To that end, "What Makes Apache Leap Unique?" (Section 2.1) in the management plan states, "Over the course of the twentieth century, many copper mines were developed in the region surrounding Superior, Arizona, and the area came to be known as the Copper Triangle. The Copper Triangle has a long history of mining, and most of the towns in the area originated as mining communities, including Miami, Globe, Superior, Kearny, Hayden, and Winkelman Several old, small-scale mining/prospecting remnants remain (e.g., adits, roads, frames and other workings), but the landscape within the Apache Leap SMA boundary is otherwise largely undeveloped."  The "Cultural/Historic" section of the EA analyzes the potential impacts to all cultural resources, including historic-age mining sites.	69

Original Comment Text	Forest Service Response	Submittal Number
The PMP requires the Forest Service to consider additional protective measures but does not establish a process for further study of additional measures to protect the ALSMA or mention whether closures of a portion of ALSMA was studied, or will be studied in the future. The Plan lacks any mechanism for changes in the future, or any procedures for Indian Tribes, the Town of Superior or other parties to address the need for additional protective measures.	By design, the management plan is a planning-level document that provides a programmatic approach for managing resources and uses in the Apache Leap SMA. This approach provides a flexible framework for making future decisions, considering site-specific conditions and new information. Forest Service planning regulations (36 CFR 219.13) provide that management plans may be amended as needed.	68
To me, much more important are the protections that need to be established to allow for traditional uses of the area by Native American people (11 Tribes/Nations) and to protect and conserve the cultural and archaeological resources of the area. In order to ensure these protections, the entire, whole mountain needs to be protected from any encroachment whatsoever. The whole Apache Leap mountain needs to be preserved in as pristine state as possible at this time for Native Americans to use it for traditional practices and conserve cultural and archaeological resources. That means: NO "SEISMIC MONITORING EQUIPMENT" OR "UNDERGROUND TUNNEL AND ASSOCIATED WORKINGS".	Section 3003 of the NDAA ((g)(4)(B)) authorizes several uses of the Apache Leap SMA, including the installation of seismic monitoring equipment; the installation of fences, signs, or other measures necessary to protect the health and safety of the public; and operation of an underground tunnel and associated workings. While the Forest Service may require terms and conditions regarding implementation of these uses, it does not have the authority to prohibit these uses. Any of these authorized activities are subject to review under Section 106 of the NHPA, as well as compliance with the current forest plan.	56
"Unnatural deterioration" should be defined to include Resolution's mining activities which result in any adverse impacts upon the Apache Leap SMA.	In the management plan, the desired condition statement in Section 3.3.1 for Cultural/Historic resources was revised to read, "Archaeological sites are protected from vandalism, looting, and other forms of human-caused deterioration." The term "unnatural deterioration" was replaced with "human-caused deterioration." Resolution Copper Mining, LLC's (Resolution Copper's), mining activities would easily fit the definition of "human-caused deterioration."	69

Original Comment Text	Forest Service Response	Submittal Number
The Apache Leap SMA has Native American significance. We have found (and left) artifact evidence of this on our hikes. This should be respected to the utmost of the Forest Service's ability.	The purposes of Apache Leap SMA under the NDAA (Section 3003(g)(2)) are to (1) preserve the natural character of Apache Leap; (2) allow for traditional uses of the area by Native American people; and (3) protect and conserve the cultural and archaeological resources of the area. The Forest Service must manage the Apache Leap SMA in a manner that is consistent with the NDAA. To that end, the Apache Leap SMA management plan describes desired conditions, goals, standards, and guidelines for management of tribal, cultural, and archaeological resources.	39
What is the meaning of "Provide a mitigation strategy specific to the management area that limits significant impacts to historic and cultural properties, should additional mitigation measures be necessary"? This sentence appears to reference potential adverse effects to historic properties and other cultural resources that have not been adequately disclosed to the affected tribes. Such potential effects must be disclosed, included in consultation proceedings, and analyzed per NHP A as well as NEPA.	The Forest Service agrees that the statement is unclear. The sentence was revised in management plan Section 3.3.4, "Management Approaches," for Cultural/Historic to state, "Although it is not anticipated that additional mitigation measures will be needed, if necessary, develop mitigation strategies specific to the resources within the Apache Leap SMA to limit significant effects to heritage resources." If proposed, future actions in the Apache Leap SMA would be subject to review and consultation under Section 106 of the NHPA and NEPA.	69

Original Comment Text	Forest Service Response	Submittal Number
The Proposed Plan's Section 3 .1.5 calls for "a monitoring strategy and timeline to ensure that historic properties and traditional resources are protected from vandalism, looting, and other forms of unnatural deterioration [and] actions to secure and stabilize sites, including temporary closures pending assessment and determination of appropriate actions to protect the sites or traditional use areas." These constituent parts seem like items to prepare and include in the Proposed Plan as soon as possible and not just to authorize and enable for preparation at an undetermined later date.	New plan components were developed for the management plan to address topics of tribal importance. Management plan Section 3.2.3, "Guidelines," for Tribal includes the following: 7  1. Indian tribes may request temporary closures of specific areas for tribal traditional cultural purposes under the Cultural and Heritage Cooperation	69
	Authority (25 U.S.C. 3054).  2. If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented.	
	3. When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer should work with landowners and other pertinent agencies to allow tribes reasonable access while protecting the natural character and cultural values of the Apache Leap SMA.	
	Section 3.3.4, "Management Approaches," for Cultural/Historic includes the following: "Develop a monitoring strategy and timeline to ensure that historic properties and traditional resources are protected from vandalism, looting, and other forms of unnatural deterioration. Consider implementing actions to secure and stabilize sites, including temporary closures pending assessment and determination of appropriate actions to protect the sites or traditional use areas."	
	Under the current forest plan, monitoring cultural resources includes the identification of recreation impacts to resources and the identification of areas and properties with a high probability for vandalism. The Forest Service has guidance for temporary closures for traditional and cultural ceremonies, which can be found at: https://www.fs.usda.gov/main/tonto/workingtogether/tribalrelations	
	"Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. Tribal members may request area closures during these activities to provide for privacy of tribal activities for traditional and cultural purposes. These closures must be requested by an Indian tribe; are subject to approval by the Forest Service; shall be temporary; and shall affect the smallest practicable area for the minimum period necessary for activities of the requesting Indian tribe."	

Original Comment Text	Forest Service Response	Submittal Number
The Proposed Plan's Section 3.1.5 calls for "a framework to inventory archaeological and cultural sites, traditional tribal use areas, and places of traditional or religious significance as opportunities are presented." The preparation of the Proposed Plan is the opportunity for advancing the cultural resource inventory so obviously integral to the identification of management standards and treatments. A detailed inventory should of inventory archaeological and cultural sites, traditional tribal use areas, and places of traditional or religious significance must play a prominent role throughout all components of this Section of the Plan.	The intent of the management plan is to provide programmatic guidance for future project-level decisions within the Apache Leap SMA. There are other Forest Service and federal regulations that provide direction on how to conduct inventories or government-to-government consultations; these procedural items are not repeated in the management plan.  Section 106 of the NHPA requires federal agencies to consider the effects of an undertaking on historic properties, which may entail a survey to inventory the historic properties within the area of potential effects. As stated in the "Cultural/Historic" section of the EA, approximately 94% of the 807 acres of the Apache Leap SMA has been surveyed for historic properties. Information has also been gathered on the <i>Chi'chil Bildagoteel</i> Historic District Traditional Cultural Property and is included in the EA.	69
Given the recognition that the Proposed Plan is a National Historic Preservation Act ("NHP A") Section 106 undertaking, the Proposed Plan should be directly grounded in and tailored to incorporate and address specific salient results of a complete historic property inventory. The Proposed Plan should include details regarding the status and results of consultations - among TNF, SHPO, Tribes, and any other affected parties - regarding historic property identification methods, eligibilities, SMA effects, and effect avoidance and reduction proposals. This must be done for all affected historic properties and other cultural resources and the Proposed Plan must not make presumptions or prognostications when evidence available to guide the Proposed Plan is within easy reach. Given Proposed Plan recognition that the entire 807 acres falls within the Chi'chil Bildagoteel National Register Historic District, landscape-level eligibility is affirmed, but this in no way relieves TNF of requirements to consult - with SHPO, tribes, other interested parties - including, but not limited to, potentially adverse effect determinations, management effect avoidance/reduction, and mitigation efforts. The Proposed Plan should include, at a minimum, clear and detailed statements regarding historic property values, consultation processes and standards, and ranges of possible preservation treatments.	The NHPA requires federal agencies to consult with the SHPO, American Indian tribes, and other interested parties on the effects of an undertaking on historic properties. The NHPA "requires the agency to consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by the undertaking" (36 CFR 800.2(c)(B)(ii)). Consultation with agencies, tribes, and other interested parties must also be conducted under NEPA in coordination with Section 106 of the NHPA consultation.  Consultation with the SHPO, tribes, and other consulting parties under Section 106 of the NHPA and NEPA is currently ongoing.  Discussions of effects on historic properties and other cultural resources, as well as the NRHP-listed <i>Chi'chil Bildagoteel</i> Historic District Traditional Cultural Property, are included in the "Tribal" and "Cultural/Historic" sections of the EA.	69

<sup>&</sup>lt;sup>7</sup> The August 2017 management plan Section 3.2.3, "Guidelines," for Tribal includes the following new guideline: "Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations."

Original Comment Text	Forest Service Response	Submittal Number
The Proposed Plan must also do more than pay lip service to the 2015, Anthropological Research, L.L.C.'s Ethnographic and Ethnohistoric Study of the Superior Area, Arizona. That report is replete with detailed information, provided directly by tribal representatives who are recognized authorities on culture and history, concerning (a) places of historical and cultural importance (including a number within or adjacent to the SMA), (b) the values embedded in those places, (c) the meanings, uses, and significances of regional historic properties and natural character, and (d) desired conditions for all of the above. The 2015 should be used as a principal tool for this plan component.	The purposes of Apache Leap SMA under the NDAA (Section 3003(g)(2)) are to (1) preserve the natural character of Apache Leap; (2) allow for traditional uses of the area by Native American people; and (3) protect and conserve the cultural and archaeological resources of the area.	69
	New plan components were developed for the management plan to address topics of tribal importance.	
	Management plan Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic," include desired conditions, objectives, standards, guidelines, and management approaches to historic properties, including the NRHP-listed <i>Chi'chil Bildagoteel</i> Historic District Traditional Cultural Property, as well as issues of access to traditional use areas by Native Americans.	
	Information on the significance of Apache Leap SMA to tribes is included in the "Tribal" and "Cultural/Historic" sections of the EA.	
The proposed management plan discusses the Congressional actions that established the SMA and provided guidance for its management, but the plan barely mentions Oak Flat. Of all the natural and cultural features with which Apache Leap is associated, Oak Flat is by far the most important. It is impossible to discuss one in isolation from the other and still maintain any credibility about either. The proposed plan fails on this account. How can Apache Leap's "special" and "unique" values (words that are used over and over again in the plan) be preserved when their most meaningful association is destroyed? Without Oak Flat, Apache Leap becomes nothing more than the façade of a man-made crater where the other half of the landscape used to be, and the management plan looks like a bandaid applied to an amputation.	The management plan mentions Oak Flat in descriptions of the area's physical and natural character, but by design, the plan does not include management direction for the area known as Oak Flat because Oak Flat is found adjacent to but outside the designated boundary for the Apache Leap SMA. Congress directed the Forest Service to prepare a management plan for the special management area, not for areas nearby.  As part of the cumulative effects analyses of the proposed action, the "Tribal" and "Cultural/Historic" sections of the EA disclose the management plan's effects on the <i>Chi'chil Bildagoteel</i> Historic District Traditional Cultural Property (which includes the Oak Flat area).	66

Original Comment Text	Forest Service Response	Submittal Number
Seismic whatever, underground mining, etcthese seem to be the major considerations being framed under the idea that Native American values are at the core of the plan.	Section 3003(g)(4)(B) of the NDAA authorizes several uses of the Apache Leap SMA, including: the installation of seismic monitoring equipment; the installation of fences, signs, or other measures necessary to protect the health and safety of the public; and operation of an underground tunnel and associated workings. While the Forest Service may require terms and conditions regarding implementation of these uses, it does not have the authority to prohibit these uses. Any of these authorized activities are subject to review under Section 106 of the NHPA, as well as compliance with the current forest plan.	25
And then camping in the Tonto Basin I woke in the night with thoughts of National Parks/Forests/Monuments and the whites who host them, knowing nothing really except what is on the brochures they hand out to tourists. I thought of how 'right' it would be to put these places under stewardship and management of the 'First Nations' who know the 'real' history of the place.	The Forest Service has an assigned responsibility for the stewardship and management of the federal lands within the boundary of the Apache Leap SMA. This authority cannot be delegated. However, the management plan developed for the Apache Leap SMA identifies several opportunities and suggestions for future collaboration between the Forest Service, the consulting parties, and other interested groups for the protection and management of the resources within the special management area.	51
Having eleven Native American tribes designated within this plan's purview makes these 807 acres of land extremely significant for cultural values that must be protected on behalf of the tribes, the Town of Superior, Resolution Copper, andthe public in the State of Arizona and in the United States. First Peoples' rights to their precious traditional and ceremonial sites need to be valued and protected, as well as conservation of American cultural and archeological resources.	The NDAA directs the Forest Service to allow for traditional uses of the area by Native American people and to protect and conserve the cultural and archaeological resources of the area. The Forest Service must also comply with the NHPA, which requires federal agencies to consider the effects of an undertaking on historic properties. This includes the NRHP-listed <i>Chí'chil Bildagoteel</i> Historic District Traditional Cultural Property. The management plan includes Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic," as a programmatic framework for addressing protections of tribal cultural values and concerns associated with the Apache Leap SMA.	62

#### Access

Original Comment Text	Forest Service Response	Submittal Number
Beautiful area!! We must keep it FULLY preserved and available for the public to enjoy forever with disturbing it.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character.	16
The public access has not been addressed and especially if you cannot access it from the east side because all access from the west side ends up at a cliff, and that cannot be considered public access. And so if the Forest Service would build a road that we can get at the Leap from the east side, then that would be considered public access, unless you were unless you were a rock climber that could climb up the sheer face to get to the top.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as road construction, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	26
Public Access - No Roads just trails, like the AZ Trail, Leave it remote to hiking only, preserve the beauty of that area.	Management plan Section 3.5.3, "Guidelines," for Recreation designates the majority of the Apache Leap SMA as "semi-primitive non-motorized," a designation that allows for non-motorized trails and does not allow motorized trails. A small portion surrounding the Forest Road (FR)2440 area on the west side of the special management area is designated semi-primitive motorized. See Figure 3 on page 25 of the management plan for a map showing the location of designated "semi-primitive motorized" and "semi-primitive non-motorized" areas.	27

## Access (Continued)

Original Comment Text	Forest Service Response	Submittal Number
No off road vehicles allow	Management plan Section 3.5.3, "Guidelines," for Recreation designates the majority of the Apache Leap SMA as "semi-primitive non-motorized," a designation that allows for non-motorized trails and does not allow motorized trails. A small portion surrounding the FR2440 area on the west side of the special management area is designated semi-primitive motorized to allow for continued minimal motorized activity. See Figure 3 on page 25 of the management plan for a map showing the location of designated "semi-primitive motorized" and "semi-primitive non-motorized" areas.	27
Please consider alternative access to Apache Leap Management Area once FR 315 is closed. Please keep FR 2440 open up to the management area.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as alternative access route designation, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." This includes the potential impacts if FR315 is closed to access. However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	28

## Access (Continued)

Original Comment Text	Forest Service Response	Submittal Number
The management plan includes references to the motorized trail issue in a number of places, leading to confusion and a mixed message.  3.7.2 Refers to designated roads, referencing a map not in the document.  3.7.3 States that the roads not designated as road will be "decommissioned" which generally means ripping the road with a dozer, reseeding and placing barriers to access.  In item three, the town has requested that existing motorized access be maintained (vision statement). They have also requested motorized access to a trailhead. This element is neglected in the plan, and it is important to future use, as expanded work on the east side will make access from that side difficult.  This road to the west side is the only access, and the current plan calls for it be eliminated, to the detriment of the local user.	The map referred to in Section 3.4.2, "Standards," for Access in the management plan is the forest-wide motorized vehicle use map. This map designates roads and areas of the Tonto National Forest that are available for motorized access. At the time of publication, the motor vehicle use map that designates motorized vehicle access on the Tonto National Forest is under development and will be available at the Forest Service administrative offices when the travel management process is completed. This map is regularly updated to present changing circumstances and therefore is the guiding document for current motorized access information.  Roads on private lands within the Apache Leap are currently not available for public use and therefore do not constitute "existing motorized access" in the Apache Leap area. Management plan Section 3.4.3, "Guidelines," for Access recommends decommissioning these roads and converting them into trails (where possible) to enhance the natural character of the area, as required in the NDAA.  The management plan is a planning-level document that provides a	30
	programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as motorized access to a trailhead, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.  Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-	
	primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  As a result of changes to a semi-primitive motorized designation, the establishment of a closure order for motorized recreation activities in the Apache Leap SMA has been removed from management plan Section 3.5.2, "Objectives," for Recreation.	

## Access (Continued)

Original Comment Text	Forest Service Response	Submittal Number
I think that your management plan fails to meet the public access requirement. If the block cave method of mining is approved by the Forest Service access from the east will be not available because of the subsidence zone. The access from the west will not meet the requirement as public access.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	36
	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	
	The NDAA does not require that the Forest Service provide recreation access to the Apache Leap SMA; it states that the Forest Service "consider" providing access for recreation.	
I have concerns about the access to the Apache Leap Management Area. If you allow the block cave type of mining the access from the east, which allows the public to get to the top of the leap, will be lost. Access must include a way for the public to get to the top without using ropes and climbing gear. Most hikers in this area are older people and without access to the top, it would be dangerous for them to use this area.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	43
	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	

Original Comment Text	Forest Service Response	Submittal Number
Road Access I am aware that Queen Creek Coalition and the Recreational Users Group have identified certain USFS roads as being necessary to access their proposed recreational activities at Apache Leap, e.g., USFS road 2440, at least as far as the Resolution private property/well pad (about half way up.) I believe that unless climbers can drive at least that far up the hill, NO ROCK CLIMBING will occur. Climbers simply will not haul 35 pound packs from Highway 177 up to the Leap.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	44

Original Comment Text	Forest Service Response	Submittal Number
Historical access to Apache Leap has occurred from the top of the Leap and via Magma Mine road and FR 315 dirt road that heads south to Lower Devils and Hackberry Creek. From there long hiking paths lead to the top of the Leap and rappelling into the climbing. QCC believes that recreational access to Apache Leap is a high priority and in fact that recreation is stated as a goal for Apache Leap in the enabling legislation.  Because access from the top of Apache Leap may be lost due to the future mining activities, replacement access should be granted. The replacement access QCC is requesting involves use of USFS FR 2440. This "west side approach" allows for the preferable approach from the bottom of the climbing areas. It also will facilitate the access of Native Americans and recreational users to the Apache Leap SMA.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.  In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	46
Road Access – QCC feels strongly that FR 2440 (aka Cross Canyon Road) should be maintained as vehicular access to a new parking lot/staging area. Resolution Copper has monitoring well sites and pads along FR 2440. Conceivably one of the well pads on its private land holdings could be used for a new parking lot/staging area for hiking, cycling and climbing access to Apache Leap SMA.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as a parking lot/staging area, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	46

Original Comment Text	Forest Service Response	Submittal Number
I am commenting on the APLMP as I want to stay involved with this as it is a popular hiking area. Access must be available from the east as that is how we get there. If you allow the block cave type of mining you must build a road for us to get to the top of the leap from the east.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as construction of a new road, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	48
We are winter visitors in the Queen Valley area for the past 20 years and have great concern about the block cave mining that is suggested for Apache Leap. If this method is allowed to go forward, it would close our access to Apache Leap on Road 315. The only access to the leap would be the west side which cannot be considered a public access which is required by law.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	49
	The NDAA does not require that the Forest Service provide recreation access to the Apache Leap SMA; it states that the Forest Service "consider" providing access for recreation.	

Original Comment Text	Forest Service Response	Submittal Number
During the public meeting in Superior on April 4, 2017 the Department noted several participating members of the public were confused with the current and proposed access for motorized recreation. We recommend additional clarification on the current access as it relates to private properties adjacent to the SMA, Forest Service motor vehicle use maps and illustrative characterization of currently open and closed routes.	The "Access" section of the EA includes a description of the current access to the Apache Leap SMA and a description of the direct, indirect, and cumulative impacts of the management plan on existing access. This includes a map with current access opportunities and information about how access interfaces with private land parcels.	50
Access and Parking. It is stated no motorized access within Apache Leap SMA. The vast majority of us do not wish for ATV's and dirt bikes ripping through that area. We do however understand the need for a primitive parking area at the least to keep visitors safe and make the area accessible for hikers, rock climbers, and other users. My personal opinion is that a couple of flat areas just above the current gate on FS 2440 should be considered. It is my understanding that 2440 will remain open to Resolution Copper to access their monitoring wells at roads end under the Leap. This will be done by motorized vehicles. It would put the parking inside of the boundary but since it will be used in some capacity anyway, a minimum of work would go into these areas for parking and access.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as parking areas, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	52
	As a result of changes in designation of part of the Apache Leap SMA to semi-primitive motorized, a closure order for motorized recreation activities in the Apache Leap SMA is unnecessary and has been removed from management plan Section 3.5.3, "Objectives," for Recreation.	

Original Comment Text	Forest Service Response	Submittal Number
The access from the west is straight up the face of the Leap. That is not safe to climb. We have to be able to have safe access to the top of the Leap. Public access must be there as required by law. If block cave mining is allowed then the Forest Service Road 315 will be lost to the public.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	54
	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	
	The NDAA does not require that the Forest Service provide recreation access to the Apache Leap SMA; it states that the Forest Service "consider" providing access for recreation.	
Public access should not limited to the bottoms of the "Leap". To meet the intent of the public access there needs to be access to the top of cliff. FS Road 315 should be left open to allow access. Access to both the top and bottom needs to be for both foot travel and vehicles.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	58
	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	

Original Comment Text	Forest Service Response	Submittal Number
Given that the legislation specifically mentioned recreation it is important that reasonable access be provided. Forrest Service road 2440 currently goes up to the base of Apache Leap and provides access to a monitor well used by Resolution. Parking at the edge or within the SMA along 2440 would provide reasonable access.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access or parking areas, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	59
	In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	
I (as have countless others) have been rock climbing on Apache Leap for several decades. Climbing on the Leap provides for very tall climbs making it unique to the region. Reasonable access is crucial once we lose the short/level access from the top as the mine is developed.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	59
	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	
While I believe that the cross-canyon road will be kept at the request of Resolution Copper for monitoring purposes, it should be more hiker friendly (no loose gravel).	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in Cross-Canyon Road, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Management plan Section 3.5.1, "Desired Conditions," for Recreation includes the desired conditions of offering dispersed recreation opportunities that emphasize non-motorized activities.	61

Original Comment Text	Forest Service Response	Submittal Number
Parking should be rustic and no higher than halfway up toward the "S" for Superior. I realize that this is TNF and not part of the Apache Leap Special Management Area. However, it is part of the access to the Apache Leap SMA. Consider making the parking a pay system similar in Sedona to help with costs.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes in access or parking areas, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.  In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	61
Access should be maintained with no closures unless due to hazardous conditions.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	61

Original Comment Text	Forest Service Response	Submittal Number
While we approve of the general desired conditions stated above in 3.3.1, we have substantive concerns. The first is the apparent incompatibility between the NDAA requirement (Section 3003(g)(5)(B)) to provide access to the SMA for recreation and the first objective of section 3.3.2 of the Proposed Management Plan. All of the approximately fifty established rock climbs within the new SMA area are currently accessed from the east, via Forest Service Road 315, also called "Magma Mine Road." The Resolution Copper mining plan of operation clearly states that this road will be re-routed in the future, due to the block-cave subsidence crater expanding into the area where FS 315 currently runs. Future access to Apache Leap from the east for rock climbing (or any other purpose) will therefore be permanently eliminated. There is occasional, unofficial access to Apache Leap from the west, via FS 2440, also known as "Cross Canyon Road," when the locked gate under Resolution Copper control is inadvertently left open, but this is rare and does not constitute authorized access. We recommend that the Proposed Management Plan be modified to not close the entire SMA to motorized travel and to instead open FS 2440 to thru traffic and establish at least a small parking area for visitors at or near the top of the road. It will be virtually impossible to access the SMA for any of its intended purposes in the future (including for cultural and religious purposes) if such access is not provided.	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.  The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes to access and parking areas, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  The NDAA does not require that the Forest Service provide recreation access to the Apache Leap SMA; it states that the Forest Service "consider" providing access for recreation.	67

Original Comment Text	Forest Service Response	Submittal Number
One wonders how access for traditional cultural uses could be accommodated if Rio Tinto is allowed to build a mine according to its current mining plan. Even if Rio Tinto is accurate that no subsidence would occur closer than 1,000 feet from the boundary of the Apache Leap SMA, it would be very difficult to allow access to the Apache Leap SMA from the east. Access from the west would be very difficult due to the escarpment itself. How would the Forest Service assure access for traditional cultural activity under the current mining plan? Would the Forest Service have the ability to force Rio Tinto to curtail mining activity to assure for public access from the east?	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes to access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	68
	The management plan addresses access to traditional use areas, as described in Section 3.2.3, "Guidelines," for Tribal: "When access to traditional use areas by tribal members is hampered by land exchanges, road decommissioning, or other actions outside and adjacent to the Apache Leap SMA, the responsible line officer will work with tribes, landowners, and other pertinent agencies to allow reasonable access while protecting the natural character and values of the Apache Leap SMA."	

Original Comment Text	Forest Service Response	Submittal Number
PMP 3.3 We agree that non-motorized recreational activities within the Apache Leap SMA is a desired condition, but you still need to be able to get to the Apache Leap SMA to conduct non-motorized recreation. How does the Forest Service propose to allow access to the Apache Leap SMA itself? The only real access to the top of Apache Leap is from the east and Rio Tinto's proposed mine plan makes that access almost impossible.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as changes to access, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan. This section encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the section titled "Access." However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.  In management plan Section 3.5.3, "Guidelines," for Recreation resources, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	68
Reiterating Resolution Copper's December 15, 2016 request to the United States Forest Service (USFS) Resolution Copper requests the ability to maintain and sample hydrological monitoring wells QC-04 and MB-03 and to be able to continue to use National Forest System road 2440 (Cross Canyon Road) to access these monitoring well sites (these activities were approved by the USFS in Resolution Copper's Prefeasibility Activities Plan of Operations #03-12-02-006). Section 3.10 Stability of Lands, Table 1. Land Suitability Determinations, states that both the East Apache Leap and West Apache Leap are not suitable for motorized vehicle use. This table suggests that the Cross Canyon Road would no longer be available for Resolution Copper to access hydrological monitoring wells QC-04 and MB-03 via motorized vehicle.	In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  Resolution Copper would continue to have permitted administrative use of FR2440 to access the two existing hydrological monitoring wells (MB-03 and QC-04) in the Apache Leap SMA.	70

Original Comment Text	Forest Service Response	Submittal Number
Section 3.3.1: "The Apache Leap SMA offers dispersed recreation opportunities that emphasize non-motorized recreation." Comment: per RC's scoping letter, we would request continued motorized access to the 2 monitor wells that were installed and authorized per the PFS plan of operations.	In management plan Section 3.5.3, "Guidelines," for Recreation resources, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  Resolution Copper would continue to have permitted administrative use of FR2440 to access the two existing hydrological monitoring wells (MB-03 and QC-04) in the Apache Leap SMA.	70
Section 3.3.2: "Within 3 years of plan approval, establish a closure order for motorized recreation activities and overnight camping under Title 36, CFR, Part 261, "Prohibitions."" Comment: per comments above - any exceptions for the existing motorized access to monitoring sites currently authorized?	In management plan Section 3.5.3, "Guidelines," for Recreation, the recreation opportunity spectrum designation was changed to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  As a result of the management plan recreation opportunity spectrum revision, the establishment of a closure order for motorized recreation activities in the Apache Leap SMA has been removed from management plan Section 3.5.3, "Objectives," for Recreation.  Resolution Copper would continue to have permitted administrative use of FR2440 to access the two existing hydrological monitoring wells (MB-03 and QC-04) in the Apache Leap SMA.	70
Section 3.7: "Only designated roads, motorized trails, and motorized use areas as depicted and described on the motor vehicle use map are open to public motorized vehicle use." Comment: does this include the road access for the 2 wells authorized for monitoring under the PFS plan of Operations?	Resolution Copper would continue to have permitted administrative use of FR2440 to access the two existing hydrological monitoring wells (MB-03 and QC-04) in the Apache Leap SMA.	70

#### Recreation

Original Comment Text	Forest Service Response	Submittal Number
Recreation - agree with the new proposed management	Thank you for your input. The management plan contains direction for recreation management that fosters protection of the area's resources.	27
no zip line	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for zip line development in the Apache Leap SMA. Individual proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	27
Since the Oak Flat Campground will be closed (non-existent) & camping will be closed in the Apache Leap Management Area – Please consider creating comparable campgrounds near or around the management area.	While overnight camping would be prohibited in the Apache Leap SMA, there will continue to be many areas open to overnight dispersed camping in the Tonto National Forest.  The EA "Recreation" section discusses the cumulative effects on recreation from the proposed Resolution Copper Project and Land Exchange.  However, a full analysis of recreation impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, along with potential mitigation measures (including mitigation for loss of camping), will be addressed in the Resolution Copper Project and Land Exchange EIS.	28

Original Comment Text	Forest Service Response	Submittal Number
Please consider additional trails in the Apache Leap Management Area	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	28
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
	Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation addresses the approach for management of future trail planning in the Apache Leap SMA.	
Non-motorized trails need to be more clearly included in the plan, allowing for a simple process to develop new trials, and acknowledge existing trail plans.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	32
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
	Language has been added to the management plan Section 3.5.4, "Management Approaches," for Recreation that addresses the approach for management of future trail planning in the Apache Leap SMA.	

Original Comment Text	Forest Service Response	Submittal Number
The ability to hike on the roads leading up to the Apache Leap area should be preserved and not altered in any way. The ability to hike on any trails throughout the Apache Leap SMA area should be preserved and not altered in any way, as should the ability to hike or climb to the top of the Apache Leap mesa.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The management plan does not limit the ability to hike or climb in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources.	39
The ability to climb the beautiful rock throughout Apache Leap should always be maintained as it is today.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation, such as climbing, that occurs at appropriate locations and intensities such that cultural and natural values are protected.	39
I have come up with a plan/proposal that I believe addresses many of the challenges posed by the Resolution Copper land exchange and its impact on the Apache Leap/Oak Flat area. I have outlined my thoughts below and would appreciate your feedback on these thoughts.  The proposal involves the creation of a new recreation/park /national forest area that would utilize existing federal BLM lands and be funded through a public/private partnership. Creation of this new recreation area could accomplish the following goals  1) protect the Apache Leap area by shifting heavy-impact uses to other areas 2) greatly expand recreational opportunities, including those for motorized recreation activities and overnight campingwhich are being phased-out at Apache Leap 3) bring much needed economic opportunity to the Southern Gila County/Eastern Pinal County area of Arizona 4) provide access to 25 square miles of Federal (BLM) land and 13 square miles of National Wilderness area that currently have no public access, and 5) generate an income source to oversee this magnificent new park opportunityespecially given the prospect of decreased federal funding for parks.  [See submittal letter for more details.]	Thank you for your idea to shift recreation activities away from the Apache Leap area in order to protect it from heavy impact uses. The focus of the proposed action is to develop a programmatic approach to managing future activities within the Apache Leap SMA itself, including recreation activities. The suggestion to create a new recreation area elsewhere does not meet the purpose and need to prepare a management plan for the Apache Leap SMA.  The EA "Recreation" section discusses the cumulative effects on recreation from the proposed Resolution Copper Project and Land Exchange. However, a full analysis of recreation impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, along with potential mitigation measures (including mitigation for loss of camping), will be addressed in the Resolution Copper Project and Land Exchange EIS.	42

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I paid particular attention to the "words" used in the ALSMP that could be used as evaluative criteria later when specific situations or projects are being evaluated.  Semi-primitive non-motorized recreation  Some "activities" are probably covered through its general statements about low impact recreation, the term for which is "semi-primitive non-motorized". I would like "semi-primitive non-motorized" to include such human powered activities as hiking, rock climbing and mountain biking. Perhaps wording can be added to that effect.  It appears to me that the USFS' administrator could make some judgments as to whether activities are inherently okay and having it explicitly stated that hiking, rock climbing and mountain biking are okay would be preferable.	Management plan Section 3.5.4, "Management Approaches," for Recreation emphasizes non-motorized recreation in the Apache Leap SMA. The activities as described in the comment are consistent with the allowable uses under the semi-primitive non-motorized recreation opportunity spectrum class designation.  The "Recreation" section of the EA discusses of the types of activities typically allowed under each of the recreation opportunity spectrum classes.	44
Intensity of Recreation  Generally federal agencies declare areas of their jurisdictions are suitable for various "intensities" of recreational use. These can range from Low Impact to Intensive. Rock climbers tend to believe strongly in conservation and "minimal impact" activities. However, I would hope that the ALSMP allows rock climbers to use the tools of their trade, "fixed anchors" and "bolts" to protect the routes and make climbing safer.  I would hope that the language of the ALSMP does NOT prohibit those activities. It might be helpful to add language specifically authorizing them.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The management plan does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources.  The "Recreation" section of the EA includes a discussion of existing climbing activities occurring in the Apache Leap SMA, including use of fixed anchor and bolted climbing routes. As discussed in the "Recreation" section of the EA, rock climbing represents the primary recreation use of the Apache Leap SMA and there are approximately 16 boulder problems and 80 bolted routes in the Apache Leap SMA. The majority of the climbing routes are located on the escarpment and are accessed from parking areas on FR315.	44

Forest Service Response	Submittal Number
The Forest Service recognizes the desire of stakeholders to develop a Climbing Management Plan for the Apache Leap SMA. Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation to develop an Apache Leap SMA Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA.	44
Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The	46
the area surrounding the Apache Leap SMA.  Management plan Section 3.5.4, "Management Approaches," for Recreation emphasizes non-motorized recreation in the Apache Leap SMA. The activities as described in the comment are consistent with the allowable uses	46
	The Forest Service recognizes the desire of stakeholders to develop a Climbing Management Plan for the Apache Leap SMA. Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation to develop an Apache Leap SMA Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA.  Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The "Recreation" section of the EA discusses the regional recreational setting for the area surrounding the Apache Leap SMA.  Management plan Section 3.5.4, "Management Approaches," for Recreation emphasizes non-motorized recreation in the Apache Leap SMA. The

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Semi-primitive non-motorized recreation – QCC supports the recreational intensity conveyed in the proposed Plan through the terminology of semi-primitive non-motorized recreation if that category includes the human powered activities of hiking, rock climbing and mountain biking. QCC feels that that category is consistent with historic usage.	Management plan Section 3.5.4, "Management Approaches," for Recreation emphasizes non-motorized recreation in the Apache Leap SMA. The activities as described in the comment are consistent with the allowable uses under the semi-primitive non-motorized recreation opportunity spectrum class designation. The "Recreation" section of the EA discusses of the types of activities typically allowed under each of the recreation opportunity spectrum classes.	46
Trail Systems – QCC feels that the Recreational Greenbelt in the Superior region should include a multiuser trail system within ALSPA. QCC has done a trail feasibility study which is being included in the Recreational User Groups (of Superior) USFS project submittal. QCC believes that future funding from impacted parties will fund the construction of those trails. Long term QCC is committed to assisting in maintain at least those portions of the trail systems that benefit rock climbers.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	46
	The Forest Service acknowledges the extensive trail planning efforts undertaken by recreational users groups and stakeholders in and around the Superior region. Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation that addresses the approach for management of future trail planning in the Apache Leap SMA.	
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
Apache Leap Climbing Management Plan – Historically land managers and rock climbers have formalized and specified rock climbing access and practices in a mutually agreed upon Climbing Management Plan to protect sensitive areas. The USFS' Manning Directive in fact called upon USFS managers to develop rock climbing management plans in its designated wilderness areas where rock climbing was to be permitted.	The Forest Service recognizes the desire of stakeholders to develop a Climbing Management Plan for the Apache Leap SMA. Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation to develop an Apache Leap SMA Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA.	46
At least two of QCC's Board of Directors have developed rock climbing management plans and would be willing to work with USFS representatives to develop such a plan for Apache Leap SMA.		

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I would like to see it specifically stated in the plan that creating new non-motorized trails would be allowed and consistent with managing for 'semi private non-motorized' to protect the natural character and values while allowing for recreational use.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	47
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
	The "Recreation" section of the EA includes a discussion of the types of activities typically allowed under each of the recreation opportunity spectrum classes.	
Section 3.3.3 makes the recommendation that "l. Overnight camping is prohibited." The Department would support a less restrictive standard for camping that allows non-vehicular based camping opportunity, such as remote backpack type access. A less restrictive opportunity would align with public access desired conditions, standards and guidelines and would achieve the desired condition for dispersed recreation opportunity that emphasizes non-motorized recreation.	The prohibition on overnight camping in the Apache Leap SMA is consistent with management plan Section 3.5.1, "Desired Conditions," for Recreation which emphasizes non-motorized use that occurs at appropriate locations and intensity such that cultural and natural values are protected. While overnight camping would be prohibited in the Apache Leap SMA, there will continue to be many areas open to overnight dispersed camping in the Tonto National Forest.	50
The Department is also highly concerned with maintaining wildlife related recreation opportunities including, but not limited to hunting as well as non-consumptive opportunities like wildlife watching. Neither the desired conditions for, "Natural Character and Scenery" or "Wildlife", recognize the current wildlife related activities including hunting. We recommend adding a sentence at the end of the second paragraph under 3.5.1 that states - "Wildlife related recreation such as hunting, wildlife watching or photography are desired recreation opportunities."	Management plan Section 1.2, "Overview of the Apache Leap SMA," notes that hunting is one of the present uses of the Apache Leap SMA. Language was added to Section 3.5, "Recreation," to further clarify that recreation activities include sport hunting. Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Wildlife-related recreation activities, including hunting, wildlife watching, and photography, are allowed recreation activities in the Apache Leap SMA.	50

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The Leap has a long history of rock climbing. From both ends to the middle are established routes with fixed anchors and bolts. These are strictly in place for the climber's safety and this practice should be allowed to continue. The last thing in the world we would want is for people to get hurt from lack of proper protection. The climbing community regulates this through organizations like QCC.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The management plan does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources. The "Recreation" section of the EA includes a discussion of existing climbing activities occurring in the Apache Leap SMA, including use of fixed anchor and bolted climbing routes.	52
Trails. A future trail system should be allowed skirting the base of the Leap to provide access to hikers and climbers. This would protect the future integrity of the area for obvious reasons.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	52 ve
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as a trail system, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
	Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation that addresses the approach for management of future trail planning in the Apache Leap SMA.	

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	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The management plan does not prohibit future surface-disturbing activities, including trail development.	55
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. These future proposals would be subject to the environmental review requirements as set forth in Forest Service NEPA procedures and guidance (36 CFR Part 220, "Forest Service National Environmental Policy Act Procedures;" FSM 1950; and FSH 1909.15). Best management practices for the protection of natural resources would be addressed during the project-specific environmental review process.	
The CWG does not agree with establishing a "no camping" designation for the Apache Leap SMA. While we understand that permanent established campsites, fire rings, and other camping-related developments are not compatible with management objectives, we believe that dispersed overnight stays for hikers, backpackers, hunters, and other visitors who arrive in the area via approved methods should be allowed. The overnight camping prohibition should not apply to dispersed overnight camping. Dispersed overnight stays will allow the natural characteristics and values, as expressed in the 3.2.2 Standards, to be enjoyed by the public, specifically "natural quiet, dark skies, and limited encounters with other visitors". Backpacking stays overnight in at-large locations will provide an important opportunity to experience the values of "natural quiet" and "dark skies" in this semi-primitive, non-motorized area. We agree that prohibiting overnight camping along roads is appropriate as is prohibition of campgrounds.	The prohibition on overnight camping in the Apache Leap SMA is consistent with management plan Section 3.5.1, "Desired Conditions," for Recreation which emphasizes non-motorized that occurs at appropriate locations and intensity such that cultural and natural values are protected. While overnight camping would be prohibited in the Apache Leap SMA, there will continue to be many areas open to overnight dispersed camping in the Tonto National Forest.	57

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The proposed plan is, in general, very unhelpful in allowing the public to understand what recreational activities will be allowed – or, conversely, prohibited. Without specific mention of the following activities outlined by the CWG in our previous letter, we assume that these activities would be allowed, provided that access to them is via non-motorized methods.  • Flying kites & paper airplanes  • Rock climbing  • Social and informal community gatherings  • Access via Cross Canyon Road, FR 2440  • Hiking (via FR 2440 and overland)  • Birding	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. As consistent with the mapped recreation opportunity spectrum classes and setting descriptions, the activities as described in the comment are consistent with the allowable uses in the Apache Leap SMA.  The "Recreation" section of the EA includes a discussion of the types of activities typically allowed under each of the recreation opportunity spectrum classes.	57
• Access to the memorial crosses (which are not located in the Apache Leap SMA)		
If this is not the case, please clarify. At the very least, please specify those activities that are included in the Recreation Opportunity Spectrum of Semi-Primitive Non-Motorized, and not require readers to research this on their own.		

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The Tonto National Forest is aware of the work being undertaken by the CWG subcommittee Recreation User Group (RUG) to develop a coordinated trail and recreation plan for the Superior area. As part of this plan it is likely that there will be some trail along the base of Apache Leap, and that rock climbing is a nature-based recreational activity that is proposed to continue. As noted above, the proposed Apache Leap SMA plan does not currently address the activity of rock climbing, which also dovetails with the Town of Superior's character and its wish to attract out-of-area visitors.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA). Climbing is also an allowable recreation activity in the Apache Leap SMA.	57
	The Forest Service acknowledges the extensive trail planning efforts undertaken by recreational users groups and stakeholders in and around the Superior region. Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation that addresses the approach for management of future trail planning in the Apache Leap SMA.	
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
There is no mention of hunting in either the Wildlife or Recreation sections of the plan. Will hunting be allowed, and under what conditions? Would the Arizona Game and Fish Department hunting guidelines be used?	The Arizona Game and Fish Department administers sport hunting in the state of Arizona. Hunting is currently permitted in the special management area and surrounding areas. Decisions regarding hunting lie with Arizona Game and Fish Department, as the Forest Service has no authority to allow, prohibit, or manage hunting permits.	57

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Non-motorized trails are not discussed in 3.7 Public Access. Since "Roads and motorized trails are not evident within the Apache Leap SMA" (3.7.1), we believe it would be appropriate to include non-motorized trails within the Apache Leap proposed management plan. Specifically, please explain whether new "primitive non-motorized" trails can be developed within the Apache Leap SMA. Would these be subject to environmental review requirements of the NEPA?	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	57
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan. Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation that addresses the approach for management of future trail planning in the Apache Leap SMA. Future proposals would be subject to the environmental review requirements as set forth in Forest Service NEPA procedures and guidance (36 CFR Part 220, "Forest Service National Environmental Policy Act Procedures;" FSM 1950; and FSH 1909.15).	

Original Comment Text	Forest Service Response	Submittal Number
There should be explicit mention of links to the LOST trail on old Hwy 60.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. Trail development would be an allowable use in the Apache Leap SMA and would be managed consisted with the mapped recreation opportunity spectrum classifications of semi-primitive motorized (surrounding the FR2440 area on the west side of the Apache Leap SMA) and semi-primitive non-motorized (remainder of the Apache Leap SMA).	61
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
	Language has been added to management plan Section 3.5.4, "Management Approaches," for Recreation that addresses the approach for management of future trail planning in the Apache Leap SMA. Specifically, the section states, "Consider existing and proposed non-motorized trails that are adjacent (e.g., the LOST [Legends of Superior Trails]) for connectivity to future proposed trails within the Apache Leap SMA".	

Original Comment Text	Forest Service Response	Submittal Number
To accomplish coordinating recreational use with tribal ceremonial activities requires access by all interested parties. This access will likely require thinking outside the usual box.  A consideration for meeting use needs while achieving the non-motorized mandate of the Special Use Area must include a collaboration of many entities. I suggest considering a developed use area just outside but adjacent to the boundary of the Special Use Area. For the purpose of this proposal I will refer to the use area as Partnership Park. Development of the use could include camping, picnicking, parking, and interpretation information. The scared and historical story, geology, vegetation and wildlife as well as rules and regulations would be included in the interpretation. To accomplish this design and implementation a newly formed collaborative group would be formed. A501c3, such as the Queen Creek coalition would take the lead to facilitate applying for grant dollars from various sources.	Thank you for your idea to develop an area outside the Apache Leap special management area for such uses as camping, picnicking, parking, and interpretive information. The focus of the proposed action is to develop a programmatic approach to managing future activities within the Apache Leap SMA itself, including recreation activities. The suggestion to create a new special use area elsewhere does not meet the purpose and need to prepare a management plan for the Apache Leap SMA.	65
Partners would include but not necessarily be limited to the tribe/s, Town of Superior, Tonto Forest, Resolution Mine and various user organizations. This approach provides non-motorized access to the many users wanting access to the Special Use area. The Park would be a good economic driver for the community, bringing local and out of area visitors to the Forest and into town for services. The Park would provide the tribe/s with needed access for ceremonies and visits to the scared spaces. Recreation users would have access to trails with places to stay during their visit.		
FS could choose to have this be a Fee area; however, I believe the collaborative group lead by a 501c3 (for example Queen Creek Collation) could raise all or most of the funds for development and maintenance. Management would follow all FS guidelines.		
By combining recreation development outside the Special Use Area with restricted use inside the Special Use Area, I believe everyone can enjoy the Forest and meet all the mandates of the Special Use Area.		

Original Comment Text	Forest Service Response	Submittal Number
According to the definitive rock climbing guide book to the area "The Rock Jock's Guide to Queen Creek Canyon," 1 Apache Leap has been an established rock climbing area since the 1970's. Thirty seven established routes exist in that guide book that are within the boundaries of the SMA—and more recent route development pushes the total number of existing climbs to near fifty established climbing routes. Rock climbing has therefore been an accepted form of recreational use for the Apache Leap area for decades, and creation of the NDAA mandated SMA should not have any negative impact on that acceptance going forward.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The management plan does not limit the ability to climb in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources.	67
Ziplines have no place on the Apache Leap SMA.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. At this time, the Forest Service has not received a proposal for a zip line in the Apache Leap SMA. If a future proposal is received for the Apache Leap SMA, the Forest Service would review the proposal under management plan Section 3.5, "Recreation," objectives, standards, and guidelines, including for consistency with the mapped recreation opportunity spectrum classes and setting descriptions.	69
Rock climbing should be limited and should leave no impacts on cultural resources	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. The management plan does not limit the ability to climb in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources.  Section 3.2.3, "Guidelines," for Tribal in the management plan states, "If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, temporary closures to protect the affected sites or use areas should be employed until restorative measures can be identified and implemented."	69

Original Comment Text	Forest Service Response	Submittal Number
I would not like to see any trails, trams, off road vehicles destroy the esthetics of the mountain.	Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected.	72
	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. At this time, the Forest Service has not received a proposal for trail development in the Apache Leap SMA. Future proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the plan.	
	The management plan language in Section 3.5.3, "Guidelines," for Recreation requires that "trail construction and maintenance work and structures should blend with the natural setting to the greatest extent possible without compromising their function or resource benefit." This management plan language encourages the protection of natural character and scenery in consideration of function and resource protection.	
Find other areas for recreation. Once it is open for recreation it will be defaced and destroyed	National Forest System lands within the Apache Leap SMA are currently, and have been in the recent past, open to public access and dispersed recreation opportunities. Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected.	72

#### **Mineral Resources**

Original Comment Text	Forest Service Response	Submittal Number
It appears that mining is still being considered the most important component of this spacewhich concerns me	With respect to mining, Section 3003(g)(3) of the NDAA indicates that as a condition of the land exchange, all rights held under the mining law to commercially extract minerals under the Apache Leap SMA shall be surrendered. In addition, under Section 3003(f) of the NDAA, the Apache Leap SMA is withdrawn from mineral entry and mining. Two remaining uses associated with mining are specified as authorized by the NDAA (Section 3003(g)(4)(B)) and include seismic monitoring equipment and an underground tunnel.	25
	The management plan implements the requirements of the NDAA through Section 3.6.2, "Desired Conditions," for Mineral Resources. This section states, "The Apache Leap SMA is withdrawn from all forms of disposition under the mineral leasing, mineral materials, and geothermal leasing laws pursuant to Section 3003 of the NDAA."	
Mineral Resources - agree with the new proposed management, will tear up landscape with current management	Thank you for your input. Management plan Section 3.6.2, "Standards," in the "Mineral Resources" section states that the exploration for and development of mineral resources does not occur within the Apache Leap SMA as directed by the NDAA.	27
This area absolutely should be protected from the ravages of the mining industry.	With respect to mining, Section 3003(g)(3) of the NDAA indicates that as a condition of the land exchange, all rights held under the mining law to commercially extract minerals under the Apache Leap SMA shall be surrendered. In addition, under Section 3003(f) of the NDAA, the Apache Leap SMA is withdrawn from mineral entry and mining. Two remaining uses associated with mining are specified as authorized by the NDAA (Section 3003(g)(4)(B)) and include seismic monitoring equipment and an underground tunnel.	51
	The management plan implements the requirements of the NDAA through Section 3.6.2, "Desired Conditions," for Mineral Resources. This section states, "The Apache Leap SMA is withdrawn from all forms of disposition under the mineral leasing, mineral materials, and geothermal leasing laws pursuant to Section 3003 of the NDAA."	

Original Comment Text	Forest Service Response	Submittal Number
please do not allow any mining activity in Apache Leap SMA, and please limit any adjacent mining activity so as to preserve the health and integrity of the areas surface and ground waters.	With respect to mining, Section 3003(g)(3) of the NDAA indicates that as a condition of the land exchange, all rights held under the mining law to commercially extract minerals under the Apache Leap SMA shall be surrendered. In addition, under Section 3003(f) of the NDAA, the Apache Leap SMA is withdrawn from mineral entry and mining. Two remaining uses associated with mining are specified as authorized by the NDAA (Section 3003(g)(4)(B)) and include seismic monitoring equipment and an underground tunnel.	55
	The management plan implements the requirements of the NDAA through Section 3.6.2, "Desired Conditions," for Mineral Resources. This section states, "The Apache Leap SMA is withdrawn from all forms of disposition under the mineral leasing, mineral materials, and geothermal leasing laws pursuant to Section 3003 of the NDAA."	
	Adjacent mining operations are being analyzed appropriately through the NEPA process (Resolution Copper Project and Land Exchange EIS) required under Section 3003(c)(9) of the NDAA. Adjacent mining cannot be limited through management actions in the Apache Leap SMA. Congress specified in Section 3003(g)(6) of the NDAA that "the provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."	
If "The Apache Leap SMA is withdrawn from all forms of disposition under the mineral leasing, mineral materials, and geothermal leasing laws pursuant to Section 3003 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) (Public Law [PL] 113–291) (113th Congress, 2014)" means that mining operations will not be allowed in the Apache Leap area, I am in favor of the plan.	With respect to mining, Section 3003(g)(3) of the NDAA indicates that as a condition of the land exchange, all rights held under the mining law to commercially extract minerals under the Apache Leap SMA shall be surrendered. In addition, under Section 3003(f) of the NDAA, the Apache Leap SMA is withdrawn from mineral entry and mining. Two remaining uses associated with mining are specified as authorized by the NDAA (Section 3003(g)(4)(B)) and include seismic monitoring equipment and an underground tunnel.	63
	The management plan implements the requirements of the NDAA through Section 3.6.2, "Desired Conditions," for Mineral Resources. This section states, "The Apache Leap SMA is withdrawn from all forms of disposition under the mineral leasing, mineral materials, and geothermal leasing laws pursuant to Section 3003 of the NDAA."	

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PMP 1.4 NDAA Section 3003 (note typo in the PMP) Subsection (f) says that Apache Leap and any land acquired from the United States are withdrawn from mining "Subject to valid existing rights" Yet later in the document (in 3.4.1) the PMP states that "exploration for and development of mineral resources does not occur within the Apache Leap SMA." These two sections are contradictory. If withdrawal occurs subject to valid existing rights and if Rio Tinto proves a valid existing right, they could mine within the Apache Leap SMA. This needs to be clarified. Either there is a possibility of mining within the Apache Leap SMA or not.	The commenter correctly identifies that NDAA Section 3003(f) represents a withdrawal subject to valid existing rights. However, this section must be read in conjunction with NDAA Section 3003(g)(3): "Surrender of Mining and Extraction Rights.—As a condition of the land exchange under subsection (c), Resolution Copper shall surrender to the United States, without compensation, all rights held under the mining laws and any other law to commercially extract minerals under Apache Leap."  Management plan Section 3.6.1, "Desired Conditions," for Mineral Resources states correctly that mining is not envisioned to occur within the Apache Leap SMA. Additional language has been added to Section 1.4, "Legislative Direction," of the management plan to cite Section 3003(g)(3) of the NDAA.	68
Recommendations for revision to Section 3.2.4 of the proposed Apache Leap SMA Management Plan are discussed below.  d. Timing  Section 3.2.4 of the proposed Plan further states "Implementation of the monitoring strategy should occur within 2 to 3 years of approval of the Resolution Copper Project decision." I recommend that the Apache Leap SMA Management Plan state that the monitoring system shall be fully operational at or prior to the start of production operations at the nearby mine. This is necessary to obtain data that can serve as a baseline for later measurements after subsidence has begun.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would likely be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of baseline monitoring. Additional language has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	53

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The PMP is silent on baseline data of any kind within or near the Apache Leap SMA before mine construction begins. The PMP requires seismic testing to begin two or three year after a mine plan is approved. However, there needs to be a seismic baseline before any mining activity takes place as a starting point for seismic activity.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would likely be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of baseline monitoring. Additional language has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	68
Comments on Section 3.2.4  The Plan suggests that a strategy will be worked out, with the assistance of Resolution Copper Company personnel, to monitor seismic activity within two or three years after the proposed mine is approved. Such an approach would insure that no baseline data on seismic activity gets collected. The Plan should provide for seismic activity to be monitored at the earliest possible date so that the effects of the new mine immediately adjacent to the Apache Leap SMA can be accurately determined.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would likely be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of baseline monitoring. Additional language has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	71

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PMP 3.2.4 The PMP should present strategy, and the strategy should go beyond addressing the question of whether seismic conditions pose a risk. The Plan should state that because of uncertainties in the prediction of subsidence, there is a significant risk that nearby mining activities could cause adverse impacts to the natural character, cultural, and historic resources of the Apache Leap SMA. The PMP should state the objectives for installation and operation of a monitoring system that will prevent such impacts.  The strategy set forth in the PMP must state the need for a monitoring system consisting of both equipment and procedures. The Plan must require that the procedures include corrective actions, such as cessation of mining, in response to evaluation of monitored data. The strategy must also recommend that binding agreements be established between the Forest Service and RCM requiring actions by RCM in response to evaluation of monitored information.  To avoid possible conflict of interest, the strategy stated in the PMP should direct that the monitoring system be specified by the Forest Service or by contractors under direct supervision of the Forest Service. The design of the monitoring system should not rely solely on consultation with RCM, and such consultation should be used only to provide supplemental information or to insure effective integration of the monitoring performed within the SMA and within the boundaries of the mine.  Section 3.2.4 of the proposed Plan further states "Implementation of the monitoring strategy should occur within 2 to 3 years of approval of the Resolution Copper Project decision." We recommend that the Apache Leap SMA Management Plan state that the monitoring system shall be fully operational at or prior to the start of production operations. This is necessary to obtain data that can serve as a baseline for later measurements after subsidence has begun.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. The management plan is not the appropriate document in which to propose a detailed seismic monitoring plan. As stated in management plan Section 3.14, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement."  The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as that is when mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.  The purpose authorizing the seismic monitoring within the Apache Leap SMA is specified by Section 3003(g)(4)(B)(i) as protection of resources: "installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area." While the purpose is to protect resources, with respect to dictating corrective actions, management direction is further limited by Section 3003(g)(6) of the NDAA, which states: "The provisions of this subsection solal not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."  These two conditions of the NDAA ar	68

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[Comment continued from above]  Section 3.2.4 also states "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement". The only existing documentation on subsidence monitoring is in GPO Appendix E, "Subsidence Management Plan". The GPO Subsidence Management Plan does describe various types of seismic sensors (but omits precision GPS), but provides little detail on their location or on response procedures. The PMP should require preparation of documentation specifying requirements for the equipment and procedures of the monitoring system. To allow timely public review and comment, the Plan should require this documentation to be available to the public well before the publication of the Final Environmental Impact Statement, and possibly referenced by the proposed Environmental Impact Statement	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of monitoring.  Additional language has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	68
Section 3.2.4 refers to analyses to determine whether "seismic conditions pose a risk to public safety or disturb the natural character, cultural, and historic resources of the Apache Leap SMA" but includes no analytic or scheduling specifications. The Proposed Plan must specify the rationale for delaying for 2 or 3 years the monitoring strategy until after "approval of the Resolution Copper Project decision." It is not acceptable for the Proposed Plan to postpone indefinitely the data gathering so obviously required for management planning. Indeed, in the absence of vital information concerning geomorphic dynamics, the Proposed Plan seems pointless.  Seismic monitoring of Apache Leap is fundamental to its preservation.  The Proposed Management Plan is vague in this regard. It incompletely states the correct objective: "mitigating all impacts to the natural character and scenery of the Apache Leap SMA." This should be expanded to refer to mitigating impacts to cultural sites, values, and activities as the purpose of the Apache Leap SMA as stated in NOAA makes clear.  The emphasis should be on not just monitoring seismic activity but on proactively recognizing deviations from expected seismic activity and taking corrective activities before any damage can be done to the Apache Leap SMA.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of monitoring.  Additional language has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	69

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Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap.  The purpose authorizing the seismic monitoring within the Apache Leap SMA is specified by Section 3003(g)(4)(B)(i) as protection of resources: "installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area." While the purpose is to protect resources, with respect to dictating corrective actions, management direction is further limited by Section 3003(g)(6) of the NDAA, which states: "The provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."  These two conditions of the NDAA are not mutually exclusive. In the absence of specific corrective actions, the monitoring serves to "protect the resources located within the special management area" by providing a feedback mechanism with which to guide block caving operations undertaken on adjacent land, which could lead to modification of mining activities.  Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the intent of the seismic monitoring is to establish a baseline prior to initiation of block caving operations, and after that to provide a feedback mechanism with which to inform block caving operations.  Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The ag	69
	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap.  The purpose authorizing the seismic monitoring within the Apache Leap SMA is specified by Section 3003(g)(4)(B)(i) as protection of resources: "installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area." While the purpose is to protect resources, with respect to dictating corrective actions, management direction is further limited by Section 3003(g)(6) of the NDAA, which states: "The provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."  These two conditions of the NDAA are not mutually exclusive. In the absence of specific corrective actions, the monitoring serves to "protect the resources located within the special management area" by providing a feedback mechanism with which to guide block caving operations undertaken on adjacent land, which could lead to modification of mining activities.  Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the intent of the seismic monitoring is to establish a baseline prior to initiation of block caving operations, and after that to provide a feedback mechanism with which to inform block caving operations.  Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should as

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The threshold needs to be associated with permanent damage to Apache Leap. What is the maximum amount of seismic activity you can have at Apache Leap before permanent damage happens? The threshold clearly needs to be below that value. The same can be said of each different continuous monitoring station. That needs to be independently evaluated so that Resolution does not pick the threshold values. See generally, General Plan of Operations, Appendix E.	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. The management plan is not the appropriate location to propose a detailed seismic monitoring plan. As stated in management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement." The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is when mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.  The review and use of baseline data will be used in the NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and	69
	mining operations. Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy."	
	Further explanation has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to reflect the intent of the Forest Service with respect to independent review and use of the seismic monitoring, as well as design of the monitoring protocols.	

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Recommendations for revision to Section 3.2.4 of the proposed Apache Leap SMA Management Plan are discussed below.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that	53
a. Need and Objectives  The first sentence of Section 3.2.4 of the proposed SMA Management Plan states "Develop a monitoring strategy in consultation with Resolution Copper mining engineers and geologists to address the question: Do seismic conditions pose a risk to public safety or disturb the natural character, cultural, and historic resources of the Apache Leap SMA?"  Of course the SMA Management Plan itself should present strategy, and the strategy should go beyond addressing the question of whether seismic conditions pose a risk. The SMA Management Plan should state that because of uncertainties in the prediction of subsidence, there is a significant risk that nearby mining activities could cause adverse impacts to the natural character, cultural, and historic resources of the Apache Leap SMA.  The SMA Management Plan should then state the objectives for installation and operation of a monitoring system that will prevent such impacts.	would occur generally beneath Oak Flat, east of Apache Leap.  The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. The management plan is not the appropriate location to propose a detailed seismic monitoring plan. As stated in management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement." The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is when mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.	
The strategy set forth in the SMA Management Plan must state the need for a monitoring system consisting of both equipment and procedures. The Plan must require that the procedures include corrective actions, such as cessation of mining, in response to evaluation of monitored data. The strategy must also recommend that legally binding agreements be established between the Forest Service and RCM requiring actions by RCM in response to evaluation of monitored information.	The purpose authorizing the seismic monitoring within the Apache Leap SMA is specified by Section 3003(g)(4)(B)(i) as protection of resources: "installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area." While the purpose is to protect resources, with respect to dictating corrective actions, management direction is further limited by Section 3003(g)(6) of the NDAA, which states, "The provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."	
	These two conditions of the NDAA are not mutually exclusive. In the absence of specific corrective actions, the monitoring serves to "protect the resources located within the special management area" by providing a feedback mechanism with which to guide block caving operations undertaken on adjacent land, which could lead to modification of mining activities.	
	Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the intent of the seismic monitoring is to establish a baseline prior to initiation of block caving operations, and after that to provide a feedback mechanism with which to inform block caving operations.	

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Recommendations for revision to Section 3.2.4 of the proposed Apache Leap SMA Management Plan are discussed below.  b. An Integrated System  It is important that the monitoring conducted within the Apache Leap SMA be fully integrated with the monitoring conducted outside the SMA within the boundaries of the mine, at the East Plant Site (EPS). Therefore the Apache Leap SMA Management Plan should state as an objective that the monitoring system be developed and operated as an integrated system encompassing all seismic monitoring and evaluation, both within the SMA and within the boundaries of the mine.	Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the Forest Service will receive and independently assess the seismic monitoring data and that this review will include any other pertinent monitoring information from outside the Apache Leap SMA.	53
Recommendations for revision to Section 3.2.4 of the proposed Apache Leap SMA Management Plan are discussed below.  c. ConsultationTo avoid possible conflict of interest, the strategy stated in the SMA Management Plan should direct that the monitoring system be specified by the Forest Service or by contractors under direct supervision of the Forest Service. The design of the monitoring system should not rely solely on consultation with RCM, and such consultation should be used only to provide supplemental information or to insure effective integration of the monitoring performed within the SMA and within the boundaries of the mine.	Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy."  Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the Forest Service will receive and independently assess the seismic monitoring data, as well as design of the monitoring protocols.	53

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Recommendations for revision to Section 3.2.4 of the proposed Apache Leap SMA Management Plan are discussed below. e. Documentation	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap.	53
e. Documentation  Section 3.2.4 also states "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement". To my knowledge, the only existing documentation on subsidence monitoring is in GPO Appendix E, "Subsidence Management Plan". The GPO Subsidence Management Plan provides a top level description of subsidence management, and mentions various types of seismic sensors, but provides almost no information on response procedures. The SMA Management Plan should require preparation of documentation specifying requirements for the equipment and procedures of the monitoring system. To allow timely public review and comment, the Apache Leap SMA Management Plan should require this documentation to be available to the public well before the publication of the Final Environmental Impact Statement, and possibly referenced by the proposed Environmental Impact Statement.	The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of monitoring.  Additional language has been added to management plan Section 3.1.4,	
	"Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	
	With respect to preparation of the monitoring plan, as stated in management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement." The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is the time during which mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.	

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The primary purposes of the SMA set forth in Section 3003(g)(2) should constitute the primary management plan components. The activity identified in Section 3003(g)(4)(B)(i) should play a prominent role in all Plan components. Seismic monitoring should play a significant role in the protection of Apache Leap and therefore its use should figure prominently in all plan components where it can be beneficially utilized. Seismic monitoring should begin at the earliest possible time - before the construction of any underground tunnel or associated works - so that baseline information can be developed by TNF, third party contractors involved in the analysis of the MPO and independent geologists or the United States Geological Survey.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap. The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of block caving operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would be collected. After a decision is finalized in the record of decision for the Resolution Copper Project and Land Exchange EIS, Resolution Copper would still be required to submit and receive approval on a final "General Plan of Operations" to incorporate aspects of the decision not in the original proposal. After the final "General Plan of Operations" is approved, Resolution Copper still estimates that construction will take approximately 10 years prior to the start of block caving and copper production. Having the seismic testing in place 2 or 3 years after the record of decision still allows for at least 7 years of monitoring.	69
	Additional language has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to elaborate on the expectations and intent of the monitoring plan (including seismic monitoring) to be prepared during the NEPA (EIS) process.	
	Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy."	
	Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the Forest Service will receive and independently assess the seismic monitoring data, as well as design of the monitoring protocols.	

Original Comment Text	Forest Service Response	Submittal Number
Section 3.2.4: Management Approaches, First paragraph. Comment: It is mentioned below with respect to implementation, but the monitoring strategy should be developed as part of the EIS.	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. As stated in management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement." The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is when mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.	70
Proximity of the Subsidence Crater to the Apache Leap SMA The Resolution Copper Mining (RCM) General Plan of Operations (GPO), dated May 8, 2016, shows in Exhibit 3.2-2 (or Figure 7 of GPO Appendix E) that subsidence produced by the mining operation is predicted to come within a short distance of the eastern boundary of the Apache Leap SMA. The GPO indicates that numerical simulations were used for this prediction, but the GPO provides little or no information or references on the accuracy of the prediction. This leads to some uncertainty about the lateral extent of the subsidence. A relatively small change in parameters, such as the subsidence angle, or conditions, such as unforeseen geological structures, could result in intrusion of the subsidence into the Apache Leap SMA. Public comments on scoping of the Environmental Impact Statement (EIS) covering the GPO have suggested that a more thorough independent and transparent study of subsidence extent be conducted by the Forest Service. Although the Apache Leap SMA Management Plan is strategic in nature and establishes broad direction, I recommend that Section 1.2, "OVERVIEW OF THE APACHE LEAP SMA" should state that the specific issue of subsidence due to the nearby mine is a uniquely important issue in the management of the SMA. It should point out that because of the close proximity of the predicted subsidence, and because of uncertainties in prediction of its extent, subsidence from the nearby mine is a potentially serious hazard to the values of the SMA.	Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy." An independent assessment of the subsidence modeling presented in the "General Plan of Operations" will be part of the NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations.  The expected presence of land subsidence on the property adjacent to the Apache Leap SMA is a unique aspect of this area. Several changes have been made to the management plan to reflect this. In the section titled "What Makes Apache Leap Unique?" (Section 2.1), language has been added indicating that adjacent subsidence is a unique aspect of the special management area. In Section 3.1.1, "Desired Conditions," for Natural Character and Scenery, "subsidence associated with any future mining adjacent to the area does not impair the special characteristics for which it was designated" has been added as a desired condition.  The extent of subsidence is included in the EA in Figure B-1 in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."	53

Original Comment Text	Forest Service Response	Submittal Number
To aid in visualization, I also recommend that Figure 2 of the Apache Leap SMA Management Plan be modified, or another figure added, to show the predicted extent of predicted subsidence relative to the boundary of the SMA. This would overlay subsidence contours obtained either from the GPO Exhibit 3.2-2 or from updates if available from further study by the Forest Service.	The extent of subsidence is included in the EA in Figure B-1 in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."	53
As designed by 36 Code of Federal Regulations [CFR] 219.19, Apache Leap escarpment area has many uses: Indian traditional and ceremonial use; public recreation; livestock grazing; hunting; and power transmission. Any, part, or all of these uses could be negatively affected by subsidence produced by Resolution Copper's proposed mine at Oak Flats. [**Here, I base the following relevant technical information on the site upon a letter submitted to you by Gene McCormick, Tucson resident, activist, and friend.] His comment states that Resolution Copper's GPO "is predicted to come within a short distance of the eastern boundary of the Apache Leap SMA. The GPO provides no information or references to substantiate this prediction, and this leads to uncertainty about possible effects of the mine on Apache Leap SMA." Therefore, Mr. McCormick's considered recommendation, which I support, is that this potentially hazardous possibility be pointed out "in the Apache Leap SMA Management Plan, Figure 2modified to show the predicted extent of subsidence, either from the GPO Exhibit 3.2- 2 or from further study by the Forest Service."	The expected presence of land subsidence on the property adjacent to the Apache Leap SMA is a unique aspect of this area. Several changes have been made to the management plan to reflect this. In the section titled "What Makes Apache Leap Unique?" (Section 2.1), language has been added indicating that adjacent subsidence is a unique aspect of the special management area. In Section 3.1.1, "Desired Conditions," for Natural Character and Scenery, "subsidence associated with any future mining adjacent to the area does not impair the special characteristics for which it was designated" has been added as a desired condition.  The extent of subsidence is included in the EA in Figure B-1 in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."	62

Original Comment Text	Forest Service Response	Submittal Number
PMP 1.2 The Resolution Copper Mining (RCM) General Plan of Operations (GPO), dated May 8, 2016, shows in Exhibit 3.2-2 (or Figure 7 of GPO Appendix E) that subsidence produced by the mining operation is predicted to come within a short distance of the eastern boundary of the Apache Leap SMA. The GPO indicates that numerical simulations were used for this prediction, but the GPO provides little or no information or references on the accuracy of the prediction. This leads to some uncertainty about the lateral extent of the subsidence. A relatively small change in parameters, such as the subsidence angle, or conditions, such as unforeseen geological structures, could result in intrusion of the subsidence into the Apache Leap SMA. Public comments on the Environmental Impact Statement (EIS) covering the GPO have suggested that a more thorough independent and transparent study of subsidence extent be conducted by the Forest Service. We recommend that PMP Section 1.2, should state that the specific issue of subsidence due to the nearby mine is a uniquely important issue in the management of the SMA. It should point out that because of the close proximity of the predicted subsidence, and because of uncertainties in prediction of its extent, subsidence from the nearby mine is a potentially serious hazard to the values of the SMA.  To aid in visualization, we also recommend that the Apache Leap SMA Management Plan, Figure 2, be modified to show the predicted extent of subsidence associated with the mine, by overlaying contours obtained either from the GPO Exhibit 3.2-2 or from updates as available from further study by the Forest Service.	Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy." An independent assessment of the subsidence modeling presented in the "General Plan of Operations" will be part of the NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations.  Further explanation has been added to management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery to reflect the intent of the Forest Service with respect to independent review and use of the seismic monitoring, as well as design of the monitoring protocols.  The expected presence of land subsidence on the property adjacent to the Apache Leap SMA is a unique aspect of this area. Several changes have been made to the management plan to reflect this. In the section titled "What Makes Apache Leap Unique?" (Section 2.1), language has been added indicating that adjacent subsidence is a unique aspect of the special management area. In Section 3.1.1, "Desired Conditions," for Natural Character and Scenery, "subsidence associated with any future mining adjacent to the area does not impair the special characteristics for which it was designated" has been added as a desired condition.  The extent of subsidence is included in the EA in Figure B-1 in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects."	68

Original Comment Text	Forest Service Response	Submittal Number
The proposals for seismic monitoring (SMA plan Section 3.2.4) describe passive data collection rather than avoidance of impacts. Although this matter will presumably be addressed in the Resolution Copper EIS, it is important that the management plan acknowledges what is now unstated: that the future stability of Apache Leap is at risk, and the entire cliff face with all of its natural and cultural values could be endangered at a scale that would render the entire plan moot.	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. As stated in management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement." The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is when mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.	66
	It would be inappropriate to include unsupported conclusions of risk as presented by the commenter. Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy." An independent assessment of the subsidence modeling presented in the "General Plan of Operations" will be part of the NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations.	
	Further explanation has been added to Section 3.1.4, "Management Approaches," for Natural Character and Scenery to reflect the intent of the Forest Service with respect to independent review and use of the seismic monitoring, as well as design of the monitoring protocols.	

Original Comment Text	Forest Service Response	Submittal Number
As per 3.2.4 of the plan, seismic monitoring will be implemented to address this question: "Do seismic conditions (from nearby mining activities) pose a risk to public safety or disturb the natural character, cultural, and historic resources of the Apache Leap SMA?" This raises the question of what actions will be taken if conditions are found that do "pose a risk to public safety" or otherwise affect the integrity of the SMA? Clearly, public safety is paramount and must not be jeopardized. In the event that seismic activity is causing a risk to public safety in the SMA, that risk could be dealt with in two ways.  1) The seismically unstable area could be fenced off, and people could be excluded from that seismically unstable portion of the SMA. This would obviously apply to SMA users visiting the SMA for whatever purpose, including recreation, cultural, or religious visits.  2) The cause of the seismic disturbances can legally be forced to stop. Since Section 3003 of the 2015 NDAA specifically specifies that the SMA purpose is to "preserve the natural character of Apace Leap," we believe the law precludes nearby mining activities from negatively impairing the existing natural character of Apache Leap. We believe this is the only response to any unsafe seismic activity that is consistent with the stated purpose of the SMA.	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap.  The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. As stated in management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery, "Further detail should be provided in the Monitoring and Evaluation Plan for the Resolution Copper Project and Land Exchange Final Environmental Impact Statement." The NEPA process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is when mining techniques and the associated impacts will be analyzed. A seismic monitoring plan cannot be developed effectively until expected impacts have been analyzed and all data associated with the mining operations have been thoroughly assessed.  The purpose authorizing the seismic monitoring within the Apache Leap SMA is specified by Section 3003(g)(4)(B)(i) as protection of resources: "installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area." While the purpose is to protect resources, with respect to dictating corrective actions, management direction is further limited by Section 3003(g)(6) of the NDAA, which states, "The provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."  These two conditions of the NDAA are not mutually exclusive. In the absence of specific corrective actions, the monitoring serves to "protect th	67

#### Wildlife

Original Comment Text	Forest Service Response	Submittal Number
Wildlife - agree with statement	Thank you for your input. The management plan contains direction that fosters protection of the area's biological resources.	27
Rat poison is an environmental hazard that wreaks havoc on the entire food chain. Please ban rat poison from the Tonto National Forest Apache Leap Special Management Area.	There is currently no known use of rat poison in the Apache Leap SMA. The use of rat poison or other similar substances on National Forest System lands would require analysis under a separate NEPA process.	33
The area is home to a broad variety of wildlife, including birds, and their ability to thrive in their existing environment in the Apache Leap SMA should never be threatened.	The management plan addresses wildlife and habitat within the Apache Leap SMA through a description of desired conditions and inclusion of guidelines and management approaches specifically designed to protect wildlife and wildlife habitats (see Section 3.7, "Wildlife," and Section 3.8, "Vegetation"). The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character.	39
It is my understanding that hunting is currently allowed in the AL SMA. In reading section 3.5 WILDLIFE, it is not clear whether hunting would be allowed as a management tool. If hunting will continue to be a wildlife management tool, perhaps it could be added.	Hunting is currently allowed in the Apache Leap SMA. The Arizona Game and Fish Department administers sport hunting in the state of Arizona. Hunting is currently permitted in the special management area and surrounding areas. Decisions regarding hunting lie with Arizona Game and Fish Department, as the Forest Service has no authority to allow, prohibit, or manage hunting permits.	47
Section 2.4 - Physical and Biological Characteristics (Page 10):  We recommend stating for the list of mammals, reptiles and birds in the SMA that the area "includes but is not limited to" the species listed. It does not appear that the Forest incorporated information from the Department's Heritage Data Management System on Special Status Species and/or Species of Greatest Conservation Need (SGCN; Arizona State Wildlife Action Plan 2040) that occur within or proximate to the plan area. We note that Sonoran Desert Tortoise (Gopherus morafkai) and American Peregrine Falcon (Falco peregrinus anatum) have been documented within the plan area. Using the information available in the Arizona Online Environmental Review Tool, the Department recommends:  • Inclusion of all Special Status Species known to occur within 3 miles of the plan area in the description of biological characteristics.  • A short description of SGCN within this section.  • Highlighting white-tailed deer, mule deer, javelina and black bear as Species of Economic and Recreation Important (SERI) in this section.	Language has been added to management plan Section 2.4, "Physical and Biological Characteristics," to clarify the intent of the general wildlife species listing. Sonoran desert tortoise and American peregrine falcon have been added to the general listing of wildlife.  An inquiry for the Apache Leap SMA using the Arizona Game and Fish Department Heritage Data Management System is included as an appendix to the Wildlife and Vegetation Specialist Report, which reveals the numerous species and their designations in the Apache Leap SMA.  Discussions of Species of Greatest Conservation Need and Species of Economic and Recreation Importance have also been included in the project record within the Wildlife and Vegetation Specialist Report.	50

Original Comment Text	Forest Service Response	Submittal Number
The Department conducts a variety of wildlife management activities statewide. These activities include, but are not limited to: ground and aerial survey, reintroduction and/or translocation and/or augmentation of existing or historic species, maintenance and/or development of waters and habitat enhancements. Maintaining the ability to conduct the full range of wildlife management actions within the plan area is of the highest priority for the Department.  The Department is concerned that standards and guidelines for the plan component "Natural Character and Scenery" may be misinterpreted into the future in such a way that needed wildlife management actions are restricted and/or otherwise become impracticable due to constraints. We recommend including a guideline in Section 3.5.2 that states "wildlife management actions including ground or aerial based survey and monitoring, or constructed habitat enhancements will be allowed with reasonable and practicable consideration for other desired landscape conditions".	The forest plan describes several existing management prescriptions that are applicable Forest wide and would continue to apply to the Apache Leap SMA. These prescriptions include "continue close coordination with State and other federal agencies for the benefit of plant and animal species," "cooperate and consult with the Arizona Game and Fish Department, US Fish and Wildlife Service, State universities, professional societies, and various conservation organizations regarding proposals and programs concerned with management of wildlife habitat," and "maximize coordination with the Arizona Game and Fish Department regarding State listed species and their habitats." Therefore, the suggested guidance in the comment is not necessary because coordination with Arizona Game and Fish Department is adequately covered in the forest plan.	50
The Department requests clarifying sentence two in Section 3.5.3 by stating a management approach that includes the full spectrum of Department management actions and authorities such as - "Support wildlife management through routine survey, population augmentations or translocations, reintroductions and/or recovery efforts, habitat enhancements, biological evaluations/assessments, conservation and/or management plans, memoranda of understanding and Forest Service direction."	The forest plan describes several existing management prescriptions that are applicable Forest wide and would continue to apply to the Apache Leap SMA. These prescriptions include "continue close coordination with State and other federal agencies for the benefit of plant and animal species," "cooperate and consult with the Arizona Game and Fish Department, US Fish and Wildlife Service, State universities, professional societies, and various conservation organizations regarding proposals and programs concerned with management of wildlife habitat," and "maximize coordination with the Arizona Game and Fish Department regarding State listed species and their habitats." Therefore, edits to the management approach section are not necessary because coordination with A Arizona Game and Fish Department is adequately covered in the forest plan.	50
PMP 2.4 The listing of wildlife species is short and inaccurate. The Coalition had identified several species at Apache Leap that are not listed including mountain lion, black bear, bobcat, coatimundi, ring tailed cat, raccoon and others. The wildlife listing needs to be more accurate.	Language has been added to management plan Section 2.4, "Physical and Biological Characteristics," to clarify the intent of the general wildlife species listing. An analysis of wildlife species in the Apache Leap SMA is included in the "Wildlife" section of the EA.	68

Original Comment Text	Forest Service Response	Submittal Number
PMP 3.5 How would the Forest Service maintain connectivity for wildlife to the east and south? Ga'an Canyon is a natural corridor for wildlife, but most of that area would be cut off according to Rio Tinto's mine plan. If Rio Tinto were to mine, those wildlife corridors to the North, East, and South would be rendered dry and devoid of life from dewatering. Even if wildlife were physically able to use those corridors, would they if they were dry and devoid of life? Would mining conditions just outside the Apache Leap SMA harass and disturb wildlife to the point that they would abandon the Apache Leap SMA? The PMP needs to consider mining conditions outside the Apache Leap SMA as a disturbing condition to the diversity of wildlife.	The cumulative effects of historic, current, and reasonably foreseeable future mining activities are addressed in the "Wildlife" section of the EA. A full analysis of impacts to wildlife from the Resolution Copper Project and Land Exchange, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	68
Comments on Section 3.5  In Section 3.5.3, the PMP shifts responsibility for wildlife to the future, holding out the prospect of recovery efforts, biological assessments, "conservation strategies and assessments, management plans, memoranda of understanding and Forest Service direction." Plans to protect birds and other wildlife must be more concrete and immediate.	Management plan Section 3.7.3, "Management Approaches," for Wildlife, describes responsibility for wildlife. The management plan is a planning-level document that provides strategy but not implementation actions. In the context of the management plan, management approaches simply provide examples of methods or tactics that may help achieve desired conditions as management actions are considered. The management plan does not propose implementation of any actions; therefore, there is no current need to establish recovery efforts, prepare biological evaluations or assessments, identify conservation strategies and assessments, or prepare management plans or memoranda of understanding.	71
Birds:  According to the 2016 North American Bird Conservation initiative, more than one-third (37%) of North American bird species are of high conservation concern and at risk of extinction without significant conservation action.  The Apache Leap escarpment supports numerous avian species. Data from surveys and independent observations reveal that at least 172 bird species occur in nearby Oak Flat. Although it is not currently known which of these bird species utilize the Apache Leap SMA, it is likely that many can be found either nesting, migrating, or wintering in this area.	Management plan Section 2.4, "Physical and Biological Characteristics," has been edited to acknowledge the unique ecological characteristics of the Apache Leap SMA. Management plan Section 3.7, "Wildlife," addresses wildlife (including migratory birds) and wildlife habitat within the Apache Leap SMA through a description of desired conditions and inclusion of guidelines and management approaches specifically designed to protect wildlife and wildlife habitats.	71
Although small, the Apache Leap SMA offers a diversity of habitats for avian species. Vegetation east of the Leap is primarily comprised of Interior Chaparral while the lower, western border is vegetated by the Arizona Upland subdivision of the Sonoran desertscrub biotic community (primarily the Jojoba-Mixed Scrub and Paloverde-Cacti-Mixed Scrub series). The convergence of habitat types, within a relatively small geographic area, suggest great potential diversity in avifauna.	Management plan Section 2.4, "Physical and Biological Characteristics," has been edited to acknowledge the unique ecological characteristics of the Apache Leap SMA. Management plan Section 3.7, "Wildlife," addresses wildlife and wildlife habitat within the Apache Leap SMA through a description of desired conditions and inclusion of guidelines and management approaches specifically designed to protect wildlife and wildlife habitats.	71

Original Comment Text	Forest Service Response	Submittal Number
Sandwiched between these vegetation zones, the Apache Leap escarpment provides safe cliff and crevice nesting sites for a variety of birds. Several species have been documented nesting in this habitat type. These include Wrens (Rock and Canyon), falcons (Peregrine and Prairie), Ravens, Red-Tailed Hawks and Great-Horned Owls. Surveys conducted by Westland Resources confirmed recent Peregrine Falcon nesting on Apache Leap.  Escarpments and ridgelines are also utilized as corridors during migration by raptors. These species take advantage of upproposeds formed as wind hits the ridgeline making for energy efficient travel over long distances.  Neotropical migrants, may also utilize the Leap during migration to their breeding grounds in North America. Additional protection for these species was provided by the 2000 Neotropical Migratory Bird Conservation Act.	Management plan Section 2.4, "Physical and Biological Characteristics," has been edited to acknowledge the unique ecological characteristics of the Apache Leap SMA. Management plan Section 3.7, "Wildlife," addresses wildlife and wildlife habitat within the Apache Leap SMA through a description of desired conditions and inclusion of guidelines and management approaches specifically designed to protect wildlife and wildlife habitats.	71
MAS believes the Plan should include the following:  1. Prior to being opened for public access, the Apache Leap SMA should be surveyed for all avian species. Surveys conducted during migration and nesting are of special concern.  2. Birds appearing on State and federal watch lists, and species listed by the NABCI and the Arizona Bird Conservation Initiative, should be identified and protected.  3. Recreational activities which result in disturbing nesting/migrating avian species should be prohibited.  4. Trails and roads should avoid habitats that are critical to avifauna.  5. Adherence to the Migratory Bird Treaty and Conservation Acts should be strictly enforced.	National Forest System lands within the Apache Leap SMA are currently, and have been in the recent past, open to public access. Both formal and informal migratory bird surveys have been conducted in portions of the Apache Leap SMA; however, a complete inventory of avian species has not occurred. Conducting the suggested surveys is beyond the scope of preparation of the management plan.  Management plan Section 3.7.1, "Desired Conditions," for Wildlife encompasses all wildlife species that could occur in the Apache Leap SMA, including the North American Bird Conservation Initiative and Arizona Bird Conservation Initiative Species.  There are currently no designated recreational areas, nor designated trails, in the Apache Leap SMA. Should areas or trails be designated in the future, impacts to migratory birds and habitats would be analyzed under a separate NEPA process, and measures to reduce those impacts would be addressed at that time.  The Forest Service is required by law to adhere to regulations described within the Migratory Bird Treaty Act, which protects all migratory birds and their parts; the Bald and Golden Eagle Protection Act, which provides additional protections to bald and golden eagles; and Executive Order 13186. Executive Order 13186 requires federal agencies to consider the effects of management impacts on migratory birds, with an emphasis on species of concern.	71

Original Comment Text	Forest Service Response	Submittal Number
Bats: Due to the extensive cliff habitat and inactive mine shafts, Apache Leap provides quality roosting and nesting habitat for several bat species. According to Westland Resources, approximately 330 inactive, underground mines occur along the Apache Leap cliff face. Surveys conducted in 2011 documented three species of bats. A previous survey by Bat Conservation International identified a total of six bat species.  MAS believes the Plan should incorporate the following:  1. Protect cliff faces and abandoned mine shafts that provide quality habitat for bat species.  2. Gate all mine shafts that may be suitable bat habitat.  3. Minimize human recreation in all bat roosting and nesting habitats.	The management plan is a planning-level document. Management plan Section 3.7.2, "Guidelines," for Wildlife directs the Forest Service to consider the habitat provided by historic mining features, including adits. Section 3.7.3, "Management Approaches," for Wildlife also considers modifications, mitigations, or other measures to reduce negative impacts to wildlife species and associated habitats. A number of mines located in the Apache Leap SMA have been mitigated in past projects with bat-friendly closures (gates/grates). Additionally, abandoned mines are managed for bats under the Cave Implementation Plan, as specified on page 42 of the forest plan.	71
Reptiles:  MAS' greatest concern are species listed as state or federally threatened or endangered. Although the Sonoran Desert Tortoise was not listed as threatened by federal authorities, it is a special species of concern and should be managed to avoid future listing of this species.  MAS' suggestions concerning reptiles:  1. Survey for all reptile species, especially the Sonoran Desert Tortoise  2. Minimize human recreation is areas utilized by the Sonoran Desert Tortoise	The management plan is a planning-level document. Section 3.7, "Wildlife," directs the Forest Service to manage for desired conditions that provide food, water, and shelter over a relatively undisturbed landscape to help meet the needs of various animal species. Under the management plan, the Forest Service would continue to manage wildlife to avoid future listing of species under the Endangered Species Act.  Both formal and informal reptile surveys have been conducted in portions of the Apache Leap SMA; however, a complete inventory of reptile species has not occurred. Conducting the suggested surveys is beyond the scope of preparation of the management plan.	71

# Vegetation

Original Comment Text	Forest Service Response	Submittal Number
Vegetation - agree with statement	Thank you for your input. The management plan contains direction that fosters protection of the area's biological resources.	27
The area's vegetation is special and sensitive. It should never be threatened.	There are currently no proposals for actions that would detrimentally affect vegetation within the Apache Leap SMA. The management plan addresses the vegetation within the Apache Leap SMA through a description of desired conditions of vegetation and inclusion of management approaches specifically designed to protect native vegetation and communities.	39
In Section 3.6 VEGETATION, I would prefer to see the management of invasive species recommendations changed in the following ways: 3.6.1 Desired Conditions The last sentence says: Introduction of additional invasive species rarely occurs and is detected at an early stage.  I suggest adding "and immediately eradicated or controlled" to the end of the sentence as I'd like the plan to be to do more than just detect invasive species.	Executive Order 13112 requires federal agencies, such as the Forest Service, to prevent and control these species, in order to minimize economic, ecological, and human health impacts. FSM 2900, "Invasive Species Management," states that all Forest Service management activities must be designed to minimize or eliminate the possibility of establishment or spread of invasive species on national forest lands. The Forest Service Southwestern Region guidance for invasive species management can be found at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3801891.pdf.  Management plan Section 3.8.2, "Management Approaches," for Vegetation outlines the approach to managing the spread of invasive species in the Apache Leap SMA, including the following: "apply timely initial treatments with follow-up treatments for appropriate intervals to meet objectives." The specific method of invasive species control and potential for eradication varies by species and would be considered under a separate NEPA process.	47
3.6.3 Management Approaches says: "Treatment efforts should focus on areas of high or concentrated use such as travel routes and trailheads."  While this approach will make the AL SMA "look" better to visitors, I am concerned that to effectively control or eradicate invasive species other methods would need to be used to determine the areas to focusing treatment efforts. For example, fountain and buffel grass tend to spread along waterways. If left in the waterways and only treated at trailheads or along travel routes, they could easily become an unmanageable fire hazard.	Of the permitted activities described within the management plan, road and trail maintenance, vehicle use, and hikers have the highest likelihood of transporting invasive plant species seeds or parts from other sources into the forest or spreading existing infestations. As these activities tend to be concentrated on roads and trails, the threat of establishment of new populations or spread of existing populations of invasive species is greatest in these areas. Drainages within the Apache Leap SMA do not contain permanent surface water features and do not support riparian vegetation.  Language was added to Section 3.8.2, "Management Approaches," for Vegetation to clarify that treatment efforts would be focused on areas of concern, including waterways and areas of high or concentrated use.	47

# **Vegetation (Continued)**

Original Comment Text	Forest Service Response	Submittal Number
3.6.3 Management Approaches also says: "Establish an inventory which identifies areas of invasive species' occurrence through locating and identifying invasive species' occurrences."  I would like to see a time limit, "within 3 years", added to this task as with other tasks specified for the AL SMA.	Section 3.8.2, "Management Approaches," for Vegetation was modified to state the following: "Inventory areas of invasive species' occurrence. Because of the often aggressive and tenacious nature of invasive species, apply timely initial treatments with follow-up for appropriate intervals to meet objectives."	47
Further, the Department is concerned that the timing restrictions related to "Vegetation" desired conditions proposed in guideline 3.6.2 could conflict with Department permitted hunts in Game Management Unit 24A. We recommend developing an additional guideline, under 3.6.2, that provides guidance on consideration and use of timing restrictions in such a way as to minimize or avoid impacts to seasonal Department permitted hunting opportunities within the plan area.	The Forest Service would solicit input from Arizona Game and Fish Department on future proposals that could potentially interfere with the seasonal hunting. Additional language has been added to management plan Section 3.7.3, "Management Approaches," for Wildlife to reflect this coordination with Arizona Game and Fish Department.	50
The CWG understands that there are differences of opinion regarding whether and how livestock grazing can control the spread of noxious weeds. Can this issue be addressed in either section 3.6 Vegetation or 3.8 Livestock Grazing?	The effects of the management plan on vegetation and invasive species, including the exclusion of livestock grazing within the special management area, are discussed in the "Vegetation" section of the EA.	57
PMP 3.6.1 The PMP needs to consider mining conditions outside the Apache Leap SMA as a disturbing condition to the composition, structure, and growth of vegetation.	In Section 3.8.1, "Desired Conditions," for Vegetation, the management plan describes specific ecological characteristics of the Apache Leap SMA toward which management of the Apache Leap SMA and resources should be directed. The cumulative effects of historic, current, and reasonably foreseeable future mining activities are addressed in the "Vegetation" section of the EA.	68

# **Vegetation (Continued)**

Original Comment Text	Forest Service Response	Submittal Number
Comments on PMP Section 3.6  Apache Leap and the surrounding area contain several subdivisions of native flora. Due to the relative isolation of this locale and inaccessible cliff face and rock outcroppings, little disturbance to plant life has occurred, resulting in a proliferation of native habitats. Continued preservation of these habitats by minimizing human impact should be paramount in any management plan for Apache Leap.  MAS' suggestions concerning vegetation:  1. Protect native plant species and especially listed species such as the Arizona Hedgehog Cactus.  2. Survey for rare and or endangered plant species before the Resolution Copper mine becomes operational.  3. Control Non-native weed species.  4. No grazing of any domestic animals should be allowed.  5. Keep visitors on specific trails.	Management plan Section 2.4, "Physical and Biological Characteristics," has been edited to acknowledge the unique ecological characteristics of the Apache Leap SMA. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character.  Management plan Section 3.8, "Vegetation," includes desired conditions and management approaches that emphasize sustaining the area's natural ecological processes and native vegetation plant species.  The need to survey for plants prior to implementation of the Resolution Copper Project and Land Exchange will be considered in the Resolution Copper Project and Land Exchange EIS, should that analysis predict potential impacts to rare or endangered plants.  The proposed management plan addresses invasive weed control in Section 3.8, "Vegetation."  Management plan Section 3.9, "Livestock Grazing," was modified to exclude livestock grazing from the portions of the grazing allotments that are in the Apache Leap SMA.  No designated trails in the Apache Leap SMA currently exist. Should trails be proposed in the future, impacts to rare, listed, or sensitive plant species would be	71
	analyzed under a separate NEPA process, and measures to reduce those impacts would be addressed at that time.	

# **Livestock Grazing**

Original Comment Text	Forest Service Response	Submittal Number
I also support the exclusion of mining, grazing and power transmission in the area. There has been enough of that in the region.	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA.	19
Livestock Grazing - agree with statement	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA.	27
And, also, my concern is if there's if it's found that grazing is substantial to fire management, that it be managed and not eliminated completely. I've already watched one fire start in the back and come down the front of the mountain.	Livestock grazing can potentially reduce the abundance of fine fuels; however, the present minimal level of grazing occurring in the Apache Leap SMA is not observed to have an effect on the abundance of fire fuels. The effects of livestock grazing on wildland fire are discussed in the "Wildland Fire" section of the EA.	34
Please clarify whether and where fences will be installed to control livestock entry into the Superior Allotment. These should be shown on the map included in the proposed plan. If fences are used, how would those impact public recreational access to the area?	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA. Management plan Section 3.9.3, "Standards," for Livestock Grazing states, "When necessary, fences to exclude livestock shall be located and constructed with materials that minimize their visibility to the extent practicable and avoid any significant cultural or natural resources." Section 3.9.4, "Guidelines," for Livestock Grazing adds, "As opportunities arise, decommission existing fencing and other grazing-related improvements within the Apache Leap SMA."	57
Please explain what "minimal" grazing in the Devil's Canyon allotment means, and how that level of activity relates to the current condition.	Livestock grazing can potentially reduce the abundance of fine fuels; however, the present minimal level of grazing occurring in the Apache Leap SMA is not observed to have an effect on the abundance of fire fuels. The level of current and proposed grazing in the Apache Leap SMA is described in the "Livestock Grazing" section of the EA.	57
Also, can you specify a timeframe in which to reduce grazing on the Devil's Canyon allotment?	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA. Management plan Section 3.9.2, "Objectives," for Livestock Grazing states that "efforts to exclude livestock from the Apache Leap SMA are completed within 2 years following approval of the management plan, in collaboration with grazing allotment permittees."	57

# **Livestock Grazing (Continued)**

Original Comment Text	Forest Service Response	Submittal Number
Current grazing rights should be maintained. Ranching is part of cultural and economic heritage. Curtailed grazing has no part in a "strategic" document.	The purpose of the management plan is to provide strategic guidance for managing future activities in the Apache Leap SMA. This includes the requirement to identify lands within the plan area as not suitable for uses that are not compatible with desired conditions for those lands. Management plan Section 3.11, "Suitability of Lands," provides a list of uses that were determined to not be compatible with the desired conditions for the area.	61
	The direct, indirect, and cumulative effects of the management plan on livestock grazing are discussed the "Livestock Grazing" section of the EA.	
PMP 3.8 Grazing would be permitted on the Devil's Canyon Allotment but prohibited on the Superior Allotment. We believe grazing should be prohibited everywhere in the Apache Leap SMA.	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA.	68
Grazing on the Apache Leap SMA should be prohibited. The area is too small to allow grazing which will result in unnecessary conflicts with other uses.	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA.	69
Comments on Section 3.8  The Plan suggests continuing the present status of cattle grazing. Grazing will be permitted on the Devil's Canyon Allotment but prohibited on the Superior Allotment. As noted above in our comments on Section 3.6, MAS believes grazing should be prohibited everywhere in the Apache Leap SMA.	The management plan components in Section 3.9, "Livestock Grazing," have been modified to exclude livestock grazing from the Apache Leap SMA.	71

#### Wildland Fire

Original Comment Text	Forest Service Response	Submittal Number
Wildland fire - agree with statement	Thank you for your input. Management plan Section 3.10, "Wildland Fire," contains direction for wildland fire management that fosters protection of the area's resources.	27
And, also, my concern is if there's if it's found that grazing is substantial to fire management, that it be managed and not eliminated completely. I've already watched one fire start in the back and come down the front of the mountain.	The management plan has been modified to exclude livestock grazing from both allotments within the Apache Leap SMA. The "Wildland Fire" section in the EA addresses the effects of the management plan on wildfire risk.	34
The Department recognizes that the Interior Chaparral plant community is a fire adapted plant community. We recommend recognition in Section 3.9.3 for a management approach that allows natural fire regimes to occur for this plant community.	Management plan Section 3.10.2, "Guidelines," for Wildland Fire directs that "within the Interior Chaparral vegetation type, strategies to manage wildland fire (wildfire and prescribed fire) that restore and maintain the natural fire regime should be encouraged."	50
	Managing wildland fires for resource enhancement is one option allowed under the management plan. The close proximity of the Apache Leap SMA to private property, residences, and the Town of Superior are other factors the Forest Service will consider in determining management responses to wildfire.  The effects of the management plan on the Interior Chaparral vegetation community are discussed in the "Wildland Fire" section of the EA.	
According to the firefighters who are members of the CWG and the Recreation User Group, section 3.9.2 of the proposed plan is particularly vague and provides no real direction in the event of wildland fire in the Apache Leap SMA. Specific areas that require clarification include:  • How and in what timeframe will risk assessments of breaking fire be performed?  • Who / which agency will determine the risks and appropriate response methods?	Information was added to management plan Section 3.10, "Wildland Fire," to further clarify wildland fire policies and management response on public lands: "The policies of the National Wildfire Coordinating Group provide broad interagency direction for managing wildland fire on public lands, including in the Apache Leap SMA. Every wildland fire start is evaluated to determine an appropriate response. Wildland fire responses often involve resources from cooperating federal, state, and municipal fire protection units."	57
<ul> <li>In this context, what does the term "wildfire objectives" mean?</li> <li>Will emergency firefighting equipment be allowed on the ground inside of the Apache Leap SMA if needed, or not? Who will pay for firefighting air tankers if needed?</li> <li>There is a long history of firefighting in this area, as well as knowledge about the challenges and the most reasonable preparations to protect Apache Leap, the Town of Superior, and Resolution Copper facilities. We urge the Forest Service to consult with relevant entities in further developing wildland fire management strategies.</li> </ul>	Management plan Section 3.10.2, "Guidelines," for Wildland Fire directs that each wildfire response should be made based on risk assessments that evaluate the threats to firefighter and public safety, the threats to both natural and human-made resource values, seasonal and/or climatic conditions, and cost-effective strategies that contribute to the success of the specific wildfire objective.	

# Wildland Fire (Continued)

Original Comment Text	Forest Service Response	Submittal Number
I agree with general US Forest Service policy that some fires need to be let burn. However, the proposed approach to fire management on Apache Leap ignores the area and the history. It is shortsighted to depend on air tankers for fire control. The area has Resolution Copper on one side and my house (and a good part of Superior) on the other side. So far Resolution has \$1.3 billion in infrastructure and it will increase in value. There needs to be land access to fight fires. The proposed plan ignores this and the cost & difficulty of fighting the last fire.	Management plan Section 3.10.2, "Guidelines," for Wildland Fire directs that each wildfire response should be made based on risk assessments that evaluate the threats to firefighter and public safety, the threats to both natural and human-made resource values, seasonal and/or climatic conditions, and cost-effective strategies that contribute to the success of the specific wildfire objective.	61
PMP 3.9 The PMP needs to state clearly that when it comes to fighting destructive wildfires, that the management guidelines should be that wildfire fighting activities should prioritize habitat within the Apache Leap SMA rather than mine property outside the Apache Leap SMA. The PMP needs to address possible wildfire conditions created by mine or other activities outside the Apache Leap SMA.	Managing wildland fires for resource enhancement is one option allowed under the management plan, as described in Section 3.10.3, "Management Approaches," for wildland fire. The close proximity of the Apache Leap SMA to private property, residences, and the Town of Superior are other factors the Forest Service will consider in determining management responses to wildfire.  The cumulative effects of future mining activities are addressed in the	68
	"Wildland Fire" section of the EA.	

### **National Environmental Policy Act**

Original Comment Text	Forest Service Response	Submittal Number
On page B-1 of the appendix the date for the CWG meeting is given for 2017 when I think the actual date was 2016. "• A presentation to the Community Working Group on November 9, 2017;"	The date of the Community Working Group meeting has been corrected in Appendix B, "Agencies and Persons Consulted," of the management plan.	3
I support this plan. This is a special area deserving of protection from business use.	Thank you for your input. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	5
Returned scoping postcard with opposition expletive statement.	Thank you for your input; however, this comment does not constitute a specific written formal comment (as defined by 36 CFR 219.62) on the management plan.	8
I support the SMA as it seems to preserve the historical, botanical, biological and scenic/recreational qualities of the land.	Thank you for your input. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	19
As usual, giving too little notice for most people to make arrangements to attend.	The Forest Service's goal is to provide ample notice for public meetings and events. Public notice for the management plan and for public scoping for the EA was provided in accordance with 40 CFR 1506.6 as well as 36 CFR 219.4(a) and 219.16. Materials from the open house public meeting held on April 4, 2017, were made available on the project website at http://www.ApacheLeapSMA.us.	22
I have become very suspicious and wary of this kind of thingwhole studies devoted to "protecting", when in reality, it is just another excuse to mine, have a place for "energy transmission", etc.	Thank for your input. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. As directed by the NDAA Section 3003(f), the Apache Leap SMA is withdrawn from future mining. There is an existing energy distribution (power transmission) corridor in the Apache Leap SMA. Management plan Section 3.1.3, "Guidelines," for Natural Character and Scenery states that "construction of new communication sites, utility lines, or transmission lines should not occur within the Apache Leap SMA."	25

Original Comment Text	Forest Service Response	Submittal Number
Sometimes, these studies and reports seem to be an excuse to give technical writers a job to corrupt natural and beautiful spaces. I still haven't quite figured out the ulterior motive for this particular plan. I support protecting natural spaces from more landscape corruption. I do not get the impression that this study/plan is designed to protect Apache Peak from this kind of exploitation as much as it is to given an excuse to perform these mutilations to the landscape.	Thank you for your input. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	25
I agree with current management be the same on the cultural/historic on the natural character/scenery. I agree with the proposed management plan. It is very important to leave the landscape of that area natural (great proposed management for future generations of residents to cherish our lord's creation).	Thank you for your input. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	27
This is all bad!!!	Thank you for your input; however, this comment does not constitute a specific written formal comment (as defined by 36 CFR 219.62) on the management plan.	29
I would like to voice my opposition to the special management plan proposed for the Apache Leap Special Management Area (Apache Leap SMA) by the US Military and Resolution Copper Mining.	Thank you for your input; however, this comment does not constitute a specific written formal comment (as defined by 36 CFR 219.62) on the management plan.	38
documents to false	Thank you for your input; however, this comment does not constitute a specific written formal comment (as defined by 36 CFR 219.62) on the management plan.	45
By implementing a ALSMP which includes hiking, rock climbing, horseback riding and mountain biking and other semi-primitive non-motorized recreation and respecting Native American concerns it should be possible to create an equal or better set of recreational resources that will benefit the local residents, the recreational users, the citizens of Arizona and national and international tourists.	Thank you for your input. The management plan includes direction for managing recreation consistent with the desired conditions for recreation in the Apache Leap SMA.	46
In section 3.2.4 Management Approaches the plan says: "Implementation of the monitoring strategy should occur within 2 to 3 years of approval of the Resolution Copper Project decision." Since 2 years is within 3 years, and if within 3 years is acceptable, then simply stating "within 3 years" should be adequate.	Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery was updated to state, "Implementation of the monitoring strategy should occur as soon as practicable, and before the commencement of any mine-related activities authorized under the 'General Plan of Operations' and related documents."	47

Original Comment Text	Forest Service Response	Submittal Number
Section 1.2- Overview of the Apache Leap SMA (Page 1): The plan states there are no legal motorized access routes within the SMA boundary and currently 3 primary access points, FR 315, 2440 and 282 are used for non-motorized access. The Department notes that portions of these routes are also used for motorized access, whether it is legal or not. The Department recommends correcting the third sentence in paragraph 3 to say "However, there are existing routescurrently used for motorized and non-motorized access into the area."	Section 1.2, "Overview of the Apache Leap SMA," in the management plan has been updated to reflect the current motorized use (permitted and otherwise) in the Apache Leap SMA.	50
The escarpment of Apache Leap and the immediate area around is a very special place to me. I have been hiking and rock climbing in that area since the 1980's. It is actually part of the reason my wife and I moved to Superior. I am excited that this area will be preserved and future access will be insured by Apache Leap SMA.	Thank you for your input. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	52
Section 1.6 of the proposed Apache Leap SMA Management Plan lists government and tribal agencies involved in preparing the Plan. I recommend that the role of the Public also be described in this section. The public provides important input to planning and decision making, through participation in public meetings and submission of written comments. The public includes not only individuals but many non-profit organizations that support specific interests relating to the wise use of public lands.	The Forest Service acknowledges and thanks the public for their valuable input during the planning process for the Apache Leap SMA. The role of the public during development of the management plan has been added to Section 1.5, "Planning Process." Public involvement is also summarized in the EA section titled "Public Involvement."	53
the Community Working Group would like to emphasize our recommendation that ongoing consultation with all affected communities and stakeholders, both on a government-to-government and informal basis, be continued by Tonto National Forest. We believe that the Town of Superior has a special interest in and role in the management of Apache Leap, which is an important part of the Town's character as well as its economic diversification plans and programs. Please ensure that the Town is included to a high degree in discussions and decisions regarding strategic planning, environmental studies, and plan implementation.	As directed the NDAA, the Forest Service is working with the Town of Superior as a consulting party for the development of the Apache Leap SMA. As part of the Town's involvement in the consultations that took place from October 2016 through January 2017, a vision statement for the Town's preferences on the management of the Apache Leap SMA was provided to the Forest Service and considered as part of public input in the development of the management plan.  The role of consulting parties in the development of the management plan is discussed in management plan Section 1.6, "Management Roles," and the EA section titled "Public Involvement and Tribal Consultation."	57

Original Comment Text	Forest Service Response	Submittal Number
In this plan and in public outreach materials associated with it, we urge you to provide more explanation and detail on the definition of a "strategic plan". This plan seems to be a vague collection of policy, regulations, and options mixed with some very specific measures and action items. We find it difficult, therefore, to gain a clear understanding of what is being proposed in all resource areas (e.g. wildfire, public access), what may be allowed immediately upon approval of the plan, what changes or specific 'on the ground' activities may occur or be eliminated later, and how those changes would be implemented. Perhaps a graphic or flow chart of how strategic plans relate to meeting the ultimate management objectives and actions would be useful in helping the public to understand this process.	The management plan is a planning-level document that provides a strategic approach for managing future activities in the Apache Leap SMA. The management plan is not intended to identify site-specific actions. Direct, indirect, and cumulative effects of implementing this strategic framework are described in the EA.  Language was added to Chapter 3 of the management plan to better describe how proposed projects are evaluated under a management plan framework.	57
regarding this proposed plan document, we note that it is heavily reliant on jargon and Forest Service terms that are mainly unintelligible to the public. We urge you to both better define the terms used and to edit the plan to incorporate "plain English" that an average reader can understand.	The management plan is written in conformance with the guidance for plan content and developed as provided in the CFR and in FSH 1909.12, "Land Management Planning Handbook," Chapter 20. Management plans for congressionally designated areas such as the Apache Leap SMA must include the following plan components: desired conditions, objectives, guidelines, standards, and suitability of lands. Each of these plan components has a specific definition (defined in the Chapter 3 of the management plan). To the extent practicable, the Forest Service has made an effort to use "plain language" when describing the components of the management plan.	57
Please provide a specific definition of "primitive non-motorized". What exactly would this include and exclude?	The commenter is referring to management plan Section 3.5.3, "Guidelines," for Recreation. The management plan includes two mapped recreation opportunity spectrum classes, "semi-primitive non-motorized" and "semi-primitive motorized." A glossary has been added to the management plan that includes this classification. The recreation opportunity spectrum class descriptions that the Apache Leap SMA incorporates are included in Table 7 of the EA.	57
Please review the Town of Superior comments in regards to the proposed plan. They do not seem to be clearly reviewed and responded to. The TNF needs to continue dialogue with the Town of Superior on how to best protect Apache Leap and support the Town of Superior's economic development planning.	As directed the NDAA, the Forest Service is working with the Town of Superior as a consulting party for the development of the Apache Leap SMA. As part of the Town's involvement in the consultations that took place from October 2016 through January 2017, a vision statement for the Town's preferences on the management of the Apache Leap SMA was provided to the Forest Service and considered as part of public input in the development of the management plan.  The role of consulting parties in the development of the management plan is discussed in management plan Section 1.6, "Management Roles," and the EA section titled "Public Involvement and Tribal Consultation."	61

Original Comment Text	Forest Service Response	Submittal Number
On its face, it is hard for us to take seriously the process and the final product of this planning exercise. In our view, the final result will fall short of its stated purpose in the law. Further, it is hard to believe the Forest Service places any more weight on the validity of the Apache Leap SMA, especially when the Forest Service waited until more than 18 months after the bill became law (more than one half the time allotted by Congress for the permitting process to take part) before planning began for the Apache Leap SMA. We fear that the late start date of the planning process will lead to a rushed and incomplete final product.	The Forest Service developed and revised a management plan in consultation with affected Indian tribes, the Town of Superior, Resolution Copper, and interested members of the public, as directed by the NDAA. The Forest Service sought public input on the proposed management plan and EA during two phases of the management plan development process: planning in fall 2016 and public scoping during spring 2017. Additionally, the Forest Service sought public input on the forest plan amendment in summer 2017. A summary of coordination with the consulting entities and the public during the management plan drafting and EA scoping process is outlined in the EA section titled "Public Involvement and Tribal Consultation."	68
It is clear in examining the Proposed Management Plan (PMP), that the Apache Leap SMA will fall far short of the direction mandated by Congress	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated. The comment is an opinion and lacks "supporting reasons for the responsible official to consider" under 36 CFR 218.2. No further response is warranted.	68
PMP 1.6 The PMP relies on features to be allowed to be built by Rio Tinto that are identified in Rio Tinto's "General Plan of Operations." However, this plan is a moving target and subject to changes made by the Forest Service and/or other agencies (or the company itself). How can this plan be approved by December of 2017 if features allowed to be built by Rio Tinto are not approved until many years later?	The management plan is a planning-level document that provides a programmatic approach for managing future activities within the Apache Leap SMA. The management plan acknowledges the activities authorized under NDAA Section 3003(g)(4)(B), which includes use of seismic monitoring equipment and an underground tunnel. The management plan provides a strategy to monitor for seismic activity within the Apache Leap SMA that may result from these activities.	68
Further study also needs to be done for all of the physical and biological characteristics.	The known characteristics of the physical and biological resources in the Apache Leap SMA were used to inform the development of the management plan and are discussed in the affected environment section of each resource section in the EA. Because the management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA, further study as suggested in this comment is not warranted at this time. Future actions would be addressed in a separate, site-specific NEPA analysis, which would include further studies as necessary to disclose the impacts of those actions.	68

Original Comment Text	Forest Service Response	Submittal Number
TNF has inappropriately provided notice about the proposed action and determined that an Environmental Analysis is inappropriate.	Public notice for the management plan and public scoping for the EA was provided in accordance with 40 CFR 1506.6 as well as 36 CFR 219.4(a) and 219.16. Pursuant to 36 CFR 219.16(a)(2), an additional public notice and 30-day comment period on the forest plan amendment occurred from July 1, 2017, to July 31, 2017.	69
	The Forest Service has determined that an EA for the Apache Leap SMA is the appropriate level of NEPA review consistent with Forest Service NEPA Procedures and Guidance (36 CFR 220, "Forest Service National Environmental Policy Act Procedures;" FSM 1950; and FSH 1909.15).	
the Proposed Management Plan ("Proposed Plan" or "Plan") is deficient in many respects, particularly in its identification management objectives and standards	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated. The comment is an opinion and lacks "supporting reasons for the responsible official to consider" under 36 CFR 218.2. No further response is warranted.	69
The Forest Service did not give the appropriate notice of proposed action and thus denied the public the opportunity for meaningful involvement. The future and fate of the area known as Apache Leap is a matter of national concern. Likewise, the Forest Service's proposed management of Apache Leap is similarly of national import. Clearly, the plain language of Section 3003(g) makes clear that the very designation of the Apache Leap SMA is to advance the purposes of the land exchange - a matter of national concern. Further, the fact that TNF has acknowledged that it has consulted with federally recognized Indian tribes from diverse areas of Arizona and New Mexico indicate the national character of the Apache Leap SMA. Actions of national concern require notice to the public by publication in the Federal Register. 40 C.F.R. § 1506.6(b)(2); Forest Service Handbook ("FSH"), FSH 1909.15, Chapter 10, Sec. 11.52. The was not done by TNF in this case and constitutes a procedural injury to the Tribe, the public, the federally recognized tribes, national religious groups, national recreational groups and national environmental groups throughout the nation. See Citizens for Better Foreslly, 341 F.3d at 370.	Public notice for the management plan and public scoping for the EA was provided in accordance with 40 CFR 1506.6 as well as 36 CFR 219.4(a) and 219.16. Pursuant to 36 CFR 219.16(a)(2), an additional public notice and 30-day comment period on the forest plan amendment occurred from July 1, 2017, to July 31, 2017.  Effects of national concern are defined in 10 CFR 1022.4 as "those effects that because of the high quality or function of the affected resource or because of the wide geographic range of effects could create concern beyond the locale or region of the proposed action." The Forest Service has determined that the Apache Leap SMA management plan would not create effects of national concern and that therefore the public involvement provisions at 40 CFR 1506.6(c) apply, rather than those at 40 CFR 1506.6(b)(2).	69

Original Comment Text	Forest Service Response	Submittal Number
Even if TNF incorrectly took the position that the Apache Leap SMA and the Proposed Plan are an action of only local concern, there is no evidence that TNF has complied with the detailed types of notice contemplated for actions "with effects of primarily local concern." 40 C.F.R. § 1506.6(b)(3)(1)-(ix). This list includes notice to the state, notice to tribes, publication in local newspapers, notice through other media, publication in newsletters, direct mailing, and posting of a notice in the area where the action will take place. TNF has failed to fully comply with the notice regulations of local concern.  TNF has failed to provide the requisite public notice to advance the Plan for the Apache Leap SMA. TNF must begin the process anew.	Public notice for the management plan and public scoping for the EA was provided in accordance with 40 CFR 1506.6 as well as 36 CFR 219 .4(a) and 219.16. Pursuant to 36 CFR 219.16(a)(2), an additional public notice and 30-day comment period on the forest plan amendment occurred from July 1, 2017, to July 31, 2017.  A summary of the public engagement and consulting activities for this proposal is provided in the EA section titled "Public Involvement and Tribal Consultation."	69
Any environmental analysis performed by TNF must be performed in conjunction with the Environmental Impact Statement ("EIS") for the Land Exchange and Resolution Copper's Mine Plan of Operations ("MPO") because by the plain language of Section 3003, the Apache Leap SMA, Land Exchange and MPO are connected actions. Section 3003(b)(1) defines "Apache Leap" as consisting of "approximately 807 acres of land." The 807 acres of land which constitute the Special Management Area ("SMA") consists of Apache Leap. The SMA requires the exchange of approximately 110 acres in Pinal County currently held by Resolution Copper. Section 3003(d)(1)(A)(v). TNF documents and its Apache Leap SMA website acknowledge that 110 acres presently owned by Resolution Copper must be added to an existing 697 acres of TNF land to comprise the SMA. See Proposed Plan, Sec. 1.2 ("Upon completion of the Southeast Arizona Land Exchange (directed as part of the NOAA), the Apache Leap SMA will include only federal lands."). The proposed SMA is incomplete until the Land Exchange is completed. Any proposed plan for the SMA cannot be effective until the SMA is complete.	The Forest Service has exercised its discretion, consistent with NDAA Section 3003(c)(9)(D), to use separate environmental review documents prepared in accordance with the National Environmental Policy Act of 1969 (42 United States Code 4321 <i>et seq.</i> ) to assess the effects of the proposed management plan and associated forest plan amendment. This proposed action does not involve (i) the land exchange or (ii) the extraction of minerals in commercial quantities by Resolution Copper on or under the federal land. This separate process facilitates completion of the management plan and appropriate environmental review within the required 3-year time frame.  In designating the Apache Leap SMA, Congress clearly identified for inclusion the Non-Federal Parcel –Apache Leap South End. The Apache Leap SMA management plan has been developed considering these offered parcels. The proposed management plan would be effective on the federal lands upon signing of the final decision. However, the proposed management plan would not take effect on the private parcels until the land exchange is finalized. If the land exchange is not finalized, the Forest Service has still met the requirements of the legislation to prepare a plan and manage the federal portion of the special management area for the purposes for which it was designated.	69

Original Comment Text	Forest Service Response	Submittal Number
Section 3003(g)(4)(B) sets forth the authorized activities in the Apache Leap SMA, Subsection (B)(iii) authorizes "operation of an underground tunnel and associated workings, as described in the Resolution mine plan of operations, subject to any terms and conditions the Secretary may reasonably require." This activity, by its terms, constitutes a part of Resolution Copper's mining operation. The tunnel and its associated works are subject to reasonable conditions and terms which may be imposed as part of any approval for Resolution's MPO.  The tunnel and its associated works are not described in any detail in the Resolution MP0.1 See General Plan of Operations, Volume 1, May 9, 2016, pp. 100, 102-104, 119, 121. The MPO does not contain a section dedicated to any description of the Conveyor/Infrastructure Tunnel or the design of the tunnel. The location, depth and size of the tunnel are not described in the MPO. The geological and groundwater conditions where the tunnel will be located are not described. When the tunnel will be constructed is unknown. The method for the construction of the tunnel has not been revealed. The references in the MPO to the tunnel are general and vague. However, based upon the sparse description of the tunnel and its associated works mentioned in the MPO, one may discern that this tunnel will be a large feature of Resolution's underground operations.  The Proposed Plan fails to address the underground tunnel and associated workings. Indeed, the Proposed Plan appears to provide inconsistent information about Resolution's "underground tunnel and associated workings."; in one section describing it as "just beyond the northern boundary of the Apache Leap SMA" and in another section as "beneath the SMA". Compare Proposed Plan, "Section 1.6 Management Roles, Resolution Copper Mining, LLC" p. 6 with "Section 3.10.1 Suitable Uses Designation by Legislation" p. 21. Perhaps the best depiction of the Conveyor/Infrastructure Tunnel's location is found in Volume III, Figure A 1.5-2f which shows th	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods that would occur generally beneath Oak Flat, east of Apache Leap.  We agree that specific details are currently lacking for the future activities authorized at Section 3003(g)(4)(b), including operation of an underground tunnel and associated workings, as described in the submitted Resolution Copper "General Plan of Operations."  The adjacent mining operations are being analyzed appropriately through the NEPA process (Resolution Copper Project and Land Exchange EIS) required under Section 3003(c)(9) of the NDAA.  Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery has been modified to clarify that the purpose and intent of the seismic monitoring is to establish a baseline prior to initiation of block caving operations, including operation of an underground tunnel and associated workings. Monitoring information would be used to evaluate the effects of future mining activities that are adjacent to the special management area.  Language in management plan Section 1.4, "Legislative Direction," has been clarified with respect to the NDAA-authorized activities (NDAA Section 3003(g)(4)(B)).	69

Original Comment Text	Forest Service Response	Submittal Number
A plain reading of the language of Section 3003 requires the Land Exchange to occur before the Apache Leap SMA even comes into existence. The statute also makes plain that Resolution's operation of the underground tunnel and associated works as described in the MPO is an activity which is allowed in the Apache Leap SMA. Completion of the Land Exchange and approval of the MPO are clearly federal actions which are connected to the management of the Apache Leap SMA.  When preparing an EA or an EIS, an agency must consider all "connected actions," "cumulative actions," and "similar actions." 40 C.F.R. §1508.25(a). Actions are "connected" if they trigger other actions, cannot proceed without previous or simultaneous actions, or are "interdependent parts of a larger action and depend on the larger action for their justification." Id. § 1508.25(a)(1). If one project cannot proceed without the other project (i.e., "but for" the other project), or if the first project is not "independent" of the second project, the two projects are considered connected actions and must be reviewed in the same NEPA review. Thomas v. Peterson, 753 F. 2d 754, 758-60 (9th Cir. 1985). "[E]ven though an action could conceivably occur without the previous or simultaneous occurrence of another action, if it would not occur without such action it is a 'connected action' and must be considered within the same NEPA document as the underlying action." Dine Citizens Against Ruining Our Env't v. Klein, 747 F. Supp. 2d 1234, 1254 (D. Colo. 2010).	The Apache Leap SMA is a statutorily designated area that came into existence through enactment of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) (Public Law 113–291). Land exchange activities are not required for the Apache Leap SMA to come into existence.  The Forest Service is complying with the direction at NDAA Section 3003(g)(5)(a) to prepare a management plan that furthers the purposes for which the area was designated within 3 years from the date of enactment of the Act.  The Forest Service has exercised its discretion, consistent with NDAA Section 3003(c)(9)(D), to use separate environmental review documents prepared in accordance with the National Environmental Policy Act of 1969 (42 United States Code 4321 et seq.) to assess the effects of the proposed management plan and associated forest plan amendment. The proposed action does not involve (i) the land exchange or (ii) the extraction of minerals in commercial quantities by Resolution Copper on or under the federal land.  The EA discusses the cumulative effects of the proposed Resolution Copper Project and Land Exchange on the resources analyzed.	69
A separate EA is not allowed to assess the effects of the Proposed Management Plan for the Apache Leap SMA on the human environment under NEPA because it is a connected action. The management of the Apache Leap SMA and any Proposed Management Plan is connected to the Land Exchange and Resolution's MPO. The Proposed Plan must be considered in the same proposed EIS with the Land Exchange and the MPO.		

Original Comment Text	Forest Service Response	Submittal Number
Any Proposed Management Plan must comply with 36 Code of Federal Regulations ("CFR") Part 219.  The proposed Apache Leap SMA is a special land designation which falls within the larger context of TNF's existing Land and Resource Management Plan and 36 CFR Part 219. The proposed Apache Leap SMA is a statutorily designated area delimited by the terms of Section 3003(g) of the NOAA. The management plan which is proposed and adopted for such area must fully comply with the regulations set forth in 36 CFR Part 219.  The document which TNF has denominated as the Proposed Management	Consistent with Forest Service planning regulations at 36 CFR 219.13, the Forest Supervisor has exercised his discretion in determining how to amend the forest plan and the scope and scale of any such amendment involving the Apache Leap SMA.  Language has been added to the management plan and the EA to further clarify the action of amending the forest plan. See Section 1.5, "Planning Process," of the management plan and the "Proposed Action" section of the EA.  Pursuant to 36 CFR 219.16(a)(2), a public notice and 30-day comment	69
Plan for Apache Leap SMA describes itself as an amending document to "portions of the 1985 Tonto National Forest Land and Resource Management Plan." Apache Leap SMA Management Plan - Proposed, p. 5 (March 2017). The document does not identify which portions of the 1985 Forest Plan are being amended. Nor does the document explain how the 1985 Forest Plan is being amended. If the Forest Service is going to rely upon the regulations governing the amendment of forest land and resource plans, it should minimally identify the portions of the 1985 Forest Plan which are being amended and explain how the plan is being specifically amended by the Apache Leap SMA Management Plan.	period on the forest plan amendment was provided from July 1, 2017, to July 31, 2017.  The Forest Supervisor has determined that an EA for the Apache Leap SMA is the appropriate level of NEPA review, consistent with Forest Service NEPA procedures and guidance (36 CFR 220, "Forest Service National Environmental Policy Act Procedures;" FSM 1950; and FSH 1909.15). The rationale for this decision is included in the "Finding of No Significant Impact" section of the EA.	
The Apache Leap SMA Proposed Management Plan is more correctly characterized as a "revision" to the 1985 Forest Plan. It is an entirely new land designation which is not addressed in the 1985 Forest Plan. Indeed, "Apache Leap" is not even mentioned in the 1985 Forest Plan and the only reference to "Oak Flat" is with regard to the campsite and construction projects in the vicinity of the campsite. "Chi'chil Bildagoteel", "Traditional Cultural Property" or "TCP" do not appear in the 1985 Forest Plan. No sitespecific management pertaining to Apache Leap is ever addressed in the 1985 Forest Plan.		
The process TNF utilized to proposed the Proposed Management Plan did not comply with 36 CFR Part 219. TNF failed to perform the assessment required by 36 CFR § 219.6(a) for a plan revision. If performed, the assessment identification and evaluation required under 36 CFR § 219.6(b) was never presented to the public for comment and evaluation. Even if the Proposed Plan is considered an amending document as TNF contends, TNF has failed to document the assessment required by 36 CFR § 219.6(c), or to explain why no assessment was presented to the public.		

Original Comment Text	Forest Service Response	Submittal Number
[Comment continued from above]  Because the Apache Leap SMA Management Plan proposed by TNF is in fact a revision of the 1985 Forest Plan, TNF is required to conduct an EIS. A plan revision requires the preparation of an EIS. 36 CFR § 219.5(a)(2)(i). TNF's proposed EA for the Management Plan is a procedural violation of NEPA and the Forest Service's guiding regulations.	Comment continued from above; see above.	69
As noted above, the Apache Leap SMA will not exist until the Land Exchange is completed. TNF should use the opportunity to create an innovative and creative management plan to achieve the plan components identified in Chapter 3 of the Proposed Plan. TNF might consider a phased Management Plan in which assessment and accumulation of baseline data can be obtained during an initial phase. The initial phase would allow the identification objectives, standards and guidelines to inform and advance the more detailed plan components.	The Apache Leap SMA is a statutorily designated area that came into existence through enactment of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) (Public Law 113–291). The Forest Service is complying with the direction at NDAA Section 3003(g)(5)(a) to prepare a management plan that furthers the purposes for which the area was designated within 3 years from the date of enactment of the Act.  The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Several sections of the plan suggest management approaches to collect baseline information through resource inventories, field surveys, and monitoring.	69
Generally, the Plan should include full references to literature and sources which are relied upon in the Plan, including appropriate page citations. The accuracy of the reference can only be verified by appropriately specific citations.	The management plan include reference citations as appropriate. Chapter 4 of the management plan provides the literature cited. The "References" section of the EA provides the literature cited in the EA.	69
The Proposed Plan must do more than simply note the presence of ecological values. See Section 2.1. The Plan should delineate the SMA's "ecological values," describe these explicitly in the discussion of unique attributes, and employ these values in defining desired conditions, recommended management actions, and setting monitoring standards and procedures.	The management plan section titled "What Makes Apache Leap Unique?" (Section 2.1) has been edited to acknowledge the unique ecological characteristics of the Apache Leap. The desired conditions for resources reflect these ecological values. The "Affected Environment" and "Environmental Consequences" sections in each resource section of the EA detail the potential effects on ecological values, such as wildlife and their habitat and vegetation.	69
Elsewhere Section 3.2.4 refers to "pertinent laws and regulations" without specifying these or their relevance or application in this context. Again, failure to use specific information and precise language fosters uncertainty. The data, language, and organization should be properly deployed to deliver the clear management direction that is the entire rationale for the Proposed Plan.	The language in Section 3.1.4, "Management Approaches," for Natural Character and Scenery was edited for clarity. The modified version of the management approach now includes this statement: "The strategy should identify and explore solutions to remediate and mitigate surface conditions that could threaten the integrity of the Apache Leap SMA as allowed by pertinent laws and regulations." There are many pertinent laws and regulations that control mining-related disturbance on National Forest System lands that would need consideration, depending on the future site-specific circumstances and context. Therefore, an exhaustive list was not provided.	69

Original Comment Text	Forest Service Response	Submittal Number
Section 1.2: RC added land to the SMA (south end) to make a more contiguous parcel. Will this be updated in the SMA and/or captured as a mitigation measure (in the EA or the EIS)?	The Apache Leap SMA includes approximately 807 acres of land currently under federal and private ownership. Upon completion of the Southeast Arizona Land Exchange (directed as part of the NDAA), the Apache Leap SMA will include only federal lands. As the land exchange is directed by law, the south end addition is not included as a mitigation measure in the EA. Figure 2 in the management plan was updated to better depict the Apache Leap South End Land Exchange Parcel.	70
Section 1.2: "There is currently no legal motorized access within the Apache Leap SMA boundary." Is this statement accurate? Resolution has current authorized legal motorized access to a portion of the SMA where two monitor wells are located (PFS Plan of Operations - per our scoping letter). That road (FR2440/Cross Canyon) goes through TNF and private RC property. Also, would existing grazing leases also allow for the potential of motorized access by the permittee.	Section 1.2, "Overview of the Apache Leap SMA," of the management plan has been updated to reflect the current motorized use (permitted and otherwise) in the Apache Leap SMA.	70
Section 1.2: "However, there are existing routes (both Forest Service roads and remnants of old, mining-related roads) that occur around and within the Apache Leap SMA that are currently used for non-motorized access into the area." Similar to the comment above, these roads are currently used for motorized access.	Section 1.2, "Overview of the Apache Leap SMA," of the management plan has been updated to reflect the current motorized use (permitted and otherwise) in the Apache Leap SMA.	70
Section 1.2, Figure 2: This figure should be updated to include the additional claims Resolution is surrendering in order to resolve survey issues. Figure needs to be updated so that the Apache Leap SE Parcel is hatched since it shares a common border with the SMA. It's hard to distinguish the area as it is and it needs to depict the updated boundary.	Figure 2 of the management plan was updated based on recommendations in the comment.	70
Section 1.4: "Activities specifically authorized by Section 3003 of the NDAA ((g)(4)(B)) relate to the proposed adjacent mining operation and include:" Sentence should read: Activities specifically authorized by Section 3003 of the NDAA ((g)(4)(B)) and related the proposed adjacent mining operation-and include:	The proposed technical edits to Section 1.4, "Legislative Direction," of the management plan were made as suggested.	70

Original Comment Text	Forest Service Response	Submittal Number
Section 1.5: "These consultation process ended on January 31, 2017, with the exception of tribal consultations, which will continue as needed though the objection period. "Comment: add "including formal Government to Government Consultation"	The proposed technical edit to Section 1.5, "Planning Process," of the management plan was made as suggested.	70
Section 1.5: "As part of the Environmental Assessment (EA) process, public comments concerning the proposed management plan will be collected from March 17, 2017, to May 1, 2017 (45 calendar-day scoping period)." Comment: The plan was released for public review and comment on April 1st with a scoping meeting on April 4th.	Language has been added to Section 1.5, "Planning Process," of the management plan and the section titled "Public Involvement" of the EA to further clarify the public involvement component of the management plan and EA.	70
Section 1.6: "Superior is also specifically mentioned in the NDAA as a consulting party for the development of the Apache Leap SMA management plan." Comment: "The Town of Superior"	The proposed technical edit to Section 1.6, "Management Roles," of the management plan was made as suggested.	70
Section 1.6: Replace this sentence "Resolution Copper is a joint venture owned by Resolution Copper Company, a Rio Tinto PLC subsidiary, and BHP Copper, Inc., a BHP-Billiton PLC subsidiary" with this sentence "Resolution Copper Mining LLC (Resolution Copper) is a non-operated company owned by Rio Tinto (55%, the operator) and BHP Billiton (45%)."	The proposed technical edit to Section 1.6, "Management Roles," of the management plan was made as suggested.	70
Section 1.6: "Resolution Copper submitted a "General Plan of Operations" to the Forest Service in November 2013 to initiate the permitting process for an underground copper mine near the Apache Leap SMA." Comment: Replace permitting with NEPA.	The proposed technical edit to Section 1.6, "Management Roles," of the management plan was made as suggested.	70

Original Comment Text	Forest Service Response	Submittal Number
Section 2.1: "The Apache Leap SMA is a relatively undisturbed area within this disturbed landscape. As the area is managed for rangeland resources, there are existing pasture fences (e.g., fourstring barbed wire) and gates. An existing utility line crosses the northern portion of the Apache Leap SMA. The very nature of the topography of the Apache Leap SMA, extremely rugged and largely impassible by most humans, has preserved the area as mostly undisturbed." Comment: "also, there are some existing roads and monitor wells (RC)."	Language has been added to the management plan section titled "What Makes Apache Leap Unique?" (Section 2.1) to further clarify the existing uses and developments within the Apache Leap SMA.	70
Section 2.2: "The Apache Leap SMA falls within the boundaries of the Chi'chil Bildagoteel Historic District, which is listed in the National Register of Historic Places (January 4, 2016) as an Apache Traditional Cultural Property." Comment: Some portions of the SMA fall within the boundary. RC private property that is currently part of the full AL SMA was not included in the listing.	Section 2.2, "Tribal Importance," of the management plan has been clarified to note that private property in the Apache Leap SMA is not included in the boundary of the <i>Chi'chil Bildagoteel</i> Historic District.	70
Appendix B: per the legislation, should also include Resolution Copper	The proposed technical edit to Appendix B, "Agencies and Persons Consulted," of the management plan was made as suggested.	70

#### Other

Original Comment Text	Forest Service Response	Submittal Number
Beautiful area!! We must keep it FULLY preserved and available for the public to enjoy forever with disturbing it.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character. Section 3.4.4, "Management Approaches," for Access was updated to include language that encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.	16
It is a beautiful, pristine, unique area that should be fully preserved.  NOTHING should be permitted by the Forest Service that would impact or destroy any part of this area.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	39
QCC believes that Apache Leap will be a keep part of the future economic growth of the Town and the region due to its unique tourism and cultural context.	Management plan Section 3.5.1, "Desired Conditions," for Recreation recognizes the economic value of the recreation opportunities associated with the Apache Leap SMA, stating, "Recreation opportunities associated with the Apache Leap SMA enhance the quality of life for local residents (e.g., social interaction, physical activity, connection with nature), provide tourist destinations, and contribute monetarily to local economies."	46
The Leap area has an economic benefit to Superior	Management plan Section 3.5.1, "Desired Conditions," for Recreation recognizes the economic value of the recreation opportunities associated with the Apache Leap SMA, stating, "Recreation opportunities associated with the Apache Leap SMA enhance the quality of life for local residents (e.g., social interaction, physical activity, connection with nature), provide tourist destinations, and contribute monetarily to local economies."	52
I recommend that the "Desired Conditions" for the components of the Apache Leap SMA Management Plan state that the values of the Apache Leap SMA are not degraded by the proposed Resolution Copper Mine. For example, in Sections 3.1.1 and 3.4.1, Cultural/Historic and Mineral Extraction, this statement should be added: "There are no adverse effects caused by nearby mining activities". Section 3.2.1 should include: "The landscape is unaltered by nearby mining activities". Section 3.5.1 should include "Habitat characteristics are not adversely affected by nearby mining activities".	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.  The EA discusses the cumulative effects from the Resolution Copper Project and Land Exchange on the resources analyzed.	53

# Other (Continued)

Original Comment Text	Forest Service Response	Submittal Number
I am writing to ask you to protect Apache Leap and the surrounding Oak Flat Area. This area is beloved by myself, my family and community, and we wish to see its wild beauty protected. We and many other local residents value this area's unique vegetation and wildlife, its scenic views which make it a magnificent outdoor recreation destination, and its overall pristine wild splendor.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	55
I also believe that we must limit noise pollution in this area to ensure that wildlife is undisturbed, and that the area continues to be a source of outdoor recreation and enjoyment for people.	The potential for noise impacts to the Apache Leap SMA will be considered when assessing the impacts of future actions proposed in the Apache Leap SMA.	55
Recreational access to the Leap by visiting climbers, hikers, etc. will provide a boost to the local economy.	Management plan Section 3.5.1, "Desired Conditions," for Recreation recognizes the economic value of the recreation opportunities associated with the Apache Leap SMA, stating, "Recreation opportunities associated with the Apache Leap SMA enhance the quality of life for local residents (e.g., social interaction, physical activity, connection with nature), provide tourist destinations, and contribute monetarily to local economies."	59
The plan repeatedly invokes the "special" and "unique" character of Apache Leap, and the plan's primary goal is said to be protection of "the values for which the area was designated". Upon review, however, the plan drastically mischaracterizes the nature of Apache Leap, and it offers little more than a way to preside over the loss and ultimate destruction of the area that it would claim to protect.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.	66
Apache Leap's "special" and "unique" values exist within the context of a much larger geophysical, biological, and cultural setting that includes Oak Flat, Devil's Canyon, the upper Queen Creek basin, Queen Valley, Picketpost Mountain, the southeastern Superstition Mountains, and other nearby prominent landforms and landscape features. Apache Leap should not be treated as an isolated unit of land unconnected with its surroundings, but as one facet of a greater definable whole encompassing an outstanding	The NDAA establishes the boundary of the Apache Leap SMA and directs the Forest Service to develop a management plan for the Apache Leap SMA. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.  The proposed action includes a forest plan amendment that would link the	66
variety of scenic, natural, and cultural values. The proposed management plan does not begin to address this connectivity, discuss its significance, or suggest ways in which the visual, spatial, cultural, and biological relationships between these areas can be acknowledged and maintained.	Apache Leap SMA plan components to the forest plan. A new management area (MA 2G Globe Ranger District – Apache Leap SMA) would also be created for the forest plan as a result of this proposal. The amended forest plan would provide the framework for managing the Apache Leap SMA within the broader landscape.	

## Other (Continued)

Original Comment Text	Forest Service Response	Submittal Number
The proposed management plan contains numerous statements to the effect that the SMA will be managed to sustain and protect the values for which the area was designated. Given that these values are not isolated from their surroundings, the plan does not adequately address how these goals can be achieved and maintained within an area that is bounded by a crazy-quilt of mining claims and property boundaries. How can Apache Leap be effectively managed if it is treated as an island surrounded by land uses destructive to the very resources that the plan seeks to preserve?	The NDAA establishes the boundary of the Apache Leap SMA and directs the Forest Service to develop a management plan for the Apache Leap SMA. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.  The proposed action includes a forest plan amendment that would link the Apache Leap SMA plan components to the forest plan. A new management area (MA 2G Globe Ranger District – Apache Leap SMA) would also be created for the forest plan as a result of this proposal. The amended forest plan would provide the framework for managing the Apache Leap SMA within the broader landscape.	66
The SMA plan has an overall tendency, as noted above, of isolating the Apache Leap SMA from its surrounding natural and cultural environment, and treating the area as if it were an island that could be managed as a distinct entity. Although it does have distinctive attributes, the area's values are not isolated – on the contrary, they are powerfully linked with Oak Flat, Picketpost Mountain, Queen Creek, and other nearby natural and cultural landscape elements. The Apache Leap SMA proposed management plan, although well-intentioned, cannot succeed without taking these larger matters into consideration.	The NDAA establishes the boundary of the Apache Leap SMA and directs the Forest Service to develop a management plan for the Apache Leap SMA. The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.  The proposed action includes a forest plan amendment that would link the Apache Leap SMA plan components to the forest plan. A new management area (MA 2G Globe Ranger District – Apache Leap SMA) would also be created for the forest plan as a result of this proposal. The amended forest plan would provide the framework for managing the Apache Leap SMA within the broader landscape.	66

## Other (Continued)

Original Comment Text	Forest Service Response	Submittal Number
The impacts from Rio Tinto's proposed mine just 1,000 feet or less from the proposed boundaries of the Apache Leap SMA are so great that if the mine were to be built as proposed, it would be impossible to fulfill the three directions stated above [referencing NDAA direction for the Apache Leap SMA]. Yet this is not addressed in the PMP. Further, there is no discussion in the PMP about what measures will be taken when it becomes apparent that operation of the proposed mine makes it impossible for the direction of the US Congress to be fulfilled.	Adjacent mining operations are being analyzed appropriately through the NEPA process (Resolution Copper Project and Land Exchange EIS) required under Section 3003(c)(9) of the NDAA. Adjacent mining cannot be limited through management actions in the Apache Leap SMA. Congress specified in Section 3003(g)(6) of the NDAA that "the provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."	68
There is no discussion in the PMP about the whether it would even be possible to "allow for traditional uses of the area by Native American people" with a working mine less that [than] 1,000 feet from the Apache Leap SMA.	The cumulative effects on tribal and cultural resources from the Resolution Copper Project and Land Exchange are discussed in the EA sections titled "Tribal" and "Cultural/Historic." However, a full analysis of impacts from the Resolution Copper Project and Land Exchange on the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	68
We recommend that the "Desired Conditions" for the components of the Apache Leap SMA Management Plan state that the values of Apache Leap are not degraded by the proposed Resolution Copper Mine. For example, in Sections 3.1.1 and 3.4.1, this statement should be added: "There are no adverse effects caused by nearby mining activities.", Section 3.2.1 should include: "The landscape is unaltered by nearby mining activities.", and Section 3.5.1 should include "Habitat characteristics are not adversely affected by nearby mining activities.".	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.  The EA discusses the cumulative effects from the Resolution Copper Project and Land Exchange on the resources analyzed.	68

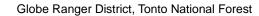
## Other (Continued)

Original Comment Text	Forest Service Response	Submittal Number
PMP 3.2 How would the Forest Service be able to maintain the Apache Leap SMA in a substantially natural condition for use and enjoyment by the public and assure natural quiet and dark skies while Rio Tinto is operating a huge mine 1,000 feet from the Apache Leap SMA?  There needs to be a discussion including measureable goals to assure the	The EA discusses the cumulative effects from the Resolution Copper Project and Land Exchange on the resources analyzed. However, a full analysis of impacts from the Resolution Copper Project and Land Exchange on the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	68
desired condition in this section can be achieved for the following:  Water: Under Rio Tinto's mining plan, the entirety of the Apache Leap SMA is likely to be completely dewatered. How would complete lack of water (other than occasional rain, which would quickly be pumped away) allow for natural conditions?		
• Noise: Under Rio Tinto's mining plan, the entirely of the Apache Leap SMA would be subject to noise and light from a nonstop working mine 1,000 feet from its border. How would natural quiet and dark skies be assured?		
• Fog plumes and other weather conditions: Under Rio Tinto's mining plan, the entirely of the Apache Leap SMA would be subject to fog plumes rising hundreds of feet in the air from at least 5 production shafts Rio Tinto plans. Rio Tinto's mine plan could cause other unnatural weather conditions. How would these disturbances allow for natural conditions?		
• Scenery: Under Rio Tinto's mining plan, there would be a 1,000-foot-deep 2-mile-wide crater 1,000 feet from the border of Apache Leap SMA to the east and a mountain of toxic tailings clearly visible to the west of the Apache Leap SMA. How would that allow for natural scenic conditions within the Apache Leap SMA? For that matter, how scenic would 5 or more steam plumes just to the east of the Apache Leap SMA be?		
While we agree that all proposed developments inside the Apache Leap SMA be designed to blend in with the natural setting and that new communications sites, utility line or transmission lines not occur within the Apache Leap SMA, what real difference would that make when there would be a 1,000-footdeep 2-mile-wide crater 1,000 feet from the border of Apache Leap SMA to the east and a mountain of toxic tailings clearly visible to the west of the Apache Leap SMA?	The EA discusses the cumulative effects from the Resolution Copper Project and Land Exchange on the resources analyzed. However, a full analysis of impacts from the Resolution Copper Project and Land Exchange on the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	68

## Out of Scope

Original Comment Text	Forest Service Response	Submittal Number
N/A	Comments received are related to Resolution Copper Project and Land Exchange EIS.	1; 2; 4; 6; 7; 9; 10; 11; 12; 13; 14; 15; 17; 18; 21; 23; 24; 35; 37; 40; 41; 64

# **Appendix D: Forest Plan Amendment Notice Public Comment Response**





## Forest Plan Amendment Notice Public Comment Response

The Tonto National Forest (Forest Service) provided an opportunity for public comment from July 1, 2017, to July 31, 2017, on the proposed amendment to the Tonto National Forest Land and Resource Management Plan (forest plan) of adopting new plan components, including the Apache Leap Special Management Area (Apache Leap SMA) as a new management area, and modifying the description and acreage of Management Area 2F. A revised management plan ("Apache Leap SMA Management Plan – Modified") was released to the public for comment during this same time period.

The following is a summary of the public comments received during the forest plan amendment notice and the Forest Service response to those comments. The "Submittal Number Identification" table provides a commenter submittal identification number to assist commenters in locating their comments in the "Forest Plan Amendment Notice Public Comment Response" table below.

#### **Submittal Number Identification**

Submittal Number	Last Name	First Name	Organization / Affiliation
1	DeMaria	Linda	
2	Pauk	George	
3	Krieg	John	
4	Lanskey	Marcus	
5	Singh-Bowman	Nan	
6	Filsinger	Erik	
7	O'Keeffe	Sean	
8	McCormick	Gene	
9	Witting	Bruce	
10	Cook	Jay	Arizona Game and Fish Department
11	Diefenderfer	Paul	
12	Keedy	John	Queen Creek Coalition
13	Gunn	David	
14	Keedy	John	
15	Holmquist	Steve	
16	Butler	Elizabeth	
17	Gessaman	Deborah	
18	Schenck	James	
19	Cozzi	Michaele	
20	Robinson	Brady	Access Fund
21	Peacy	Vicky	Resolution Copper Mining, LLC
22	Everett	David	
23	Rambler	Terry	San Carlos Apache Tribe

## Forest Plan Amendment Notice Public Comment Response

#### **Natural Character Scenery**

Original Comment Text	Forest Service Response	Submittal Number
Section 3.1 Natural Character and Scenery  The standard for Natural Character and Scenery (3.1.2) states that natural character and associated values (natural quiet, dark skies and limited encounters with other visitors) will take precedence over recreation uses where conflicts occur. The Department has previously stated concern that this standard creates unnecessary conflict with wildlife related recreation (AGFD April 30, 20 17). The Department believes that wildlife related recreation is compatible with the natural character and scenery of the SMA and an appropriate public use of the area. The Forest has included a guideline #4 (3.1.3) that indicates monitoring will be used to determine negative impacts from recreation to this plan component, and that rehabilitation and closures may be used to mitigate impacts.  The Department requests inclusion of additional information on the management approach for recreation related monitoring and how it would be structured to achieve guideline #4. For example, it is not clear as to:	The management plan complies with the requirements in the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character.  Section 3.1.2, "Standards," under Natural Character and Scenery does not limit wildlife-related recreation in the Apache Leap Special Management Area (Apache Leap SMA); however, the U.S. Forest Service (Forest Service) may impose recreation closures if necessary for the protection of cultural and natural resources. Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected.  Management plan Section 3.1.3, "Guidelines," and Section 3.1.4, "Management Approaches," for Natural Character and Scenery were edited to clarify that the guideline and management approach referenced in the	10
<ul> <li>How conflicts between bird-watching versus hunting, rock climbing or hiking would be uniquely detected, documented and quantified</li> <li>How the Forest would achieve an objective monitoring approach that targets the specific recreation conflict</li> </ul>	comment are related to seismic monitoring activities.	
How the Forest would ensure that decision making is based on objective measures as opposed to potentially subjective or unquantified public perception.		
• How closures apply to activities, SMA areas or other restrictions.		
The Department requests coordination on further development and clarity of the monitoring and management approach for recreation in section 3.1.4.		

Original Comment Text	Forest Service Response	Submittal Number
As to the more detailed "Section 3.1.4 Management Approaches" re. "monitoringthat proposed monitoring strategies for Resolution Copper to preserve the natural character, cultural, and historic resources" of the site, I note two repeated phrases—one, "as much as practicable" and the other, repeated use of the verb helper, "should," rather than the stronger use of words like "would" or "will." Under Number 1, what exactly would the Forest Service accept as an "adequate period before pre-mine construction and development"? Under Number 2, how would Resolution Copper involve the Forest Service's "integrally indesign of the monitoring plan"including Number 3, adequate reporting and independent assessment by the Forest Service? The final paragraph under "Management Approaches" also contains weak wordage related to scenery management goals, for instance, "as opportunities arise, consider" and "efforts may be made" re. power line corridors. Who exactly will present and make such suggestions to Resolution Copper?	The referenced text from Section 3.1.4, "Management Approaches," for Natural Character and Scenery regarding scenery management was removed from the management plan. The text was determined to be duplicative of the "Guidelines" for Natural Character and Scenery in Section 3.1.3.  The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of mining operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would likely be collected. The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the direction in Section 3003(d)(9) of Public Law (PL) 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed "General Plan of Operations" block cave mining method will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."  Any use of information by the Forest Service, whether collected by Resolution Copper Mining, LLC (Resolution Copper), or not, requires independent assessment by the Forest Service, as specified under 42 Code of Federal Regulations (CFR) 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy."	17
Section 3.1.1 Desired Conditions Section 3.1.1 - Please see comment on item #1 below (and likely applicable to item #2 as well) - it might be worth acknowledging possible exceptions in the desired conditions here or somewhere in the guidelines for required monitoring and associated access that RC will need to implement as part of the EIS.  [Commenter suggests adding to the last sentence of 3.1.1 #1: can we add " to the extent practicable (i.e. monitoring stations and associated access)".]	All future development in the Apache Leap SMA would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan.	21

Original Comment Text	Forest Service Response	Submittal Number
Section 3.1.4 Management Approach This section appears to be in direct conflict with Subsection g (6) of the NDAA, which specifically states that the management plan "shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules and regulations".  Adding some upfront wording to the start of this paragraph would address the inconsistency "Consistent with Subsection g (6) of the NDAA The first sentence in the Management Approaches should be modified to delete "and mitigate". Likewise the sentence "Moreover, any management solutions should be the source of monitoring data to inform and refine adjacent block-caving operations, with the objective of mitigating all impacts to public safety and the natural character and scenery of the apache Leap SMA" needs to be stricken.  The management plan is not the correct place to make this statement, particularly as it is essentially in the GPO already. This should be addressed in the EIS.	The management plan was revised to incorporate some of the suggested edits in accordance with NDAA Section 3003(g)(6). The Forest Service considers the reference to "pertinent laws and regulations" in Section 3.1.4, "Management Approaches," for Natural Character and Scenery to incorporate NDAA Section 3003g(6).  The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the direction in Section 3003(d)(9) of PL 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed "General Plan of Operations" block cave mining method will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."	21
Commenter suggests the following edits: Develop a strategy in consultation with Resolution Copper mining engineers and geologists to provide a means to monitor, estimate, anticipate, and mitigate, where possible, the effects of future mining adjacent to the SMA in order to preserve the natural character, cultural, and historic resources of the Apache Leap SMA as much as practicable. The monitoring strategy should include seismic monitoring equipment on the surface and subsurface, surface monuments (e.g., wooden or concrete post) that would be surveyed for movement, monitoring locations for collecting rock mechanics data, and a baseline survey using state-of-the-art methods, such as LiDAR, to establish pre-mine conditions against which future surveys could be compared. The strategy should identify and explore solutions to remediate and mitigate surface conditions that could threaten the integrity of the Apache Leap SMA as allowed by pertinent laws and regulations. Moreover, any management solutions should be the source of monitoring data to inform and refine adjacent block caving operations, with the objective of mitigating all impacts to public safety and the natural character and scenery of the Apache Leap SMA.		

Original Comment Text	Forest Service Response	Submittal Number
The Tribe appreciates that the Modified Plan addresses many of seismic monitoring concerns. However, concerns remain. The Modified Plan should make abundantly clear that early seismic monitoring should extend to any RCM mining related activities whether authorized under an MPO or not. Any mining related activities which are now being conducted by RCM should be monitored.	SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."  The Forest Service is currently monitoring and managing permitted mining activities on federal lands, including hydrological monitoring wells in the	23
	Apache Leap SMA, which are permitted under the "Final Environmental Assessment: Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Activities Plan of Operations."	
	We have also provided a response to your original comment submitted during the scoping period in the environmental assessment (EA) in Appendix C, "Public Scoping Comment Response."	

Original Comment Text	Forest Service Response	Submittal Number
Again, the Tribe's experts conclude that a baseline for seismic activity must be established as soon as possible; not in the future, after the approval of an MPO or after RCM has conducted other mining related activities which may have created surface or sub-surface disturbances. The Modified Plan should require that the seismic monitoring strategy and plan be developed not only in consultation with RCM's mining engineers and geologist but with independent engineers and geologists or perhaps with U.S. Geological Survey personnel as was mentioned in the Tribe's May 1 Comment Letter. TNF should not rely solely upon RCM's views on monitoring or mitigation strategies.	The intent of the management plan is to provide for an adequate period of baseline seismic monitoring prior to the start of mining operations on adjacent lands. As proposed, an adequate period of at least 7 years of baseline monitoring would likely be collected. The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the direction in Section 3003(d)(9) of PL 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed "General Plan of Operations" block cave mining method will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."  Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy."  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	23

Original Comment Text	Forest Service Response	Submittal Number
The Modified Plan seismic monitoring section again contains the phrase: "The strategy should identify and explore solutions to remediate and mitigate surface conditions that could threaten the integrity of the Apache Leap SMA as allowed by pertinent laws and regulations."	There are many pertinent laws and regulations that control mining-related disturbance on national forest lands that would need consideration, depending on the future site-specific circumstances and context. Therefore, an exhaustive list was not provided.	23
The Modified Plan still does not identify the laws and regulations and does not specify their relevance or application. The Tribe asked for that clarification in its original Comment Letter. Please explain why the following was dropped from the quoted phrase: "with the objective of mitigating all impacts to public safety and the natural character and scenery of the Apache Leap SMA."	The deleted portion of text referenced in the comment appears in the modified management plan in Section 3.1.4, "Management Approaches," for Natural Character and Scenery. The sentence was removed from the management plan to improve consistency with NDAA Section 3003(g)(6), which states that adjacent mining cannot be limited through management actions in the Apache Leap SMA. Congress specified in Section 3003(g)(6) of the NDAA that "the provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations."  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	

Original Comment Text	Forest Service Response	Submittal Number
The Tribe's experts suggested the use of tilt meters on the cliffs in the original Comment Letter. The Modified Plan does not address the use of tilt meters or why their use would be objectionable. The Tribe's experts also suggested threshold limits and exceedance values in the original Comment Letter. The Modified Plan should address that threshold limits and exceedance values will be developed as part of the seismic monitoring and mitigation strategies. The Modified Plan does not address but should inform where RCM's underground tunnel and associated workings are located in relation to the ALSMA boundaries. As the Tribe pointed out in its May 1 Comment Letter, there is at least some indication that some mine workings are beneath the surface boundary of the ALSMA. The Modified Plan does not address but should inform whether RCM has begun construction or development of its underground tunnel and associated workings.	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the direction in Section 3003(d)(9) of PL 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed "General Plan of Operations" block cave mining method will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."  Section 3003 of the NDAA ((g)(4)(B)) authorizes several uses of the Apache Leap SMA, including the installation of seismic monitoring equipment; the installation of fences, signs, or other measures necessary to protect the health and safety of the public; and operation of an underground tunnel and associated workings. The potential cumulative effects of the Resolution Copper Project and Land Exchange on the Apache Leap SMA are discussed in the EA. Details on the proposed Resolution Copper Project and Land Exchange, including the location of underground tunnels and associated workings, can be found in the Resolution Copper "General Plan of Operations." At the time of development of the EA, the underground tunnel and associated workings remain proposed.  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	23

Original Comment Text	Forest Service Response	Submittal Number
In Section 3.1.2, the Modified Plan did not reference, define, delineate values and desired conditions for, and identify management actions to conserve clean air, near-surface water, noise levels and other elements of the SMA's natural character. The Tribe made this comment in our May 1, 2017 Comment Letter. We called attention to the fact that these are integral elements of the natural character of Apache Leap. Please address why these additional elements are not included in the Modified Plan.	Management plan standards, guidelines, and management approaches provide the direction for the preservation of the Apache Leap SMA's natural character and scenery characteristics. Section 3.1, "Natural Character and Scenery," contains background information on the physical, biological, and landscape characteristics of the Apache Leap SMA that contribute to the area's natural character and scenery. Management plan Section 3.1.2, "Standards," under Natural Character and Scenery addresses noise levels with the following standard: "Natural character and associated values, including natural quiet, dark skies, and limited encounters with other visitors, shall take precedence over recreation uses where conflicts occur."  There are overriding Forest Service policies and federal regulations addressing air quality, water quality, and other physical and biological resources to which actions in the Apache Leap SMA would be subject (e.g., Clean Air Act, Clean Water Act, and various Forest Service Manuals [FSMs] and Handbooks [FSHs]). The management plan does not attempt to duplicate or override these existing policies and regulations. The potential for impacts to the resources listed in the comment will be considered when assessing the impacts of future actions in the Apache Leap SMA.  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	23
As previously noted, the Tribe takes great offence with the statement appearing at page 16 that subsidence associated with mining under Oak Flat does not impair the special characteristics of the ALSMA. Please provide the rationale or reasoning for this statement either in the Modified Plan or EA or in consultation with the Tribe. This statement is fundamentally inconsistent with other descriptions of the ALSMA provided in the Modified Plan.	The commenter is referring to the desired condition in Section 3.1.1, "Desired Conditions," for Natural Character and Scenery: "subsidence associated with any future mining adjacent to the area does not impair the special characteristics for which it was designated." This desired condition is consistent with the definition of a desired condition plan component, as included in the management plan introduction to Chapter 3 under "Plan Components:" "A desired condition is a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates (36 CFR 219.7(e)(1)(i))."  In light of the proposed adjacent mining activities, this desired condition was included in the management plan to express a desire that the subsidence associated with potential future mining would not impair the special characteristics of the Apache Leap SMA.	23

Original Comment Text	Forest Service Response	Submittal Number
Figures 1 to 4 attached to the Tribe's May 1, 2017 Comment Letter depicting a 360-degree view of the landscape from atop the ALSMA as prepared by Dr. James Wells of L. Everett & Associates, graphically depict the visual and scenic impairment which will result from the subsidence associated with the block-caving mining operations conducted in the area immediately to the east of the ALSMA. Those figures should be included in the Modified Plan and the EA.	The potential cumulative effects of the Resolution Copper Project and Land Exchange on scenery resources in the Apache Leap SMA are discussed in the EA section titled "Natural Character and Scenery." Full disclosure of the scenery impacts of the Resolution Copper Project and Land Exchange, including visualizations of anticipated mine operation components, will be analyzed in the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS).  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	23
Following are my recommendations for Management Approaches to protect various resources of the Apache Leap SMA from subsidence caused by adjacent mining.  In the Modified Management Plan Section 1.1 PURPOSE OF THE MANAGEMENT PLAN indicates that the Management Plan should provide strategy. (It states "The plan also provides the monitoring strategy".) In the Modified Management Plan Section 3.1.4 "Management Approaches" starts with "Develop a strategy ", which implies that the strategy is to develop a strategy. I recommend that "Develop a strategy" at the start of Management Approaches related to subsidence be replaced with "Specify a seismic monitoring system".	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. The seismic monitoring management approach, as stated in Section 3.1.4, "Management Approaches," for Natural Character and Scenery adequately outlines the intent to develop a seismic monitoring strategy to evaluate the effects of future proposed mining adjacent to the Apache Leap SMA.	8
Following are my recommendations for Management Approaches to protect various resources of the Apache Leap SMA from subsidence caused by adjacent mining.  To assure credibility and avoid tangible or perceived conflict of interest, the Management Approaches relating to subsidence should direct that the monitoring system be specified by the Forest Service or by contractors under direct supervision of the Forest Service. The current reference to consultation with Resolution Copper in Section 3.1.4 should be modified or eliminated, to avoid interpretation that RCM could have a major role in specification of a system intended to protect the SMA from impacts caused by RCM's operations. The Management Approaches should state that the development of the monitoring system will use consultation with RCM only to provide supplemental information or to insure effective integration of the monitoring performed within the SMA and within the boundaries of the mine.	Any use of information by the Forest Service, whether collected by Resolution Copper or not, requires independent assessment by the Forest Service, as specified under 42 CFR 1506.5(a): "If an agency requires an applicant to submit environmental information for possible use by the agency in preparing an environmental impact statement, then the agency should assist the applicant by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy."	8

Original Comment Text	Forest Service Response	Submittal Number
Following are my recommendations for Management Approaches to protect various resources of the Apache Leap SMA from subsidence caused by adjacent mining.  Section 3.1.4 of the modified Management Plan currently states that the strategy should "identify and explore" solutions which would "inform and refine adjacent block caving operations, with the objective of mitigating all impacts". I recommend that the strategy set forth in the plan place heavy emphasis on the need for a seismic monitoring system consisting of not only equipment but also procedures. The procedures must not simply "inform and refine", but include corrective actions, such as modification or cessation of adjacent mining operations in response to evaluation of monitored data. The strategy must also recommend that legally binding agreements be established between the Forest Service and RCM requiring actions by RCM in response to evaluation of monitored information.		8

Original Comment Text	Forest Service Response	Submittal Number
Following are my recommendations for Management Approaches to protect various resources of the Apache Leap SMA from subsidence caused by adjacent mining.  The Management Approaches related to subsidence should state as an objective that the seismic monitoring system be developed and operated as an integrated system encompassing all seismic monitoring and evaluation, both within the Apache Leap SMA and within the boundaries of the adjacent mine, at the East Plant Site (EPS).	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including direction that the area should allow for both surface and subsurface seismic monitoring.  As defined in the management plan introduction to Chapter 3 under "Plan Components," an objective is "a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets (36 CFR 219.7(e)(1)(ii))." The request to edit the seismic monitoring strategy in Section 3.1.4, "Management Approaches," for Natural Character and Scenery as an objective was not made, as it is not consistent with the requirements of Forest Service plan components.  The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the	8
	direction in Section 3003(d)(9) of PL 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed "General Plan of Operations" block cave mining method will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."	
Following are my recommendations for Management Approaches to protect various resources of the Apache Leap SMA from subsidence caused by adjacent mining.  The Management Approaches related to subsidence should require preparation of documentation specifying requirements for the equipment and procedures of the seismic monitoring system. To allow timely public review and comment, the Apache Leap SMA Management Plan should require this documentation to be available to the public well before the publication of the Resolution Copper Project and Land exchange Final Environmental Impact Statement, and preferably referenced by the Draft Environmental Impact Statement.	The purpose of the management plan is to provide management direction for the Apache Leap SMA, including the intent that the area should allow for both surface and subsurface seismic monitoring. The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the direction in Section 3003(d)(9) of PL 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed "General Plan of Operations" block cave mining method will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."	8

Original Comment Text	Forest Service Response	Submittal Number
B. What Makes Apache Leap Unique?  I recommend that Section 2.1 of the Management Plan, "What Makes Apache Leap Unique?" discuss the proximity of Apache Leap to the predicted subsidence crater as a major factor that makes Apache Leap unique. This subsidence constitutes a unique hazard to the SMA, and is a uniquely important issue in the management of the SMA. The discussion of Section 2.1 should include the predicted distance of the subsidence crater from the SMA, and possible inaccuracies in currently available predictions.  The Resolution Copper Mining (RCM) General Plan of Operations (GPO), dated May 8, 2016, in Exhibit 3.2-2, or Figure 7 of GPO Appendix E, shows the extent of subsidence predicted by studies conducted by RCM. Comparison of that figure with Figure 2 of the SMA Management Plan shows that subsidence produced by the mining operation is predicted to come within about 1000 feet of the eastern boundary of the Apache Leap SMA.  The GPO indicates that numerical simulations were used for this prediction, but the GPO provides little or no information or references on the accuracy of the prediction. This leads to some uncertainty about the lateral extent of the subsidence. A relatively small change in parameters, such as the subsidence angle, or conditions, such as unforeseen geological structures, could result in intrusion of the subsidence into the Apache Leap SMA. Public comments on scoping of the Environmental Impact Statement (EIS) covering the GPO have suggested that a more thorough independent and transparent study of subsidence extent be conducted by the Forest Service.  To aid in visualization, I also recommend that Figure 2 of the Apache Leap SMA Management Plan be modified, or another figure added, to show the predicted extent of subsidence relative to the boundary of the SMA. This would overlay subsidence contours obtained either from the GPO Exhibit 3.2-2 or from updates if available from further study by the Forest Service.	by outlining the types of information required. The agency shall independently evaluate the information submitted and shall be responsible for its accuracy." The extent of subsidence is included in the EA in Figure B-1 in Appendix B, "Projects, Activities, and Factors Considered in Cumulative Effects." A full analysis of subsidence impacts from the Resolution Copper Project and Land	8

Original Comment Text	Forest Service Response	Submittal Number
The modified Management Plan presently discusses Management Approaches related to subsidence monitoring and control only in Section 3.1.4 for Natural Character and Scenery. Management Approaches concerned with subsidence monitoring and control must also be discussed for other resources that could be impacted by subsidence, such as Cultural/Historic, Mineral Resources, and Wildlife. Since the Management Approaches relating to subsidence are essentially the same for all of these resources, they could be discussed in one place in Section 3 of the SMA Management Plan, and then referenced by Sections 3.1.4, 3.3.4, 3.6.4, 3.7.4, etc.	The intent of including the seismic monitoring management approach in Section 3.1.4, "Management Approaches," for Natural Character and Scenery was to capture the seismic monitoring approach in one location in the management plan. The plan components in the management plan are designed to be used together to achieve integrated resource management throughout the plan area.	8
Following are my recommendations for Management Approaches to protect various resources of the Apache Leap SMA from subsidence caused by adjacent mining.  The SMA Management Plan, in describing Management Approaches related to subsidence, should state that because of the proximity and uncertainties in the predicted subsidence, there is a significant risk that adjacent mining activities could cause adverse impacts to the various resources of the Apache Leap SMA. It should then state that this leads to a need for installation and operation of a seismic monitoring system that will prevent such impacts.	The EA discusses the cumulative effects of the Resolution Copper Project and Land Exchange on the Apache Leap SMA. However, a full analysis of subsidence impacts from the Resolution Copper Project and Land Exchange on the Apache Leap SMA will be addressed in the Resolution Copper Project and Land Exchange EIS.  The seismic monitoring authorized within the Apache Leap SMA is described as a means to protect resources: "installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area" (Section 3003(g)(4)(B)(i)). The National Environmental Policy Act process (EIS) required under Section 3003(c)(9) of the NDAA for the land exchange and mining operations is the appropriate process in which to develop a seismic monitoring plan, as it is when mining techniques and the associated impacts will be analyzed.	8

#### Tribal

Original Comment Text	Forest Service Response	Submittal Number
religious traditions that extend back over 1000 years. The area should not be given, leased, or otherwise endangered especially to provide mining access to a foreign corporation.	The purposes of Apache Leap SMA under the NDAA (Section 3003(g)(2)) are to (1) preserve the natural character of Apache Leap; (2) allow for traditional uses of the area by Native American people; and (3) protect and conserve the cultural and archaeological resources of the area. The Forest Service must manage the Apache Leap SMA in a manner that is consistent with the NDAA. To that end, the Apache Leap SMA management plan describes desired conditions, goals, standards, and guidelines for management of tribal, cultural, and archaeological resources.  As directed by NDAA Section 3003(f), the Apache Leap SMA is withdrawn from all forms of mineral developing and leasing. Section 3.6, "Mineral	4
	Resources," of the management plan implements the NDAA mineral withdrawal.	
In response to your recent overview of that first version, I commend your amendment to "identify the Apache Leap SMA as a new management areamodify the description and acreage of the former management area[and] incorporate new plan componentsdeveloped to meet the primary purpose of the special management area" (p. 5, Section 1.5 Planning Process). In particular, I want to applaud paragraph 3, which extends consultation processes (ended January 31, 2017) to continue tribal consultation through the period of objections, to include government-togovernment consultation. In good faith, the leaders of eleven Native tribes must be included in these potentially life-changing processes. I also note that approving the management plan and amending the forest plan are privy to a further objection period, with all objections resolved prior to a final decision.	Thank you for your input. The role of tribal consultation in the development of the management plan is discussed in management plan Section 1.6, "Management Roles," and the EA section titled "Public Involvement and Tribal Consultation." The commenter is correct. The draft decision notice and finding of no significant impact for the "Apache Leap Special Management Area Special Management Plan Environmental Assessment and Finding of No Significant Impact" is subject to the pre-decisional objection procedures identified in 36 CFR 219, subpart B. Additional specifics of the objection period are detailed in the draft decision notice.	17

## Tribal (Continued)

Original Comment Text	Forest Service Response	Submittal Number
With much appreciation, I note the addition of "Section 3.2, Tribal," to the Management Plan and also the "clarification on the mitigation and monitoring strategy for cultural resources," matters of supreme concern to Native Americans, and to those of us Americans who feel deeply their First People's Rights in North America. Their requests re. landscape/resources, access, and plant species are clearly and succinctly stated under "Desired Conditions" (Numbers 1-4). Under "Standards," they ask that their "traditional use shall take president over recreation uses; that the Forest Service help maintain confidentiality of "culturally sensitive information," as expected by the Tribes. Under Number 3, they request that federally assisted projects include "tribal input[re.] archaeological sites, traditional use areas and natural resourceand that "consultation must be initiated over a 'substantial direct effect' to the land on one or more tribes from a proposed decision or action." Finally, Number 4 sums up tribal consultation rights perfectly, to my mind. Their years of occupancy on this land make them local "experts" on their tribal perspectives, needsconcerns[and traditional knowledge," thus pointing out that what they know deserves early consultation on "project design and decisions." They certainly do have their wisdom, in my opinion. "Section 3.2.3, Guidelines" outlines four reasonable and important requests re. tribal cultural purposes: recognition of impacts other than historical or traditional uses that call for permanent or temporary closures; allowing reasonable tribal access when questions arise with landowners and other agencies; and, finally, if additional unlisted cultural resources are eligible for inclusion in the National Register, that papers be prepared "within five years of initial determination of eligibility."  In "Section 3.2.4, Management Approaches" under "Tribal," the document language seems to shift from the other, more affirmative document's management sections, to using the wo	The Apache Leap SMA management plan uses management approaches to describe management intent and possible management strategies and to identify potential partnership opportunities and coordination activities, including area or resource monitoring. By design, management approaches are flexible and strategic, communicating current thinking and management intent.  In response to your questions regarding the language choices in Section 3.2.4, "Management Approaches," for Tribal, the use of "consider" is the appropriate plan terminology for a management approach and is consistent with the terminology used in other "Management Approaches" sections of the management plan.	17
to positively state support for their four management approaches as requested?  • What is needed to ensure that some or all of these as-requested management approaches would or will be supported by the Forest Service?		

## Tribal (Continued)

Original Comment Text	Forest Service Response	Submittal Number
Section 2.5 Social and Cultural Characteristics  If the legend of Apache Leap conflicts with oral history from the Apache people, should it be removed from the SMA? The social and cultural characteristics are nicely described in Sections 2.1 and 2.2 above.	The management plan was not edited as proposed by the commenter.  The legend of Apache Leap is a unique component of the social and cultural characteristics of the Apache Leap SMA.	21
Thank you for adding the "Tribal" section to the Modified Plan. However, to provide significance and meaning to this section, it would be appropriate and important to include a statement to the effect that the "ALSMA's importance as a cultural resource and sacred area include the eastern slopes containing canyons and drainages leading to Oak Flat which are is a cultural resource containing cultural resources and historic and sacred sites of importance to affected Indian tribes."	Management plan Section 3.2, "Tribal," was edited to incorporate additional descriptions of the <i>Chi'chil Bildagoteel</i> Historic District and its relationship to Oak Flat and the Apache Leap SMA. The management plan section titled "What Makes Apache Leap Unique?" (Section 2.1) was edited to include a description of the physical relationship between Apache Leap and Oak Flat. Information about the area's importance to Apache tribes was also added.	23

## Tribal (Continued)

Original Comment Text	Forest Service Response	Submittal Number
In closing, the Apache Leap and Oak Flat area, and the surrounding lands belong to the Apaches. Even though on paper, it was taken away from my people, in our hearts and minds, the lands still belong to us. Our Creator God gave these lands to us. On a personal note, this is also where my ancestors were born - on my paternal grandfather's side, I originate from these lands. Before miners discovered minerals in this area in the 1850s, our ancestors used this area for its bounty and life sustaining means. There were plenty of acorns (still our main diet to this day), medicinal plants, wild game, edible plants, and water. Our ancestors used this place as their means, through prayers, to connect to our Creator God; a place where we may give thanks, praise and ask for protection and guidance. Of course, all these things were pushed aside in the name of minerals as miners with the help of the U.S. Cavalry and, ultimately, the U.S. President, signed an executive order taking this land away from us and herding our ancestors, like cattle, onto the Reservation we reside on.  Today, history repeats itself. We still have miners (Resolution Copper Mine) and they are still being helped by the United States government (Congress) to further forever damage these lands and waters through mining in the	Thank you for sharing this perspective. The management plan section titled "What Makes Apache Leap Unique?" (Section 2.1) was edited to include information about the area's importance to Apache tribes.  The environmental effects of the proposed Resolution Copper Project and Land Exchange are being examined by the Forest Service consistent with the direction in Section 3003(d)(9) of PL 113–291. When it becomes available, the information gathered about potential harm to the Apache Leap that could result from the proposed block cave mining will be used to develop more specific details for the Apache Leap SMA seismic monitoring strategy identified in management plan Section 3.1, "Natural Character and Scenery."	23
immediate area.  Our Creator God provided us the natural resources to survive on and these natural resources are interconnected both above and below surface. These natural resources are not compartmentalized like shelves in a dresser where you can neatly fold socks, shirts, and pants into each shelves. In the natural world, if you harm one area, it affects other adjacent areas.  Block cave mining will do harm to the Apache Leap area simply because it is connected to the other areas being planned for destruction. The Apache Leap area will not maintain its unique special character or purpose simply because no human being can make perfect or keep perfect what our Creator God has already perfected.		

#### **Cultural/Historic Resources**

Original Comment Text	Forest Service Response	Submittal Number
C. Desired Conditions I agree with the statement of Section 3.1.1 of the modified Management Plan that "Subsidence associated with any future mining adjacent to the SMA does not impair the natural characteristics and scenery of the SMA". I recommend that similar statements be added for the "Desired Conditions" of other resources that could be impacted by subsidence associated with nearby mining. This would include as a minimum the following Desired Conditions:		8
3.3.1 Cultural/Historic Desired Conditions – state that historic and prehistoric human products are not disturbed by subsidence from future adjacent mining activity.		
The Tribe does not believe that the Modified Plan adequately addresses the historic, cultural and religious importance of Apache Leap in conjunction with Oak Flat and the Modified Plan failed to adequately address the Tribe's concerns listed at pages 7 to 8 of the May 1, 2017 Comment Letter at Item B. Please also see the comment in the preceding paragraph.	The management plan section titled "What Makes Apache Leap Unique?" (Section 2.1) was edited to include a description of the physical relationship between Apache Leap and Oak Flat. Information about the area's importance to Apache tribes was also added.	23
	Management plan Section 3.2, "Tribal," was also edited to incorporate additional descriptions of the <i>Chi'chil Bildagoteel</i> Historic District and its relationship to Oak Flat and the Apache Leap SMA.	
	We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	
Among the antiquities protected by law and common sense are Native American burial sites, sacred artifacts, and living ancient oak trees. The oak trees are special because they show evidence of ancient Indigenous Peoples sacred and cultivation practices.	We agree. The management plan includes desired conditions that recognize the importance of sacred places and traditional practices. Section 3.2, "Tribal," includes the following direction: "Traditional resources are preserved in place wherever feasible;" and "Traditional uses such as the collection of medicinal plants and wild plant foods are valued as important uses. Traditionally important plant species are available for traditional uses. Healthy populations are sustained or expanded within the Apache Leap SMA."	2

#### Access

Original Comment Text	Forest Service Response	Submittal Number
I again question whether the public access requirement is addressed by only trails that end up at a cliff face. I believe that public access does not require you to be a mountain climber to reach all parts of the management area. This means that we need access from the east.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to work with interested parties in the future to facilitate continued public access to the Apache Leap SMA. The NDAA does not require that the Forest Service provide recreation access to the Apache Leap SMA; it states that the Forest Service "consider" providing access for recreation.	3
I like the inclusion of USFS roads 2440 and 282 as potential access to the Leap.	Thank you for your input. Management plan Section 3.5.3, "Guidelines," for Recreation designates the majority of the Apache Leap SMA as semi-primitive non-motorized, which allows for non-motorized trails and does not allow motorized trails. A small portion surrounding the Forest Road (FR)2440 area on the west side of the special management area is designated semi-primitive motorized to allow for continued minimal motorized activity in the road area.	6
There are two areas of further refinement I believe should be made. To facilitate the specific input, I've shown in specific language for specific paragraphs of the draft plan. Those additions have been highlighted for your convenience. [Note: the commenters highlighted text is underlined] The logic for the request to add parking "at" or "just inside" the Apache Leap SMA boundary is that rock climbers carry heavy (35 lb) packs and it not feasible to park at the base of FR 2440, for example, and hike all the way to climb at the cliffs. A parking lot part-way up the hill at the general location of the ALSMA boundary would be a reasonable accommodation.  3.4.1 Desired Conditions  1. Public access within the Apache Leap SMA is consistent with protection of scenic and cultural/historic values.  2. The transportation system supports ongoing access for dispersed recreation opportunities, resource management activities, and authorized uses. Roads and motorized trails are only evident within the Apache Leap SMA on the west side of the escarpment, where FR2440 is located. Low impact parking lots along FR 2440 near the boundary of the ALSMA to serve as trail heads part way up the hill will be considered. Non-motorized trails are the primary source of public access for most of the area's rugged, remote landscapes.	The management plan addresses this comment along FR2440 in two sections of the plan. Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to "consider developing access 'nodes' on the west and south sides of Apache Leap for future public access. These nodes would provide locations for non-motorized trail junctions and trailheads and could also be considered for parking areas if at a road terminus." Additionally, management plan Section 3.5.3, "Guidelines," for Recreation acknowledges the potential need for future motorized access to a portion of the Apache Leap SMA. The area surrounding FR2440 on the west side of the Apache Leap SMA is designated semi-primitive motorized to allow for continued minimal motorized activity in the road area.	6

Original Comment Text	Forest Service Response	Submittal Number
As a member of the C.W.G. (Community Working Group) I did not approve of the group request for additional access to the Apache Leap Special Management Area Plan.  My opinion: I do not approve of the Rock climbing, Flying kites & paper airplanes, of Social and informal community gatherings. These three items only spell trouble for Emergency Services & Pinal Search & Rescue.  Should you desire additional information on the potential impacts to Emergency Services & Pinal Search & Rescue, I will be available and willing to provide significant detail on potential impacts (both to staffing and budget). The more open this area is, the sooner the beauty of the area will be impacted and/or destroyed. It should be left as it, with no additional roads or trails, just leave the existing trails and roads.  Please see the attached d pictures (taken 4/25/17) just outside of the proposed A.L.S.M.A.P. These are a perfect example of what the area will look like on there is open public access. [Attached are two pictures of graffiti on rocks. Please see the comment letter for the attachments.]	<ul> <li>Thank you for your input. The management plan contains direction for recreation management that fosters protection of the area's resources.</li> <li>The focus of the proposed action is to develop a programmatic approach to managing future activities within the Apache Leap SMA itself, including recreation activities. Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected.</li> <li>Additionally, the management plan includes several plan components that address recreation conflicts with natural and cultural resources in the Apache Leap SMA, including the following:</li> <li>Natural character and associated values, including natural quiet, dark skies, and limited encounters with other visitors, shall take precedence over recreation uses where conflicts occur (Section 3.1.2, "Standards," for Natural Character and Scenery).</li> <li>Tribal perspectives, needs, and concerns should be prioritized. Where activities may affect places important to tribes, the Forest should work to avoid impacts to the fullest extent of applicable laws and regulations (Section 3.2.3, "Guidelines," for Tribal).</li> <li>If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, permanent or temporary closures to protect the affected sites and/or use areas should be considered until restorative measures can be identified and implemented (Section 3.2.3, "Guidelines," for Tribal).</li> <li>If historic properties or traditional use areas are found to be impacted by recreation or other allowable uses, temporary closures to protect the affected sites or use areas should be employed until restorative measures can be identified and implemented (Section 3.3.3, "Guidelines," for Cultural/Historic).</li> </ul>	9

Original Comment Text	Forest Service Response	Submittal Number
Section 3.4 Access  The Department appreciates the clarifications to thoroughly describe the current levels of public access via Forest system routes. The Department agrees with the intent of Standard 3.4.2 for designations to align with motor vehicle use maps; and with the guideline # 1 to sign roads and trails; and guideline 3.5.3 to manage the Apache Leap SMA for recreation settings including: semi-primitive motorized and semi-primitive nonmotorized recreation. Lastly, the Department agrees that development of access nodes on the west and south side of Apache Leap would be a positive step for public access.	Thank you for your input. The management plan contains direction for public access that fosters protection of the area's resources.	10
The legislation that congress passed allowing the land swap for Resolution specifically mentioned recreation. Without reasonable access to Apache Leap recreational uses such as hiking and rock climbing are meaningless. Please allow use of the existing roads for motorized access at least the boundary of the Special Management Area. Access and a reasonable parking area will allow recreational use of the area without significant impacts. Climbers (myself included) have been climbing on Apache Leap for decades. We have approached from the top but this access route will be lost as the mine is developed. We need reasonable access to replace what is being lost. Climbers will be losing a significant number of climbs once the mine closes access to Oaks Flats and the surrounding area.	The NDAA does not require that the Forest Service provide recreation access to the Apache Leap SMA; it states that the Forest Service "consider" providing access for recreation.  The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as roads or parking areas, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan. Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA.  The EA discusses the cumulative effects on access and recreation from the proposed Resolution Copper Project and Land Exchange in the sections titled "Access" and "Recreation." However, a full analysis of access and recreation impacts from the Resolution Copper Project and Land Exchange on the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	11

Original Comment Text	Forest Service Response	Submittal Number
There are some continuing concerns we have that need addressed with the APSM Plan as revised.  First of all, we appreciate the inclusion of FR 2440 and FR282 as as motorized access to the edge of APSMA. In order for FR2440 to be useful to Rock Climbers and others, there needs to be a low impact parking/staging area designated at the border of ALSMA where FS2440 enters ALSMA. Without providing a parking/staging area there, it would effectively eliminate use of ALSMA to Rock Climbers and other potential users of ALSMA. Rock Climbers carry heavy loads of equipment used in rock climbing. We carry this type of equipment as to not damage the rock in the climbing process while providing climbing safety. For us, this is essential. For a recommended change to paragraph 3.4.1.2 we would propose the following high lighted areas.: [Highlighted text from the comment is underlined]  3.4.1.2 The transportation system supports ongoing access for dispersed recreation opportunities, resource management activities, and authorized uses. Roads and motorized trails are only evident within the Apache Leap SMA on the west side of the escarpment, where FR2440 is located. Low impact parking lots along FR 2440 near the boundary of the ALSMA to serve as parking/staging area part way up the hill will be established. Non-motorized trails are the primary source of public access for most of the area's rugged, remote landscapes.	interested parties in the future to facilitate continued access to the Apache	12

Original Comment Text	Forest Service Response	Submittal Number
supported, but with the mine taking the access from the East away, there needs to be designated parking within or just outside the management area on the West. And not just for a few vehicles in one location. I would support 2 or 3 access points with parking for up to 20 vehicles at each location.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as parking or motorized access to a trailhead, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan.	13
	Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the Recreation Opportunity Spectrum designation was changed in the modified management plan to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	
	The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the "Access" section. However, a full analysis of access impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	

Original Comment Text	Forest Service Response	Submittal Number
I have been a rock climber since 1993 when I joined the Arizona Mountaineering Club (AMC). I learned rock climbing through their classes. One of the favorite places many AMC climbers love is Queen Creek and areas of Apache Leap. Prior to learning rock climbing I camped and hiked in and around Oak Flat Campground from the early 1970 when I came to Arizona. Some of those hikes also included hiking along the base of Apache Leap. Many fond memories there. I believe it is the responsibility of the Tonto National Forest personnel working on ALSMA plans to do all within their power to insure access to the Leap and all it has to offer, including rock climbing.  As we will not be able to access Apache Leap from the east once the Resolution Copper mine is in operation, west access is very important for all who will use the Leap. That west access is on FR2440. It is a steep rocky road with little or no parking. There needs to be a parking lot/staging area at the juncture of FR2440 and the Leap boundary. That would provide a control point for users of the Leap.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as parking or motorized access to a trailhead, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan.  The management plan addresses the access and parking comment along FR2440 in two plan sections. Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the Recreation Opportunity Spectrum designation was changed in the modified management plan to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.  The EA discusses the cumulative effects on access from the Resolution Copper Project and Land Exchange in the "Access" section. However, a full analysis of access impacts from the Resolution Copper Project and Land	14
	Exchange on the east side of the Apache Leap SMA, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	

Original Comment Text	Forest Service Response	Submittal Number
As a long time hiker and rock climber and someone who has enjoyed this area for more than 30 years, I have basically three points of concern.  1. That the Plan allows some parking area or areas, at or more hopefully within the boundaries of ALSMA. I personally believe FSR 2440 would be best for this consideration.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as motorized access to a trailhead, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan.  Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the Recreation Opportunity Spectrum designation was changed in the modified management plan to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	15
As a long time hiker and rock climber and someone who has enjoyed this area for more than 30 years, I have basically three points of concern.  2. The Plan has language that will allow for the development of future non motorized trail system that would skirt along the Leap's base to provide access and preserve the integrity of it's natural character.	Thank you for your input. The management plan contains direction for recreation management that fosters protection of the area's resources. Individual proposed projects, such as additional trails, would be subject to analysis for potential site-specific environmental impacts and for compliance with plan components established in the management plan.	15

Original Comment Text	Forest Service Response	Submittal Number
Section 3.5.4 Management Approaches says, in part, "Work with non- governmental organizations and local government officials to establish sustainable rock climbing and bouldering expectations for the Apache Leap SMA. Consider designating approaches to the escarpment from the west side, designating climbing routes, and prohibiting new bolting to minimize environmental impacts."  My residence is one block from the Cross Canyon trail/access (Forest Road 2440) to Apache Leap. While I understand that the Queen Creek Climbing Coalition would like to convert this to a public access road for climbers to drive up to, and park, at the base of Apache Leap, I do not believe that this is in the best interest of the general public and certainly not the residents of the area.  Resolution Copper uses the Cross Canyon to access monitoring wells which is not an issue as it is very light traffic. This route is a hiking trail for the people of Superior. I would not like to see it converted to an access road for climbers. I think climbing is fine, but the idea that climbers can't carry their climbing gear from Ray Road to the base of Apache Leap does not resonate. If you can't carry your gear to the base of Apache Leap, you probably shouldn't be attempting the climb.  Please keep the access on the Cross Canyon (Forest Road 2440) as it is currently and preserve it as a walking trail. Climbers that can't hike to the base can still do roadside climbing off of Highway 60 through the agreement with Resolution Copper.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as an alternative access route designation, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan; this section encourages the Forest Service to work with interested parties, including recreation user groups and adjacent landowners, in the future to facilitate continued access to the Apache Leap SMA.  In consideration of the numerous public scoping comments received on the proposed management plan regarding continued access to the Apache Leap SMA, the Forest Service modified the recreation opportunity spectrum designation around a small portion surrounding the FR2440 area on the west side of the SMA as semi-primitive motorized. See Figure 3 on page 25 of the management plan for a map showing the location of designated "semi-primitive motorized" and "semi-primitive non-motorized" areas.	18

Original Comment Text	Forest Service Response	Submittal Number
Section 3.5.4 Management Approaches says, in part, "Work with non- governmental organizations and local government officials to establish sustainable rock climbing and bouldering expectations for the Apache Leap SMA. Consider designating approaches to the escarpment from the west side, designating climbing routes, and prohibiting new bolting to minimize environmental impacts."  My residence is one block from the Cross Canyon trail/access (Forest Road 2440) to Apache Leap. While I understand that the Queen Creek Climbing Coalition would like to convert this to a public access road for climbers to drive up to, and park, at the base of Apache Leap, I do not believe that this is in the best interest of the general public and certainly not the residents of the area.  I have hiked this route weekly since March, 2015 and in all of that time have encountered vehicles only 5 times. It's a hiking trail for the people of Superior even though the mine does use it for water monitoring. I would not like to see it converted to an access road for climbers. If the road is improved, vehicles will be able to increase their speed, making it more dangerous for hikers. Climbing is fine, but the idea that climbers can't carry their climbing gear from Ray Road to the base of Apache Leap does not resonate — it's only 1 1/2 miles. If you can't carry your gear to the base of Apache Leap, you probably shouldn't be attempting the climb.  Please keep the access on the Cross Canyon (Forest Road 2440) as it is currently and preserve it as a walking trail. Climbers that can't hike to the base can still do roadside climbing off of Highway 60 through the agreement with Resolution Copper.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as an alternative access route designation, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan. Section 3.4.4, "Management Approaches," for Access was added to the management plan; this section encourages the Forest Service to work with interested parties, including recreation user groups and adjacent landowners, in the future to facilitate continued access to the Apache Leap SMA.  In consideration of the numerous public scoping comments received on the proposed management plan regarding continued access to the Apache Leap SMA, the Forest Service modified the recreation opportunity spectrum designation around a small portion surrounding the FR2440 area on the west side of the special management area as semi-primitive motorized. See Figure 3 on page 25 of the management plan for a map showing the location of designated "semi-primitive motorized" and "semi-primitive non-motorized" areas.	19
Regarding Access  Access Fund approves of language changes made in the revised Apache Leap SMA Management Plan to enhance access to the recreational resources existing within the boundaries of the SMA. The NDAA directive calling for the formation of the SMA specifies (Section 3003(g)(5)(B)) that access will be provided to the SMA for recreation. The initial draft SMA management plan did not adequately address this access requirement, in our view. The revised plan, calling for some semi-primitive motorized (SPM) areas with parking is an improvement over the original management plan. Specifically, access from the west, via FS 2440 (also known as "Cross Canyon Road) with "nodes" for parking reflect significant improvement to access over the original SPM.	Thank you for your input. The management plan contains direction for public access that fosters protection of the area's resources.	20

Original Comment Text	Forest Service Response	Submittal Number
I believe that the access point (i.e. parking area) should be moved closed to Apache Cliffs. This is for several reasons. One is to aid senior tribal members easier access to the cliffs. Also, climbers carry heavy packs when making their approaches to the climbing area's. A parking lot midway up FR 2440 would be reasonable to assist both user groups in accessing the beautiful Apache Leap.	The management plan is a planning-level document that provides a programmatic approach for managing future activities in the Apache Leap SMA. Future proposed projects, such as parking areas, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan.  The management plan addresses the access and parking comment along FR2440 in two plan sections. Management plan Section 3.4.4, "Management Approaches," for Access encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the Recreation Opportunity Spectrum designation was changed in the modified management plan to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA in response to public concerns over continued access to the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	22

#### Recreation

Original Comment Text	Forest Service Response	Submittal Number
There are two areas of further refinement I believe should be made.  To facilitate the specific input, I've shown in specific language for specific paragraphs of the draft plan. Those additions have been highlighted for your convenience. [Note: the commenters highlighted text is underlined]  The second point is also very important and speaks to the mitigation of the rock climbing being lost due to the Resolution Copper mine. I don't think that there should be a prohibition in the overall Apache Leap Management Plan of new bolting, new fixed anchors, etc. While there are some rock climbs historically existing on the Leap, it represents a potential significant replacement to the rock climbs being lost within the zone of active operations of the Mine. I believe that it should be possible to work out, probably within the forthcoming Climbing Management Plan, a reasonable balance of cultural protections and the allowance for establishing new rock climbing routes using bolts and fixed anchors. But I believe those decisions should be allowed within the general guidelines of the overall Plan.  3.5.4 Management Approaches  As opportunities arise, consider ways to integrate and develop non-motorized trails within the Apache Leap SMA. Review trail proposals as they are received from non-governmental organizations, local governments, and citizer initiatives and work with all consulting parties, stakeholders, and the public to ensure any future trail development is consistent with the purposes for which the Apache Leap SMA was designated. Consider existing and proposed non-motorized trails that are adjacent (e.g., the LOST [Legends of Superior Trails]) for connectivity to future proposed trails within the Apache Leap SMA.  Work with local non-governmental organizations, local governments, tribes, and recreation groups to develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA. Work with nongovernmental organizat	may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery," Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic."	6

Original Comment Text	Forest Service Response	Submittal Number
I feel that the modified plan made some excellent changes. I particularly like the specific recognition of historic recreational use of the Apache Leap. Done properly I feel that those uses are consistent with the Plan as laid out. I am fine with the concept of non-motorized access to dispersed recreation stated.	Thank you for your input. The management plan contains direction for recreation that fosters protection of the area's resources.	6
Section 3.5 Recreation  The Department requests the Forest allow for non-vehicular based camping opportunities, such as remote backpacking for Desired Condition (3.5.1 - #3), which currently limits recreation to day-use only and excludes overnight camping (Objective 3.5.2). A less restrictive opportunity would align with desired conditions for other plan components and would further achieve the desired condition for dispersed recreation opportunity that emphasizes non-motorized recreation (3.5.1 - #1).	The prohibition on overnight camping in the Apache Leap SMA is consistent with management plan Section 3.5.1, "Desired Conditions," for Recreation, which emphasizes non-motorized use that occurs at appropriate locations and intensities such that cultural and natural values are protected. While overnight camping would be prohibited in the Apache Leap SMA, there continue to be many areas open to overnight dispersed camping in the Tonto National Forest.	10
The Department expresses concern for any additional special management or land use designations that further restrict wildlife management and wildlife related recreational activities. Objectives 3.1.2 and 3.5.2 provide for a Wilderness type management approach for the SMA. Both the Multiple-Use Sustained-Yield Act of 1960 and the Federal Land and Policy Management Act of 1976 (FLPMA) prohibit federal land management agencies from affecting the State's jurisdiction and responsibilities, and managers of public lands are mandated to provide multiple-use recreational opportunities on public lands to both present and future generations. The Department perceives the conversion of public lands to a special use status as a breach of the FLPMA mandate, with those lands forever lost for multiple-use.  The Department supports public land use that provides Arizona's public and resources with a net benefit, and does not support the conversion of public lands from multiple-use to special land use designations or management areas that result in a net loss of wildlife resources, wildlife related recreational opportunities and wildlife dependent economic benefit. The Department requests the Forest conduct a full analysis of the cumulative impacts of further loss of public lands that provide for multiple-use and wildlife related recreation and economic opportunities.	This comment is outside the scope of this proposed action and environmental review. The proposed action does not include the designation of the Apache Leap SMA as a special management area. The Apache Leap SMA (839-acre area) was designated by Congress as a special management area through the NDAA, and it is outside of Forest Service authority to change the designation. Section 3003(g)(5)(a) of the NDAA directed the Forest Service to prepare a special management plan for the Apache Leap SMA. As required by Congress, the management plan establishes a comprehensive framework for managing the natural character of the Apache Leap SMA and its values, as specified in the NDAA (NDAA, Section 3003(g)(5)(A)). The management plan does allow for multiple-use and wildlife-related recreation and economic opportunities.	10

Original Comment Text	Forest Service Response	Submittal Number
The Department and the Theodore Roosevelt Conservation Partnership have been working together to develop an interactive mapping tool resulting from sportsmen and sportswomen sharing information about their valued areas to hunt and fish in Arizona https://www.azgfd.com/Recreation/ValueMapping. The Department requests the Forest incorporate this data into the planning components and in the analysis for the Environmental Assessment.	Sport hunting is an allowed recreation activity in the Apache Leap SMA. Management plan Section 1.2, "Overview of the Apache Leap SMA," notes that hunting is one of the present uses of the Apache Leap SMA. Section 3.5, "Recreation," clarifies that recreation activities include sport hunting. Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes that non-motorized recreation, which includes sport hunting, occurs at appropriate locations and intensities such that cultural and natural values are protected.  The EA section titled "Recreation" includes discussion of the existing sport hunting opportunities in the Apache Leap SMA. The proposed hunting and fishing value mapping tool was reviewed during the development of the EA. The Apache Leap SMA currently allows sport hunting (there are no fishing opportunities available). The management plan does not impose restrictions on sport hunting in the Apache Leap SMA; therefore, it was determined that the value mapping tool was not relevant to the analysis presented in the EA.	10
New bolting must be allowed so that climbers get something to replace the resource we will be losing. A climbing management plan should be developed (the Access Fund can help with this) to set reasonable limits. Prohibiting new bolts at this stage is unnecessary and arbitrary and would have be harmful to recreational climbing on Apache Leap.	Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider "prohibiting new bolting on select climbing routes to minimize environmental impacts." The Apache Leap SMA management plan does not impose any restrictions on climbing bolts.	11
As Chair of the Queen Creek Coalition I am appreciative of the revisions made on the original ALSM Plan. We particularly appreciate the Forest Service recognition of the historic recreational uses of Apache Leap and the surrounding area. It has been and continues to be a destination for local, state, national and even international climbers. This area is rated highly as a "must go" rock climbing area by many of the popular magazines and web sites. Over more than forty years, rock climbing has provided considerable economic impact for the town of Superior and surrounding communities. We want to see this continue.	Thank you for your input. Management plan Section 3.5.4, "Management Approaches," for Recreation includes the following management approach: "Work with local non-governmental organizations, local governments, tribes, and recreation groups to establish sustainable rock climbing and bouldering expectations in the Apache Leap SMA. Develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA."	12

Original Comment Text	Forest Service Response	Submittal Number
We believe that a Climbing Management Plan is essential to ALSMA and that this management plan should be free to address new climbing routes, bolting and access routes to name a few of the considerations. We propose the following changes to para. 3.5.4 high lighted areas: [Note: Highlighted text from the comment is underlined]  3.5.4 As opportunities arise, consider ways to integrate and develop non-motorized trails within the Apache Leap SMA. Review trail proposals as they are received from nongovernmental organizations, local governments, and citizen initiatives and work with all consulting parties, stakeholders, and the public to ensure any future trail development is consistent with the purposes for which the Apache Leap SMA was designated. Consider existing and proposed non-motorized trails that are adjacent (e.g., the LOST [Legends of Superior Trails]) for connectivity to future proposed trails within the Apache Leap SMA. Work with local non-governmental organizations, local governments, tribes, and recreation groups to develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA. Work with non-governmental organizations and local government officials to establish sustainable rock climbing and bouldering expectations for the Apache Leap SMA. Consider designating approaches to the escarpment from the west side, designating climbing routes, and in select climbing crags prohibiting new bolting to minimize environmental impacts. These considerations would be detailed within the Climbing Management Plan.	Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider "prohibiting new bolting on select climbing routes to minimize environmental impacts." The Apache Leap SMA management plan does not impose any restrictions on climbing bolts. The Apache Leap SMA does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery;" Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic."	12
1. The clause not allowing any new bolting to avoid environmental impact is a new one. Until this last version of the management plan was unveiled, this was never discussed as far as I know. I understand such a ban in a wilderness (Superstitions), but here I do not. Climbing has been a historical use in Apache Leap since the late 1960's and continues to be a major draw in the area. Continued development of climbing routes is essential to the rock climbing community. A ban on bolts stops climbing usage of Apache Leap, The ability to add bolts when old ones are considered dangerous is also essential to the safety of those climbing there. Without it, climbing completely ceases to be a use of the area. Bolts have minimal impact. If the correct type of bolt is used, they are difficult to see, even up close, minimizing the visual impact. From far away, even 50 feet, bolts are very hard, if not impossible, to spot. Bolting should be allowed under the control of a climbing management plan. With proper management, bolting can be a nearly invisible addition to the landscape.	Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider "prohibiting new bolting on select climbing routes to minimize environmental impacts." The Apache Leap SMA management plan does not impose any restrictions on climbing bolts. The Apache Leap SMA does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery," Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic."	13

Original Comment Text	Forest Service Response	Submittal Number
I also believe that a Climbing Management Plan is necessary to manage rock climbing on Apache Leap. Expertise is available to assist the Forest Service with this task. Queen Creek Coalition has several individuals with experience in this process who, I am sure would be able to assist.	Thank you for your input. Section 3.5.4, "Management Approaches," for Recreation includes the following management approach: "Work with local non-governmental organizations, local governments, tribes, and recreation groups to establish sustainable rock climbing and bouldering expectations in the Apache Leap SMA. Develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA. Within the Climbing Management Plan, consider designating approaches to the escarpment from the west side, designating climbing routes, and prohibiting new bolting on select climbing routes to minimize environmental impacts."	14
Bolting is a subject that always comes up when undertaking management of a climbing area. Many local climbing organizations around the country have helped the National Parks and Forest Service develop workable bolting solutions. The Queen Creek Coalition and the Arizona Mountaineering Club are local organizations with knowledge on the subject. Indeed The Access Fund, a recognized National Climbing Organization has been instrumental in finding mutually acceptable bolting plans. I ask you to seek advice and recommendations from those who have found mutually agreeable solutions to bolting in National Parks and Forests. That will be to everyones advantage.	Thank you for your input. Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider "prohibiting new bolting on select climbing routes to minimize environmental impacts." The Apache Leap SMA management plan does not impose any restrictions on climbing bolts.	14
The establishment of Resolution Copper Mine in the middle of a pristine camping, hiking, biking, rock climbing and equestrian recreation area is for most, a disaster. There is so much developed and undeveloped recreation in the immediate area of the mine, including Apache Leap that it seems imperative to me that the Tonto National Forest personnel working on ALSM plans be the driving force in creating a workable situation for all parties. With the ALSM Plan, this is a chance to provide remediation for some of what is lost due to the mine's location. The Forest Service has the chance here, to provide even more positive recreational resources that will benefit the recreation community and local interests as well.	Thank you for your input. Management plan Section 3.5, "Recreation," contains the desired conditions, objectives, guidelines, and management approaches for the management of recreation within the Apache Leap SMA. The EA discusses the cumulative effects of the proposed Resolution Copper Project and Land Exchange on recreation. Separately, a full analysis of recreation impacts from the proposed Resolution Copper Project and Land Exchange, along with potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	14

Original Comment Text	Forest Service Response	Submittal Number
As a long time hiker and rock climber and someone who has enjoyed this area for more than 30 years, I have basically three points of concern.  3. That a climbing management plan be created that would govern the future addition of bolts and anchors that are crucial to climber's safety. QCC would be in a position to implement recommendations and work with USFS to manage this plan.	Thank you for your input. Section 3.5.4, "Management Approaches," for Recreation includes the following management approach: "Work with local non-governmental organizations, local governments, tribes, and recreation groups to establish sustainable rock climbing and bouldering expectations in the Apache Leap SMA. Develop an Apache Leap Special Management Area Climbing Management Plan in a manner consistent with the stated purposes of the Apache Leap SMA, as identified in the NDAA. Within the Climbing Management Plan, consider designating approaches to the escarpment from the west side, designating climbing routes, and prohibiting new bolting on select climbing routes to minimize environmental impacts."	15
Rock Climbing and Climbing Access  According to the definitive guide book to the area "The Rock Jock's Guide to Queen Creek Canyon," [See Comment Letter for Reference] Apache Leap has been an established rock climbing area since the 1970s. Thirty seven established routes exist in that guide book that are within the boundaries of the SMA—and more recent route development pushes the total number of existing climbs to near fifty established climbing routes. Rock climbing has therefore been an accepted form of recreational use for the Apache Leap area for decades, and creation of the NDAA mandated SMA should not impede rock climbing activities or access. In fact, the Apache Leap SMA should ideally improve climbing access and foster new climbing opportunities.	The "Recreation" section of the EA includes a discussion of existing climbing activities occurring in the Apache Leap SMA, including use of fixed anchor and bolted climbing routes. As discussed in the "Recreation" section of the EA, rock climbing represents the primary recreation use of the Apache Leap SMA.  The Apache Leap SMA does not limit the ability to climb in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery," Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic."  Section 3.4.4, "Management Approaches," for Access of the management plan encourages the Forest Service to work with interested parties in the future to facilitate continued access to the Apache Leap SMA. In management plan Section 3.5.3, "Guidelines," for Recreation, the Recreation Opportunity Spectrum designation was changed in the modified management plan to semi-primitive motorized for a 500-foot buffer around the existing FR2440 within the Apache Leap SMA. The semi-primitive motorized designation would provide opportunities for future motorized route designation.	20

Original Comment Text	Forest Service Response	Submittal Number
Regarding Recreation  Access Fund supports the Forest Service in their effort to "work with local non-governmental organizations, local governments, tribes, and recreation groups to develop an Apache Leap Special Management Area Climbing Management Plan" and their effort to "work with non-governmental organizations and local government officials to establish sustainable rock climbing and bouldering expectations for the Apache Leap SMA."  Designating approaches to the escarpment from the west side is essential—as existing access to these areas from the east side will be eliminated if the Oak Flat lands do transfer to Resolution Copper, as intended under section 3003 of the FY2015 NDAA. Access Fund believes that further discussion is needed on the one proposal contained in the revised SMA "prohibiting new bolting to minimize environmental impacts," as no bolting prohibition currently exists in this area and most designated wilderness areas in National Forests and National Parks allow the placement of fixed anchor bolts. Fixed anchors are a critical component of rock climbing safety systems and have been allowed for decades in the Apache Leap, Oak Flat, and Queen Creek climbing areas. Additionally, no studies exist demonstrating any environmental concerns related to fixed climbing anchors or bolting activities.	Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider "prohibiting new bolting on select climbing routes to minimize environmental impacts." The Apache Leap SMA management plan does not impose any restrictions on climbing bolts. The Apache Leap SMA does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery," Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic."  The EA section titled "Recreation" discusses the cumulative effects on recreation from the proposed Resolution Copper Project and Land Exchange. However, a full analysis of recreation impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, along with potential mitigation measures (including mitigation for loss of camping), will be addressed in the Resolution Copper Project and Land Exchange EIS.	20
Section 3.5 Recreation the USFS might want to add a standard or guideline about large organized events, such as contests, challenges, races, encampments, movies, etc. They are not specifically addressed but seem like they would not meet the implied desired conditions and might be easier to incorporate now.	The management plan is a planning-level document that provides a programmatic approach for managing future recreation activities in the Apache Leap SMA. Future events would be permitted through the special-use authorization process. This process would include analysis for potential site-specific environmental impacts and for consistency with the plan components established in the management plan.	21
I am writing this letter to submit my opinion on the Apache Leap Special Management Area plan. As an active rock climber, my family and I have been enjoying the Queen Creek recreational area, including Apache Leap, for over 25 years. We have camped and climbed extensively in the Apache Leap area. I appreciate your inclusion of rock climbing in the management plan. I think that rock climbing can co-exist with the uses of the Native Americans. Rock climbers feel a special attachment to the geology of the Apache Leap area.	Thank you for your input. Management plan Section 3.5, "Recreation," contains the desired conditions, objectives, guidelines, and management approaches for the management of recreation in the Apache Leap SMA.	22

Original Comment Text	Forest Service Response	Submittal Number
One is the elimination of fixed ancors and protection. The specific geology dictates the use of fixed anchors for safety reasons, and there is historic evidence of this since the 1960's. I think that there should be a climbing management plan that addresses and allows for the placement of new routes using fixed anchors and the replacement of older fixed gear.	Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider prohibiting new bolting on select climbing routes. The Apache Leap SMA management plan does not impose any restrictions on climbing bolts.  The Apache Leap SMA does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery," Section 3.2 "Tribal," and Section 3.3,	22
A specific ban on zip lines should be set forth in the Recreation Section.	"Cultural/Historic."  Management plan Section 3.5.1, "Desired Conditions," for Recreation	23
	emphasizes non-motorized recreation that occurs at appropriate locations and intensities such that cultural and natural values are protected. At this time, the Forest Service has not received a proposal for a zip line in the Apache Leap SMA. Future proposed projects, such as a zip line, would be subject to analysis for potential site-specific environmental impacts and for compliance with the plan components established in the management plan.	
Thank you for considering recreational closures during times of tribal cultural and resource use. Thank you for prohibiting new bolting by rock climbers to minimize environmental impacts.	Management plan Section 3.5.4, "Management Approaches," for Recreation was clarified to state that a future Apache Leap Special Management Area Climbing Management Plan would consider prohibiting new bolting on select climbing routes.	23
	The Apache Leap SMA does not limit the ability to climb or use "fixed anchors" and "bolts" in the Apache Leap SMA; however, the Forest Service may impose recreation closures if necessary for the protection of cultural and natural resources, as stated in the plan components under Section 3.1, "Natural Character and Scenery," Section 3.2, "Tribal," and Section 3.3, "Cultural/Historic."	

#### **Mineral Resources**

Original Comment Text	Forest Service Response	Submittal Number
I would like you to reject any copper mining in the Apache Leap Special Management Area. This area is a natural and national treasure. It is sacred ground for several native tribes. Please do the right thing and reject any copper mining in the Apache Leap Special Management Area	As directed by NDAA Section 3003(f), the Apache Leap SMA is withdrawn from all forms of mineral development and leasing. Section 3.6, "Mineral Resources," of the management plan refers to the NDAA mineral withdrawal.	7
C. Desired Conditions I agree with the statement of Section 3.1.1 of the modified Management Plan that "Subsidence associated with any future mining adjacent to the SMA does not impair the natural characteristics and scenery of the SMA". I recommend that similar statements be added for the "Desired Conditions" of other resources that could be impacted by subsidence associated with nearby mining. This would include as a minimum the following Desired Conditions: 3.6.1 Mineral Resources Desired Conditions – state that archeological, geological, and biological features of caves and abandoned mines are not adversely affected by subsidence from future adjacent mining activity.	Thank you for your input. The intent of including the subsidence-related desired condition in Section 3.1.1, "Desired Conditions," for Natural Character and Scenery was to capture this desired condition in one location in the management plan. The plan components in the management plan are designed to be used together to achieve integrated resource management throughout the plan area. A full analysis of impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, including subsidence and potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	8

#### Wildlife

Original Comment Text	Forest Service Response	Submittal Number
C. Desired Conditions  I agree with the statement of Section 3.1.1 of the modified Management Plan that "Subsidence associated with any future mining adjacent to the SMA does not impair the natural characteristics and scenery of the SMA". I recommend that similar statements be added for the "Desired Conditions" of other resources that could be impacted by subsidence associated with nearby mining. This would include as a minimum the following Desired Conditions:  3.7.1 Wildlife Desired Conditions – state that wildlife habitat characteristics are not adversely affected by subsidence from future adjacent mining activity.	The intent of including the subsidence-related desired condition in Section 3.1.1, "Desired Conditions," for Natural Character and Scenery was to capture this desired condition in one location in the management plan. The plan components in the management plan are designed to be used together to achieve integrated resource management throughout the plan area.	8
Section 3. 7 Wildlife Wildlife, wildlife resources, and the Department's authority and need to actively manage wildlife must be included as a primary component and/or priority characteristic of any special land use designation including, but not limited to: wild and scenic rivers, recreation management areas, special management areas, Recreation Opportunity Spectrum allocations, wilderness, and recommended wilderness.  Based upon its long history of wildlife management in special land use designation areas, the Department anticipates challenges, complications, or obstruction of its ability to implement the following management activities including but not limited to:  • Motorized big game retrieval for legally taken and tagged elk, mule deer, bear, and bison  • Use of aircraft for translocations, monitoring, captures, surveys, and research (including overflights, landings, and drones)  • Research, surveys, scientific sampling, capturing and marking animals, including the use of radio telemetry  • Aquatic species management and monitoring including stocking, stream renovations using electrofishing equipment, and barrier construction and repair  • Construction, redevelopment, and maintenance of wildlife waters catchments using motorized and mechanized equipment  • Wildlife water catchment monitoring and water delivery by use of motorized vehicles, helicopters, pumps and hoses.	The proposed action does not include the designation of the Apache Leap SMA as a special management area. The Apache Leap SMA (839-acre area) was designated by Congress as a special management area through the NDAA, and it is outside of Forest Service authority to change the designation. Section 3003(g)(5)(a) of the NDAA directed the Forest Service to prepare a special management plan for the Apache Leap SMA. As required by Congress, the management plan establishes a comprehensive framework for managing the natural character of the Apache Leap SMA and its values, as specified in the NDAA (NDAA, Section 3003(g)(5)(A)).  The role of the Arizona Game and Fish Department in the development of the management plan is discussed in management plan Section 1.6, "Management Roles," and the EA section titled "Public Involvement and Tribal Consultation."  The management plan addresses wildlife and habitat within the Apache Leap SMA through a description of desired conditions and inclusion of guidelines and management approaches specifically designed to protect wildlife and wildlife habitats (see Section 3.7, "Wildlife," and Section 3.8, "Vegetation"). The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. All future proposed activities in the Apache Leap SMA, including those proposed by the Arizona Game and Fish Department, would be subject to analysis for potential site-specific environmental impacts and for consistency with the plan components established in the management plan.	10

# Wildlife (Continued)

Original Comment Text	Forest Service Response	Submittal Number
Habitat enhancement, creation and/or restoration projects using mechanized and motorized equipment and prescribed fire     Angling, hunting, trapping     Emergency translocations and/or removal of fish and wildlife (ie. due to fire, etc) when necessary to conserve species of concern, retrieve dead animals for disease testing, retrieve sick or wounded animals, or to prevent transmission of diseases or parasites affecting wildlife and humans. Staging various equipment and vehicles for emergency response     Fencing to protect wildlife habitats and/or restrict wildlife     Providing salt or other special wildlife habitat features     Fence removal     Removal and/or control of nonnative animal species     Introduction, supplementation and/or translocations of native and/or naturalized species of fish and wildlife     Predator control     Access to existing roads and trails to meet harvest objectives and distribute hunters     Law Enforcement wildlife investigations and response to illegal wildlife activities by use of motorized equipment     Creation of alternate access routes when existing designated access routes are closed across private land     To ensure the state's management authorities and jurisdiction are not affected by planning decisions, the Forest must include language throughout the Apache Leap SMA management plan and related forest plan amendment that the above activities and others identified by the Department would be allowable actions throughout the SMA. If the Forest anticipates impacts to the Department's ability to carry out its trust responsibilities and statutory authorities (including but not limited to the wildlife management activities outlined above), those impacts must be disclosed and fully analyzed within the Environmental Assessment (EA).	The forest plan describes several existing management prescriptions that are applicable forest-wide and would continue to apply to the Apache Leap SMA. These prescriptions include "continue close coordination with State and other federal agencies for the benefit of plant and animal species," "cooperate and consult with the Arizona Game and Fish Department, US Fish and Wildlife Service, State universities, professional societies, and various conservation organizations regarding proposals and programs concerned with management of wildlife habitat," and "maximize coordination with the Arizona Game and Fish Department regarding State listed species and their habitats." The forest plan allows for coordination with the Arizona Game and Fish Department regarding the authorities and activities listed by the commenter across the entire forest, including the Apache Leap SMA.	10

# Wildlife (Continued)

Original Comment Text	Forest Service Response	Submittal Number
[Comment continued from above]  Currently, there are no guidelines (3.7.2) or management approaches (3.7.3) describing the Department's management authority to continue wildlife management practices within the SMA. In the March 2017 version of the management plan Section 3.5.3, the Forest included a management approach to support wildlife through various processes (agreements, plans, recovery efforts, etc.). The Department requested the Forest clarify the management approach to describe the full spectrum of Department management actions and authorities such as - "Support wildlife management through routine survey, population augmentations or translocations, reintroductions and/or recovery efforts, habitat enhancements, biological evaluations/assessments, conservation and/or management plans, memoranda of understanding and Forest Service direction." The modified plan (June 20 17) has removed all previous statements related to wildlife management approaches with the exception of working with the Department to minimize or avoid impacts to permitted hunting opportunities. Although the plan recognizes the Department's management role in Section 1.6.6, the Department requests inclusion of a plan guideline and management approach that explicitly identifies the suite of wildlife management tools required to fulfill our jurisdictional authority, and that will clearly align with other plan components and avoid conflicts between desired conditions, guidelines and management approaches.	[Comment continued from above, see above for comment response]	10
Section 3.7.3 Management Approaches to remain consistent with the NDAA, please add to the section sentence of the paragraph "In conjunction with Resolution Copper and consistent with subsection g(6) of the NDAA"	Adjacent mining cannot be limited through management actions in the Apache Leap SMA. Congress specified in Section 3003(g)(6) of the NDAA that "the provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules, and regulations." The Forest Service considers this management plan to follow NDAA Section 3003(g)(6).	21

# Vegetation

Original Comment Text	Forest Service Response	Submittal Number
The Department acknowledges that the Forest addressed our April 30, 2017 concern that the timing restrictions described as a management approach (3.8.2) for plan component Vegetation (3.8) could conflict with Department permitted hunts in Game Management Unit 24A; by including a management approach under 3.7.3 to work with the Department to avoid impacts to seasonally permitted hunting opportunities within the Apache Leap SMA.	Thank you for your input.	10
I would like some timeframes added to the Vegetation section as suggested in the <i>bold italics</i> below.  3.8.2 Management Approaches  Develop an integrated management approach <i>within 2 years</i> with the goal of preventing, controlling, or eradicating invasive species. Inventory areas of invasive species' occurrence <i>within 1 year of developing the integrated management approach</i> .  Because of the often aggressive and tenacious nature of invasive species, the Forest Service should apply timely initial treatments <i>within 1 year of completing the inventory</i> , with follow-up for appropriate intervals to meet objectives.	The existing language in management plan Section 3.8.2, "Management Approaches," for Vegetation adequately recognizes the timely nature of invasive species management, and the language used is consistent with the intent of a management approach plan component. Time frames were not added as requested by the commenter.	16

## **Livestock Grazing**

Original Comment Text	Forest Service Response	Submittal Number
	Thank you for your input. Management plan Section 3.9, "Livestock Grazing," contains the desired conditions, objectives, guidelines, and management approaches for the management of the Apache Leap SMA.	23

## **National Environmental Policy Act**

Original Comment Text	Forest Service Response	Submittal Number
1.5 Planning Process  To clearly comply with the 2012 planning rule, the term "need to amend" should be changed to "need to change". This section should also provide the basis to easily show that the appropriate modification is an amendment and not a revision or a new plan for a new Forest Service unit (as some might interpret the SMA or at least the private land to become part of the SMA). The planning rule has insider jargon which the commenters will try to use to their advantage.	Title 36 CFR 219.13(a) of the 2012 National Forest System Land Management Planning Rule (2012 planning rule) specifies that a forest plan amendment is required to add, modify, or remove one or more plan components, or to change how or where one or more plan components apply to all or part of the plan area (including management areas or geographic areas).  Consistent with the 2012 planning rule, the Forest Supervisor has exercised his discretion to (1) identify the Apache Leap SMA as a new management area (MA) (MA 2G Globe Ranger District – Apache Leap SMA); (2) modify the description and acreage of the former management area (MA 2F Globe Ranger District – General Management Area); and (3) incorporate new plan components that were developed to meet the primary purpose of the special management area. The proposed edit is not necessary to comply with the 2012 planning rule.	21
Section 1.6.3 Affected Indian Tribes It would be worth mentioning that the National Forest management Act (NFMA) envisioned coordination of planning efforts with federal agencies, state and local governments, tribes and adjacent private land owners. The 2012 planning rule also requires this coordination. Also the current forest plan requires coordination and consultation with the tribes, Arizona SHPO, and AZGFD.	Thank you for your comment. The existing language in management plan Section 1.6, "Management Roles," is sufficient to describe the management roles, consultation, and jurisdiction of the parties involved in the development of the management plan. No changes to the management plan were made. Additional information regarding management roles, consultation, and jurisdiction can be found in relevant resource sections in the EA.	21

Original Comment Text	Forest Service Response	Submittal Number
Arizona Game and Fish Department Policies Under Title 17 of the Arizona Revised Statutes, the Arizona Game and Fish Department, by and through the Arizona Game and Fish Commission (Commission), has jurisdictional authority and public trust responsibilities for the management of state fish and wildlife resources. The Department is directed by the Commission and their policies to fulfill state trust responsibilities, carry out jurisdictional authorities, and implement our mission. The following policies apply directly to the management of public lands and must be addressed in the management plan, forest plan amendment and related EA to evaluate potential impacts to state policies: A2.1 0-Recreational Shooting Upon Arizona's Public Lands, A2.18-Multiple Use Management Of Public Lands, A2.20-Access To And Upon Public And State Trust Land, A2.22-Consideration Of Economic Impact, and A2.38-Travel Management And Access Upon Arizona's Public Lands For The Enjoyment Of Arizona's Wildlife Resources And Outdoor Recreation (attached). The Department's mandate to meet statutory trust responsibilities to manage fish and wildlife populations is supported by the U.S. Forest Service and incorporated where appropriate in Forest Land and Resource Management Plans (Master Memorandum of Understanding (MOU) between the Forest Service, U.S. Department of Agriculture, Southwestern Region and the Arizona Game and Fish Commission; attached). Similarly, the Department recognizes the responsibility of the U.S. Forest Service to manage for sustainable ecosystems. Implementation level plans and site-specific projects will be evaluated and finalized through appropriate coordination, partnerships, and processes that reflect the spirit and intent of this MOU. The Forest must consider (and evaluate in the EA) the importance of hunting and hunting heritage under each of these plan components per Executive Order (EO) 13443 (attached), which directs the Department of Agriculture 'to facilitate the expansion and enhancement of hunting opportunities	Sport hunting is an allowed recreation activity in the Apache Leap SMA. Management plan Section 1.2, "Overview of the Apache Leap SMA," notes that hunting is one of the present uses of the Apache Leap SMA. Section 3.5, "Recreation," clarifies that recreation activities include sport hunting. Management plan Section 3.5.1, "Desired Conditions," for Recreation emphasizes that non-motorized recreation, which includes sport hunting, occurs at appropriate locations and intensities such that cultural and natural values are protected. The EA section titled "Recreation" includes discussion of the existing sport hunting opportunities in the Apache Leap SMA.  The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan addresses wildlife and habitat within the Apache Leap SMA through a description of desired conditions and inclusion of guidelines and management approaches specifically designed to protect wildlife and wildlife habitats (see Section 3.7, "Wildlife," and Section 3.8, "Vegetation").  The forest plan describes several existing management prescriptions that are applicable forest-wide and would continue to apply to the Apache Leap SMA. These prescriptions include "continue close coordination with State and other federal agencies for the benefit of plant and animal species," "cooperate and consult with the Arizona Game and Fish Department, US Fish and Wildlife Service, State universities, professional societies, and various conservation organizations regarding proposals and programs concerned with management of wildlife habitat," and "maximize coordination with the Arizona Game and Fish Department in the development of the management plan is discussed in management plan Section 1.6, "Management Roles," and the EA section titled "Public Involvement and Tribal Consultation."	10

Original Comment Text	Forest Service Response	Submittal Number
[Comment continued from above]  (a) Evaluate the effect of agency actions on trends in hunting participation and, where appropriate to address declining trends, implement actions that expand and enhance hunting opportunities for the public; (b) Consider the economic and recreational values of hunting in agency actions, as appropriate; (c) Manage wildlife and wildlife habitats on public lands in a manner that expands and enhances hunting opportunities, including through the use of hunting in wildlife management planning; (d) Work collaboratively with State governments to manage and conserve game species and their habitats in a manner that respects private property rights and State management authority over wildlife resources; (e) Establish short and long term goals, in cooperation with State and tribal governments, and consistent with agency missions, to foster healthy and productive populations of game species and appropriate opportunities/or the public to hunt those species; (f) Ensure that agency plans and actions consider programs and recommendations of comprehensive planning efforts such as State Wildlife Action Plans, the North American Waterfowl Management Plan, and other range-wide management plans for big game and upland game birds; (g) Seek the advice of State and tribal fish and wildlife agencies, and, as appropriate, consult with the Sporting Conservation Council and other organizations, with respect to the foregoing Federal activities.	[Comment continued from above, see above for comment response]	10
In conclusion, the Department acknowledges the Forest's efforts to balance wildlife conservation with the Apache Leap SMA management needs and looks forward to working closely with the Forest to avoid potential impacts to Arizona's fish and wildlife resources and recreational opportunities.	Thank you for your input.	10

Original Comment Text	Forest Service Response	Submittal Number
<ul> <li>Attachments [See comment letter for attachments]:</li> <li>Executive Order 13443 "Facilitation of Hunting Heritage and Wildlife Conservation"</li> <li>Arizona Game and Fish Department Operating Manual, Section A2.10 Recreation Shooting upon Arizona's Public Lands, SectionA2.18 Multiple-Use Management of Public Lands, A2.20 Access To and Upon Public and State Trust Land, A2.22 Consideration of Economic Impact, A2.38 Travel Management and Access upon Arizona's Public Lands for the Enjoyment of Arizona's Wildlife Resources and Outdoor Recreation, and A2.11 Species of Greatest Conservation Need in Arizona.</li> <li>Master Memorandum of Understanding Between the U.S. Department of Agriculture Forest Service Southwest Region and the Arizona Game and Fish Commission and Department</li> </ul>	The forest plan describes several existing management prescriptions that are applicable forest-wide and would continue to apply to the Apache Leap SMA. These prescriptions include "continue close coordination with State and other federal agencies for the benefit of plant and animal species," "cooperate and consult with the Arizona Game and Fish Department, US Fish and Wildlife Service, State universities, professional societies, and various conservation organizations regarding proposals and programs concerned with management of wildlife habitat," and "maximize coordination with the Arizona Game and Fish Department regarding State listed species and their habitats."  The role of the Arizona Game and Fish Department in the development of the management plan is discussed in management plan Section 1.6, "Management Roles," and the EA section titled "Public Involvement and Tribal Consultation."	10

Original Comment Text	Forest Service Response	Submittal Number
The most telling addition to the Modified Plan is the reference to "block-caving operations" at page 16. The second significant addition to the Modified Plan is the mention of "subsidence" for the first time and this farcical statement that appears on page 16: "Subsidence associated with any future mining adjacent to the area does not impair the special characteristics for which it was designated." These two statements render TNF's entire environmental analysis suspect.  TNF's pre-disposition to accept block-caving mining operations and the resulting subsidence crater as accomplished facts in the Modified Plan for the ALSMA render suspect all future environmental analysis conducted by TNF on this project as well as the Land Exchange and the RCM MPO. These statements tacitly indicate, if not bluntly acknowledge, that no serious consideration will be given to alternative mining operation methods in the Environmental Impact Statement ("EIS") that TNF is required to prepare for the Land Exchange and RCM's MPO.  The Tribe has long suspected that the EIS called for in Section 3003 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act (NOAA) for Fiscal Year 2015 would be a mere sham. The Tribe has long suspected that TNF would capitulate without serious regard for alternative mining operation methods to RCM's block-caving mining operation method. The Modified Plan's acquiescence in the block-cave mining operation method. The Modified Plan's acquiescence in the block-cave mining operation method. The suspicions. These suspicions became apparent to the Tribe during the negotiations for a Memorandum of Understanding ("MOU") for government-to-government consultation as was reflected in the Tribe's January 11, 2017 correspondence to Supervisor Bosworth, a copy of which is attached. [See comment letter for attachments]	Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery was edited to clarify that the seismic monitoring strategy would apply to any future mining, if approved, adjacent to the Apache Leap SMA.  Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods. Impacts to the Apache Leap SMA from the proposed Resolution Copper Project and Land Exchange, including alternative mining methods, will be addressed in the Resolution Copper Project and Land Exchange EIS. The Apache Leap SMA management plan does not assume approval of the Resolution Copper "General Plan of Operations." However, in response to public comments related to potential impacts of future mining activities, the management plan does include direction to protect the resources of the Apache Leap SMA in the event that the Resolution Copper Project and Land Exchange EIS is approved	23

Original Comment Text	Forest Service Response	Submittal Number
Government-to-government consultation pursuant to Executive Order No. 13175 is required to be "meaningful". 65 CFR 67249 Nov. 9, 2000; OMB Memorandum of November 5, 2009. In our view, the term meaningful connotes an exchange of ideas and a certain responsiveness by the federal government. As I noted at our meeting of December 16, 2016, formal government-to-government consultation has never occurred- the TNF has never met with the San Carlos Council, the governing body of the Tribe. Instead of government-to-government consultation, there has been only an exchange of letters. While the TNF has received our correspondence and listened during those few informal meetings we have had, it has not responded in a meaningful manner; instead, consultation has amounted to lip service. Worse, the Modified Plan shows that TNF has willfully ignored the concerns I have raised, ignored the Tribe's interest in Oak Flat, ignored the impact of the RCM mine on the sacred and archaeological sites within the area, and totally ignored the devastatingly adverse impact of RCM's mine on the region's water supply and water quality.	Consultation with tribes, the State Historic Preservation Officer, and other consulting parties under Section 106 of the National Historic Preservation Act and National Environmental Policy Act is currently ongoing. The Forest Service has been working with the tribes through formal consultation, scoping, and meetings to address issues of tribal concern. The Forest Service is currently in formal government-to-government consultation with 12 Native American tribes. The Forest Service looks forward to continued engagement in government-to-government consultation with all affected tribes.  The management plan section titled "What Makes Apache Leap Unique?" (Section 2.1) was edited to include a description of the physical relationship between Apache Leap and Oak Flat. Information about the area's importance to Apache tribes was also added. Management plan Section 3.2, "Tribal," was also edited to incorporate additional descriptions of the <i>Chi'chil Bildagoteel</i> Historic District and its relationship to Oak Flat and the Apache Leap SMA.  The EA discusses the cumulative effects from the Resolution Copper Project and Land Exchange on the resources analyzed. However, a full analysis of impacts from the Resolution Copper Project and Land Exchange will be addressed in the Resolution Copper Project and Land Exchange EIS.	23

Original Comment Text	Forest Service Response	Submittal Number
In light of the foregoing and for the reasons originally stated, the Tribe reiterates the statements made in our May 1, 2017 Comment Letter at Items 1 and 2 at pages 2 to 4. It is precisely because of the Modified Plan's acquiescence in the block-cave mining operation methodology and the resulting subsidence crater that national notice and an EIS are required for the ALSMA Management Plan. National interest groups and the public at large would have no way of knowing of such a development of national import when it is only added during a revision of an earlier proposed plan.  The ALSMA Management Plan must be part of the larger EIS involving the Land Exchange and the RCM MPO. The notice that TNF gave for comment and public scoping for the ALSMA Management Plan, including any notice given for additional comments on the Modified Plan, do not comply with the law. TNF did not address either of these issues in the Modified Plan. Nor did TNF feel a need to address these two issues directly with the Tribe in any government-to-government consultation or correspondence. The Tribe anticipates that it will be addressed in the EA for the ALSMA Management Plan.	The Forest Service has determined that an EA for the Apache Leap SMA is the appropriate level of National Environmental Policy Act review consistent with Forest Service National Environmental Policy Act Procedures and Guidance (36 CFR Part 220, "Forest Service National Environmental Policy Act Procedures;" FSM 1950; and FSH 1909.15).  The Apache Leap SMA management plan does not assume approval of the proposed Resolution Copper "General Plan of Operations." However, in response to public comments related to potential impacts of future mining activities, the management plan does include provisions to protect the resources of the Apache Leap SMA in the event that the Resolution Copper Project and Land Exchange EIS is approved.  The EA discusses the cumulative effects on resources in the Apache Leap SMA from the proposed Resolution Copper Project and Land Exchange. However, a full analysis of impacts from the Resolution Copper Project and Land Exchange on the east side of the Apache Leap SMA will be addressed in the Resolution Copper Project and Land Exchange EIS.  Public notice for the management plan and public scoping for the EA was provided in accordance with 40 CFR Part 1506.6 as well as 36 CFR 219.4(a) and 219.16. Pursuant to 36 CFR 219.16(a)(2), an additional public notice and 30-day comment period on the forest plan amendment occurred from July 1, 2017, to July 31, 2017.  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	23
In Item 3 of the May 1, 2017 letter, the Tribe addressed issues of compliance with 36 Code of Federal Regulations ("CFR") Part 219. The Modified Plan appears to address some of the concerns about compliance with 36 CFR Part 219. However, given the time constraints, the Tribe has not been able to fully evaluate whether there is complete compliance with 36 CFR Part 219. We therefore reserve the right to provide further comment on this aspect of the Modified Plan as part of the government-to-government consultation process for the ALSMA Management Plan and any Forest Management Plan amendments or revisions. The Tribe believes that continuing government-to-government consultation with all affected tribes should be incorporated into any 36 CFR Part 219 compliance.	The Forest Service recognizes that the Tribe has rights to object under 36 CFR Part 219 and will continue to work with the tribes through formal government-to-government consultation to address issues of tribal concern.  We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	23

Original Comment Text	Forest Service Response	Submittal Number
On behalf of the Tribe, I thank the Forest Service for the opportunity to comment on the Modified Plan. We are distressed that TNF has acquiesced in RCM's block-caving mining method and the resulting subsidence crater. Regretfully, I fear that this admission on TNF's part does not bode well for events going forward on the ALSMA and the Land Exchange/RCM MPO. If you decide that consultation can address any of the Tribe's concerns raised here or in our May 1, 2017 Comment Letter, please do so in writing addressed to the Council with copies to me and Alexander Ritchie, the Tribe's Attorney General.	The Apache Leap SMA management plan does not assume approval of the proposed Resolution Copper "General Plan of Operations." However, in response to public comments related to potential impacts of future mining activities, the management plan does include provisions to protect the resources of the Apache Leap SMA in the event that the Resolution Copper Project and Land Exchange EIS is approved.  Management plan Section 3.1.4, "Management Approaches," for Natural Character and Scenery was edited to clarify that the seismic monitoring strategy would apply to any future proposed mining adjacent to the Apache Leap SMA.	23
	Resolution Copper has submitted a "General Plan of Operations" to the Forest Service that includes proposed block caving mining methods. Full disclosure of the impacts of the Resolution Copper Project and Land Exchange, including analysis of alternative mining methods, will be analyzed in the Resolution Copper Project and Land Exchange EIS.	
	We have also provided a response to your original comment submitted during the scoping period in the EA in Appendix C, "Public Scoping Comment Response."	

#### Other

Original Comment Text	Forest Service Response	Submittal Number
I strongly object to any plan that does not take into account the mining disaster for the Oak Flat area. It is totally unacceptable to allow Resolution Copper corp. to destroy any area within a radius of 20 miles of Apache Leap.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character. Adjacent mining activities and management implications for the preservation of the area's natural character are considered throughout the management plan, as evidenced in several of the plan sections:  • Section 2.1, "What Makes Apache Leap Unique?"  • Section 3.1.1, "Desired Conditions," for Natural Character and Scenery  • Section 3.1.4, "Management Approaches," for Natural Character and Scenery  The cumulative effects of the proposed Resolution Copper Project and Land Exchange are addressed in the EA for the resources analyzed. A full analysis of impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, including potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	2
These comments focus on protection of the Apache Leap SMA from the effects of subsidence associated with the adjacent mine proposed by Resolution Copper Company (RCM). The management direction in the plan is designed to protect the values for which the area was designated, and to guide limited uses compatible with the area's primary purpose. Thus the Apache Leap SMA Management Plan is intended to deal with actions internal to the Apache Leap SMA, and not with the nearby mining operation. Nevertheless, some actions internal to Apache Leap SMA may be necessary to protect the values of Apache Leap SMA from external influences such as the proposed mine.	The management plan complies with the requirements in the NDAA to protect the values for which the area was designated, including the area's natural character. The management plan contains direction that fosters preservation of the area's natural character. Adjacent mining activities and management implications for the preservation of the area's natural character are considered throughout the management plan, as evidenced in several of the plan sections:  • Section 2.1, "What Makes Apache Leap Unique?"  • Section 3.1.1, "Desired Conditions," for Natural Character and Scenery  • Section 3.1.4, "Management Approaches" for Natural Character and Scenery  The cumulative effects of the proposed Resolution Copper Project and Land Exchange are addressed in the EA for the resources analyzed. A full analysis of impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, including subsidence and potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	8

# Other (Continued)

Original Comment Text	Forest Service Response	Submittal Number
Of course, this includes the now worldwide mining industry and its demands but also its vicissitudes. Living in a mineral-rich state like Arizona brings more opportunities and choices to our doorstep from international corporations and consortiums to exploit these opportunities for either their countries or for sale on the world market. But, for every situation like this, there are the cost/benefits to consider in each of all of the eleven categories examined carefully in this document.	The cumulative effects of the proposed Resolution Copper Project and Land Exchange are addressed in the EA for the resources analyzed. A full analysis of impacts from the proposed Resolution Copper Project and Land Exchange to the Apache Leap SMA, including subsidence and potential mitigation measures, will be addressed in the Resolution Copper Project and Land Exchange EIS.	17
In the Resolution Copper mining case, I believe that the greatest number of questions that need also to be asked are regarding the necessity and need for our valuable copper resources at this very time, when the values of copper on the world market is down. Yes, it will take a long, arduous process to dig the hole safely and conscientiously, but the effects on the Apache Leap SMA, and on the environment here in northern Arizona will be everlasting. When it's over and done, the mining corporation will have moved on to other money-making projects, leaving its terrible degradations in their wake. Certainly, they gave us many reasons for the mine, and money to boot; but in the end, Native Americans and we citizens of Arizona don't need a crystal ball, do we, to see what those after us will look at on the remains of this site and say, "What were they thinking back in the summer of 2017"?		
As an extremely concerned citizen of Arizona, please, devote yourselves and your combined agencies to your most considered decision to the Apache Leap Special Management Area Management Plan – Review." The Tribes and we American citizens are awaiting your deliberations.		
Also, I believe that you will want to correct the following: p. 15 The sentence below, which is the last sentence before 3.1, should begin with either	The management plan was revised as suggested.	16
"Each resource" or "Each of the resources"		
"Each resources below begins with a description of the resource (Forest Service, 1976) and how it may or may not pertain to the Apache Leap SMA."		

# Other (Continued)

Original Comment Text	Forest Service Response	Submittal Number
Section 1.6.4 Resolution Copper Mining, LLC. It is preferable if the Management Plan contain only the information that is needed to provide the foundation for the plan. The ownership and submittal of the plan of operations is unnecessary information, which could become out of date and therefore not appropriate for the management plan. Resolution's interest in the ALSMA management plan is: 1. RC is operating next to it and 2. they are involved in the land exchange, which is already stated. [Commenter suggests deleting the first sentence of this section. Start the second sentences with: Resolution Copper Mining, LLC (Resolution Copper)]		21
Section 2.1 What makes Apache Leap Unique?, first sentence of the last paragraph.  [Commenter suggests deleting the first sentence of this paragraph: Delete. Already stated later in the paragraph.]	The text was modified slightly to clarify the unique characteristics of the Apache Leap SMA.	21

# Out of Scope

Original Comment Text	Forest Service Response	Submittal Number
N/A	Comments received are related to Resolution Copper Project and Land Exchange.	1; 5