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Resolution Copper Project and Land Exchange Environmental Impact Statement

Scoping Report

Tonto National Forest



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ACRONYMS AND ABBREVIATIONS

ADEQ	Arizona Department of Environmental Quality
AGFD	Arizona Game and Fish Department
AIRFA	American Indian Religious Freedom Act
BA	biological assessment
Baseline EA	“Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Plan of Operations Environmental Assessment”
BLM	Bureau of Land Management
BO	biological opinion
CAP	Central Arizona Project
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEIS	draft environmental impact statement
EIS	environmental impact statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FAQs	Frequently Asked Questions
FEIS	final environmental impact statement
FLPMA	Federal Land Policy and Management Act
Forest Service	U.S. Forest Service
GHG	greenhouse gas
GPO	General Plan of Operations
HAPs	hazardous air pollutants
HDMS	Heritage Data Management System
ID	interdisciplinary
ITAA	Inter Tribal Association of Arizona
LED	light-emitting diode
LTSC	long-term storage credit
MARRCO	Magma Arizona Railroad Company
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards

NAGPRA	Native American Graves Protection and Repatriation Act
NDAA	Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015
NEPA	National Environmental Policy Act
NFS	National Forest System
NGO	non-governmental organization
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NRHP	National Register of Historic Places
OHV	off-highway vehicle
PDF	Portable Document Format
PSD	Prevention of Significant Deterioration
Resolution Copper	Resolution Copper Mining, LLC
ROD	record of decision
SERI	Species of Economic and Recreational Importance
SWAP	State Wildlife Action Plan
SWCA	SWCA Environmental Consultants
TNF	Tonto National Forest
U.S.	U.S. Route
USFWS	U.S. Fish and Wildlife Service

READER GUIDE

Welcome to the “Resolution Copper Project and Land Exchange EIS Scoping Report.” This scoping report was prepared by the U.S. Forest Service (Forest Service) to summarize the National Environmental Policy Act (NEPA) scoping process for the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS). This guide is intended to help the reader understand the structure of the scoping report and make it easier to find information.

The scoping report is available as an Adobe Systems Portable Document Format (PDF). The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in Federal documents be accessible to individuals with disabilities. The Forest Service has made every effort to ensure that the information in the scoping report is accessible. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA’s TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

SCOPING REPORT ORGANIZATION

This document is divided into five chapters and a set of appendices:

- *Chapter 1 – Project Overview and Scoping Process*: This chapter provides background information on the proposed action, summarizes the scoping process, and describes the next steps in the NEPA process.
- *Chapter 2 – Public Meeting Summary*: This chapter summarizes the initial public scoping process, scoping meetings, and public questions and concerns brought forward during the scoping meetings.
- *Chapter 3 – Public Comment Summary*: This chapter contains a description of the public scoping comment analysis process and a summary of the public scoping comments received during the 120-day scoping period.
- *Chapter 4 – Internal Scoping Summary*: This chapter contains details of the specific internal scoping efforts that were conducted and lists the concerns identified during internal scoping.
- *Chapter 5 – Cooperating Agency and Tribal Scoping Summary*: This chapter summarizes the cooperating agency scoping process and cooperating agency scoping comments. Additionally, this chapter summarizes the public scoping comments submitted by tribes and tribal-affiliated organizations.
- *Appendices*: The appendices provide more detailed information to support the scoping processes summarized in this document.

HOW TO FIND CERTAIN INFORMATION

This scoping report provides several tools to help the reader find information.

- A table of contents.
- Heading numbers: each chapter and section has a unique number as part of its headings.

-
- In-text references to sections, tables, and figures: When a reader is directed to a section of the document or to a figure or table, that reference is provided as a clear and unique identifier; for example, “see [Section 1.4.1](#).”
 - Hyperlinks: This PDF document has been formatted to include multiple hyperlinked features for improved navigation. Hyperlinks in this document appear as blue text. The table of contents contains hyperlinks for each section, table, and figure. The in-text references are hyperlinked so readers can jump directly to the referenced section, table, or figure. Additional navigation options are located at the bottom of each page: the link of the bottom left-hand side will return you to the Table of Contents, and the link on the bottom right-hand side will return you to your previous location within the document.

CHAPTER 1

Project Overview and Scoping Process



1.0 CHAPTER 1 – PROJECT OVERVIEW AND SCOPING PROCESS

1.1 Background

The Tonto National Forest (TNF), an administrative unit of the U.S. Forest Service (Forest Service), is completing an environmental impact statement (EIS) to evaluate the Resolution Copper Project and Land Exchange proposal. The project is located in the Globe and Mesa Ranger Districts, Tonto National Forest, Arizona. The TNF is evaluating the proposed action at this time to comply with its statutory and regulatory obligations to respond to a proposed plan of operations submitted by Resolution Copper Mining, LLC (Resolution Copper), and to comply with Section 3003 of the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA).

1.2 Purpose and Need

The purpose of and need for this project is twofold:

- To consider approval of the proposed “General Plan of Operations” (GPO) submitted by Resolution Copper, which would govern surface disturbance on National Forest System (NFS) lands from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.
- To exchange lands between Resolution Copper and the United States as directed by Section 3003 the NDAA.

1.3 Project Description



Figure 1.3.1-1. Resolution Copper Shaft No. 10.

The proposed action is to approve the proposed GPO as submitted by Resolution Copper and to complete the land exchange as directed by Congress under Section 3003 of the NDAA. As proposed in the GPO, the Resolution Copper mine would affect Federal, State, and private lands. The proposed action by the Forest Service would only approve mining operations on NFS lands, because the Forest Service does not have jurisdiction to regulate mining operations that occur on private or State land. However, the EIS will consider and disclose environmental effects that would occur on Federal, private, or State lands associated with the proposed mine and the land exchange. Connected actions related to the GPO and amendment of the “Tonto National Forest Land and Resource Management Plan” (1985, as amended) will also be analyzed. Impacts of past, present, and reasonably foreseeable actions in the project area will be considered in combination with the impacts of the project to estimate the potential cumulative impacts of project implementation.

Substantial mining activities described in the GPO would affect a 2,422-acre parcel of land known as the Oak Flat parcel (Figure 1.3.1-1). Section 3003 of the NDAA directs the conveyance of the Oak Flat parcel to Resolution Copper. In exchange for the Oak Flat parcel, Resolution

Copper would transfer eight parcels located throughout Arizona, totaling 5,344 acres, to the United States. The Forest Service will not have jurisdiction to regulate mining activities on the Oak Flat parcel, which is to be conveyed to Resolution Copper, because by law (i.e., the NDAA) it will be private land. The Forest Service will need to approve a plan of operations only for related operations that are proposed on NFS land outside the Oak Flat parcel.

1.4 Scoping Process

1.4.1 Pre-scoping Stakeholder Assessment

Between January 27 and March 17, 2016, Dr. Martha Rozelle of The Rozelle Group and Jill Grams of SWCA Environmental Consultants (SWCA) conducted interviews with persons or groups with potential interest in the EIS. The purpose of the interviews was to gather input and assess the level of concern and interest to aid in development of the “Public Involvement Plan” for the EIS.

Twenty-two interviews or brief conversations were conducted with 28 stakeholders representing a range of interests and or groups. The interviews were designed to last about 1 hour and generally followed a predetermined interview guide. Nine of the interviews were conducted in person, and 13 were conducted by telephone. The list of stakeholders, interview guide, and summary of the key themes and comments expressed during the interviews are included as [Appendix A](#), Stakeholder Analysis Summary.

The Stakeholder Analysis Summary includes (as [Appendix B of that report](#)) a memorandum outlining the key observations and recommendations for the EIS public involvement process based on the stakeholder interviews. The key theme areas observed during stakeholder assessment include trust, process, desire for involvement, and level of information. Recommendations for addressing these theme areas were provided to the TNF for consideration during development of the EIS “Public Involvement Plan.”

1.4.2 Scoping Process Overview

The purpose of the public scoping process is to provide agencies and members of the public with an opportunity to provide input on the scope of the proposed project and content of the issue analysis in the EIS. In addition, the scoping process helps identify any issues that are not considered relevant and can therefore be eliminated from detailed analysis in the EIS. The list of stakeholders and other interested parties is also updated and generally expanded during the scoping process.

As a result of public interest and feedback, the Tonto Forest Supervisor extended the public scoping period to 120 days.

The scoping process for the proposed action consisted of three types of scoping: public scoping, internal scoping, and cooperating agency and tribal scoping. An overview of the three scoping types follows:

- **Public Scoping:** The public scoping period commenced on March 18, 2016, with the Forest Service publication of a Notice of Intent (NOI) to prepare an EIS on the proposed Resolution Copper Project and Land Exchange in the Federal Register. A 120-day public scoping comment period occurred from March 18, 2016, to July 18, 2016. During this time, the TNF solicited public comments on the proposed action and held five public meetings.
- **Internal Scoping:** Internal scoping efforts included several meetings and field trips with the NEPA interdisciplinary (ID) team. ID team members include Forest Service resource specialists and planners representing anticipated topics of analysis in the NEPA process, managers, and TNF line officers; the ID team is supported by resource specialists and planners from SWCA.

-
- Cooperating Agency and Tribal Scoping: Cooperating agency and tribal scoping was conducted with cooperating agencies through a cooperating agency kick-off meeting and through comments submitted by cooperating agencies and tribes during the public scoping comment period.

1.4.2.1 OPPORTUNITIES FOR PUBLIC AND AGENCY COMMENT

Members of the public and agencies were afforded several methods for providing comments during the scoping period. All comments were given equal consideration, regardless of method of transmittal.

Five public scoping meetings were held in Queen Valley, Superior, Globe, Gilbert, and San Tan, Arizona.

Comments could be recorded on comment forms at the scoping meetings. Comment forms ([Appendix B](#)) were provided to all meeting attendees and were also available throughout the meeting room, where attendees could write and submit comments during the meeting.

- Comments could be submitted verbally at the scoping meetings.
- Individual letters and comment forms could be mailed via U.S. Postal Service to Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468.
- Emailed comments could be sent to a dedicated email address: comments@ResolutionMineEIS.us.
- Comments could be submitted by fax or voicemail to 866-546-5718.
- Comments could be submitted electronically through a web form on the www.ResolutionMineEIS.us project website.

1.4.3 Next Steps in the NEPA Process

1.4.3.1 PUBLIC CONCERN STATEMENTS

Prior to the next step in the National Environmental Policy Act (NEPA) process, issues development, the TNF will develop public concern statements to further synthesize public scoping comments. Public concern statements are succinct statements summarizing public viewpoints and rationales for concerns regarding the proposed action, resource impacts, and the NEPA process. Public concern statements will be developed by reviewing the public scoping comment record and the public comment summary contained in [Chapter 3](#) of this document. The public concern statements will then be linked to each public scoping comment in the project record. Comments will be linked to the public concern statements that best represent the content of the comment. During issues development, the public concern statements will be reviewed to ensure that all public concerns expressed during the scoping process have been thoroughly considered.

The public concern statement development and linking process will be summarized in a separate public concern statement report; the anticipated publication date for this report is spring 2017.

1.4.3.2 ISSUES DEVELOPMENT

The Council on Environmental Quality (CEQ) regulations have specific direction for issues in EISs. Agencies shall determine the scope and the significant issues to be analyzed in depth in the EIS (40 Code of Federal Regulations [CFR] 1501.8(a)(2)), and identify and eliminate from detailed study the issues that are not significant or that have been covered by prior environmental review (§ 1506.3), narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere (40 CFR 1501.7(a)(3)).

Issues serve to highlight effects or unintended consequences that may occur from the proposed action and alternatives, giving opportunities during the analysis to reduce adverse effects and compare trade-offs for the decision-maker and public to understand. Issues help set the scope of the actions, alternatives, and effects to consider in our analysis (Forest Service Handbook 1909.15.12.4).

Comments from the tribes, public, and other agencies submitted during the scoping period will be used to formulate issues concerning the proposed action. An issue is a point of dispute or disagreement with the proposed action based on some anticipated environmental effect. The forest supervisor will determine the relevant issues to be considered for detailed analysis in the EIS. The process for developing issues and a list of the relevant issues will be summarized in a separate issues report; the anticipated publication date for this report is spring 2017.

1.4.3.3 ALTERNATIVES DEVELOPMENT

The Forest Service will conduct an intensive alternatives development process that responds to the key issues identified. The Forest Service will develop reasonable and feasible alternatives to the proposed action that resolve, minimize, or reduce impacts to identified issues while meeting the purpose and need for the proposed action. Alternative tailings facility locations and designs that are within the Forest Service's regulatory authority to approve, as well as different mining techniques, if different mining techniques address issues and meet the project's purpose and need, will be evaluated during the alternatives development process. The Forest Service will hold a public workshop in spring 2017 to engage the public in the alternatives development process.

A no action alternative (no mining and no land exchange) will be analyzed in the EIS and will serve as a baseline for comparing the proposed action and the other action alternatives. However, the Forest Service cannot legally choose to move forward with the no action alternative in the record of decision (ROD) because Section 3003 of the NDAA legislatively authorized the land exchange and because the 1872 mining law, as amended, does not provide the Forest Service with the authority to prohibit the proposed mining activities.

1.4.3.4 EIS PROCESS

The general process next steps for the development of the EIS are depicted in [Figure 1.4.3.4-1](#). The availability of the draft EIS (DEIS) will be announced in the Federal Register and advertised in the local and regional media. The DEIS will be available for public comment and public meetings or hearings will be held to receive comments on the adequacy of the DEIS. The Forest Service will review and consider all comments received on the DEIS. The document will be modified as appropriate based on public comments; all substantive comments and responses will be incorporated into the final EIS (FEIS).

The availability of the FEIS and draft ROD will be announced in the Federal Register and advertised in local and regional media. The Forest Service project-level objection process (36 CFR Part 218) will follow the publication of the FEIS and draft ROD. A ROD selecting the alternative to be implemented will be made by the Forest Service once responses to objections have been issued. The final ROD will be published in the Federal Register. Section 3003 of the NDAA authorizes and directs the Secretary of Agriculture to administer the Resolution Copper Land Exchange 60 days following publication of the FEIS.

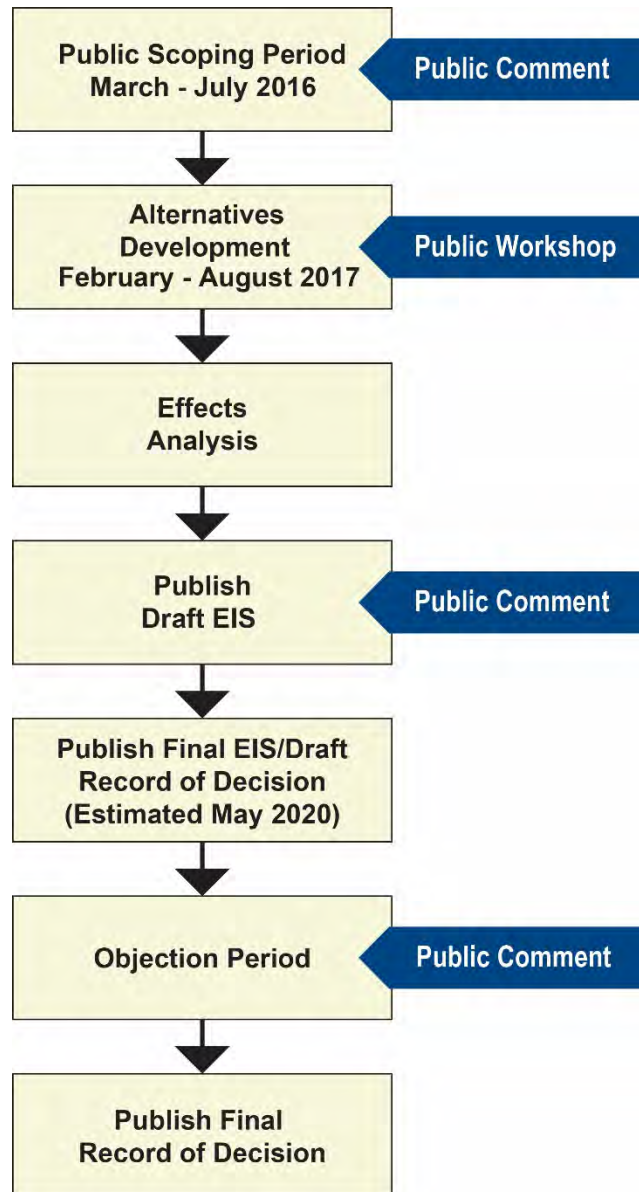


Figure 1.4.3.4-1. EIS Process.

1.5 Document Organization

This document summarizes the Resolution Copper Mine Project and Land Exchange EIS scoping efforts. This document is divided into five chapters and a set of appendices:

- *Chapter 1 – Project Overview and Scoping Process*: This chapter provides background information on the proposed action, summarizes the scoping process, and describes the next steps in the NEPA process.

- *Chapter 2 – Public Meeting Summary*: This chapter summarizes the initial public scoping process, scoping meetings, and public questions and concerns brought forward during the scoping meetings.
- *Chapter 3 – Public Comment Summary*: This chapter contains a description of the public scoping comment analysis process and a summary of the public scoping comments received during the 120-day scoping period.
- *Chapter 4 – Internal Scoping Summary*: This chapter contains details of the specific internal scoping efforts that were conducted and lists the concerns identified during internal scoping.
- *Chapter 5 – Cooperating Agency and Tribal Scoping Summary*: This chapter summarizes the cooperating agency scoping process and cooperating agency scoping comments. Additionally, this chapter summarizes the public scoping comments submitted by tribes and tribal-affiliated organizations.
- *Appendices*: The appendices provide more detailed information to support the scoping processes summarized in this document.

1.5.1 Scoping Summary Guide

Table 1.5.1-1 provides a summary guide to the scoping comment topics and the location of the related discussion(s) contained in this document. The guide is organized into three main categories: proposed action, resource topic, and NEPA process. Under each of these categories are associated scoping comment concern topics. The far right-hand column of the table contains hyperlinked references to the related scoping report sections. The guide is meant to be used as a navigational and reference tool; it is not representative of all the discussions contained in this document.

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations

Category	Scoping Comment Topic	Scoping Report Section(s)
General Opinion		
	Support	Section 3.5.1.1 – General Support
	Opposition	Section 3.5.1.2 – General Opposition
Proposed Action		
Mine Operations	General	Section 2.4.1.2 – Mine Proposal Section 3.5.2.1 – General Mine Operations
	Subsidence Zone	Section 3.5.2.3 – Subsidence Zone Section 5.3.2.1 – Proposed Action (Subsidence Zone)
	MARRCO Corridor	Section 2.4.1.2 – Mine Proposal (Facilities) Section 3.5.2.5 – Magma Arizona Railroad Company Corridor
	Pipelines	Section 3.5.2.6 – Slurry Pipelines Section 5.2.4.1 – Proposed Action (Slurry Pipelines) Section 5.3.2.1 – Proposed Action (Slurry Pipelines)
	Mineral Processing	Section 3.5.2.7 – Mineral Processing Section 4.3.1 – Mine Proposal – Tailings
	Loadout Facility	Section 2.4.1.2 – Mine Proposal (Facilities) Section 3.5.2.8 – Loadout Facility

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Proposed Action, cont'd.		
Mine Operations, cont'd.	Tailings Storage Facility	Section 2.4.1.2 – Mine Proposal (Tailings) Section 3.5.2.9 – Tailings Storage Facility Section 4.3.1 – Mine Proposal – Tailings Section 5.2.4.1 – Proposed Action (Tailings Storage Facility) Section 5.3.2.1 – Proposed Action (Tailings Storage Facility)
	Water Source (including Groundwater Pumping)	Section 2.4.1.2 – Mine Proposal (Water Source) Section 3.5.2.4 – Groundwater Pumping Section 3.6.14.6 – Water Quantity Section 4.3.2 – Mine Proposal – Water Source Section 4.3.5.6 – Geology and Minerals Section 5.2.4.1 – Proposed Action (Water Source) Section 5.3.2.1 – Proposed Action (Groundwater Pumping)
	Power Facilities	Section 2.4.1.2 – Mine Proposal (Facilities) Section 3.5.2.2 – Power Facilities
Mine Reclamation	General	Section 2.4.1.2 – Mine Proposal (Reclamation) Section 3.5.2.10 – Mine Reclamation Section 4.3.3 – Mine Proposal – Reclamation Section 5.3.2.1 – Proposed Action (Mine Reclamation)
	Financial Responsibility	Section 2.4.1.2 – Mine Proposal (Reclamation) Section 3.5.2.10 – Mine Reclamation Section 5.3.2.1 – Proposed Action (Mine Reclamation)
	Management	Section 2.4.1.2 – Mine Proposal (Reclamation) Section 3.5.2.10 – Mine Reclamation Section 4.3.3 – Mine Proposal – Reclamation Section 5.2.4.1 – Proposed Action (Mine Reclamation)
	Reclamation History	Section 3.5.2.10 – Mine Reclamation Section 4.3.3 – Mine Proposal – Reclamation
	Subsidence Zone	Section 2.4.1.2 – Mine Proposal (Reclamation) Section 3.5.2.10 – Mine Reclamation Section 5.3.2.1 – Proposed Action (Mine Reclamation)
	Tailings Storage Facility	Section 2.4.1.2 – Mine Proposal (Tailings) Section 3.5.2.10 – Mine Reclamation Section 4.3.1 – Mine Proposal – Tailings
Land Exchange		
Selected and Offered Parcels	General	Section 2.4.1.1 – General Section 2.4.1.3 – Land Exchange Section 3.5.3 – Land Exchange Section 4.3.4 – Land Exchange – General Section 5.2.4.1 – Proposed Action (Land Exchange) Section 5.3.2.1 – Proposed Action (Land Exchange)
	Valuation	Section 2.4.1.3 – Land Exchange Section 3.5.3.2 – Land Exchange Valuation Section 5.2.4.1 – Proposed Action (Land Exchange)
	Mineral Rights	Section 3.5.3.4 – Mining Claims Section 4.3.4 – Land Exchange – General Section 4.3.5.6 – Geology and Minerals
	Management	Section 3.5.3.3 – Management of Land Exchange Parcels Section 4.3.4 – Land Exchange – General Section 5.2.4.2 – Resource Topics (Land Use)

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Impact Analysis		
Air Quality	General	Section 2.4.1.4 – Resource Topics (Air Quality) Section 3.6.1.1 – General Concerns Section 5.3.2.2 – Air Quality
	Sources	Section 3.6.1.2 – Sources of Air Pollution Section 4.3.5.1 – Air Quality Section 5.2.4.2 – Resource Topics (Air Quality)
	Baseline Assessment and Impact Analysis	Section 3.6.1.1 – General Concerns Section 5.3.2.2 – Air Quality
	Regulatory Compliance	Section 3.6.1.1 – General Concerns Section 4.3.5.1 – Air Quality Section 5.2.4.2 – Resource Topics (Air Quality) Section 5.3.2.2 – Air Quality
	Related Resource Impacts	Section 3.6.1.3 – Air-Quality-Related Resource Impacts Section 4.3.5.1 – Air Quality Section 4.3.5.2 – Biological Resources Section 5.3.2.2 – Air Quality
Biological Resource	General	Section 2.4.1.4 – Resource Topics (Biological Resources) Section 3.6.2 – Biological Resources Section 4.3.3 – Mine Proposal – Reclamation Section 4.3.5.2 – Biological Resources Section 5.2.4.2 – Resource Topics (Biological Resources) Section 5.3.2.3 – Biological Resources
	Wildlife	Section 2.4.1.4 – Resource Topics (Biological Resources) Section 3.6.2.1 – General Wildlife Section 4.3.5.2 – Biological Resources Section 5.2.4.2 – Resource Topics (Biological Resources)
	Riparian, Aquatic Resources	Section 2.4.1.4 – Resource Topics (Biological Resources) Section 3.6.2.2 – Riparian, Aquatic Resources, and Fish Section 4.3.2 – Mine Proposal – Water Source Section 4.3.5.2 – Biological Resources
	Fish	Section 3.6.2.2 – Riparian, Aquatic Resources, and Fish
	Special Status Species	Section 3.6.2.3 – Special Status Species Section 4.3.5.2 – Biological Resources Section 5.2.4.2 – Resource Topics (Biological Resources) Section 5.3.2.3 – Biological Resources
	Plants	Section 3.6.2.4 – Plants
	Invasive Species	Section 3.6.2.5 – Invasive Species Section 4.3.3 – Mine Proposal – Reclamation Section 4.3.5.2 – Biological Resources Section 4.3.5.3 – Climate Change Section 5.2.4.2 – Resource Topics (Biological Resources)
	Bird Species (including Bats)	Section 3.6.2.6 – Bird Species Section 4.3.5.2 – Biological Resources Section 5.2.4.2 – Resource Topics (Biological Resources) Section 5.3.2.3 – Biological Resources

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Impact Analysis, cont'd.		
Climate Change	General	Section 3.6.3 – Climate Change Section 4.3.5.3 – Climate Change Section 5.2.4.2 – Resource Topics (Climate Change)
	Greenhouse Gases	Section 3.6.3 – Climate Change Section 4.3.5.3 – Climate Change Section 5.2.4.2 – Resource Topics (Climate Change)
	Regulatory Guidance	Section 3.6.3 – Climate Change
	Effect on Proposed Project	Section 3.6.3 – Climate Change Section 5.2.4.2 – Resource Topics (Climate Change)
	Water Resources	Section 3.6.3 – Climate Change Section 3.6.14.5 – Water Supply Section 4.3.5.3 – Climate Change Section 5.3.2.4 – Climate Change
	Carbon Sequestration	Section 3.6.3 – Climate Change Section 4.3.5.3 – Climate Change
Cultural Resources	General	Section 3.6.4.1 – Adverse Impacts to Cultural Resources (General) Section 4.3.5.4 – Cultural Resources Section 5.3.2.5 – Cultural Resources
	Adverse Impacts to Native Americans	Section 3.6.4.3 – Adverse Impacts to Native Americans Section 4.3.5.4 – Cultural Resources Section 5.3.2.5 – Cultural Resources
	Archaeological Sites and Historic Resources	Section 3.6.4.2 – Archaeological Sites and Historic Resources Section 4.3.5.4 – Cultural Resources Section 5.3.2.5 – Cultural Resources
	Traditional Cultural Property, NRHP	Section 2.4.1.4 – Resource Topics (Cultural Resources) Section 3.6.4.3 – Adverse Impacts to Native Americans Section 4.3.5.4 – Cultural Resources Section 5.3.2.5 – Cultural Resources
	Cultural Resources Studies and Surveys	Section 2.4.1.4 – Resource Topics (Cultural Resources) Section 3.6.4.4 – Cultural Resource Studies, Surveys, and Analysis
	Historic Period Recreational Resources	Section 3.6.4.6 – Historic Period Recreational Resources
	Regional History	Section 3.6.4.5 – Regional History
	Other Cultural Resources	Section 2.4.1.4 – Resource Topics (Cultural Resources)
Environmental Justice	General	Section 4.3.5.5 – Environmental Justice Section 5.2.4.2 – Resource Topics (Environmental Justice)
	Cultural Resources	Section 3.6.5.1 – Cultural Resources Section 4.3.5.4 – Cultural Resources
	Socioeconomics	Section 3.6.5.2 – Socioeconomics

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Impact Analysis, cont'd.		
Geology	General	Section 3.6.6 – Geology Section 4.3.5.6 – Geology and Minerals Section 5.2.4.2 – Resource Topics (Geology and Minerals)
	Soils	Section 3.6.6.1 – Soils Section 4.3.3 – Mine Proposal – Reclamation Section 4.3.5.6 – Geology and Minerals
	Minerals	Section 4.3.5.6 – Geology and Minerals
	Subsidence	Section 2.4.1.4 – Resource Topics (Geology and Minerals) Section 3.6.6.2 – Subsidence Section 4.3.5.6 – Geology and Minerals Section 5.2.4.2 – Resource Topics (Geology and Minerals) Section 5.3.2.6 – Geology
	Seismic Activity	Section 2.4.1.4 – Resource Topics (Geology and Minerals) Section 3.6.6.3 – Seismic Activity Section 5.2.4.2 – Resource Topics (Geology and Minerals) Section 5.3.2.6 – Geology
	Tailings Storage Facility	Section 3.6.6.4 – Tailings Storage Facility
	Other Geological Concerns	Section 3.6.6.5 – Other Geological Concerns
Land Use	General	Section 4.3.4 – Land Exchange – General Section 5.2.4.2 – Resource Topics (Land Use) Section 5.2.4.2 – Resource Topics (Recreation)
	Residential Development	Section 3.6.7.1 – Residential Development
	Ranching, Grazing, Farming	Section 3.6.7.2 – Ranching, Grazing, and Farming Section 4.3.3 – Mine Proposal – Reclamation Section 4.3.5.10 – Range Management Section 5.2.4.2 – Resource Topics (Land Use)
	Land Conservation (including Public Lands)	Section 3.6.7.3 – Land Conservation Section 5.2.4.2 – Resource Topics (Land Use)
Noise and Vibrations	Noise Impacts	Section 2.4.1.4 – Resource Topics (Noise and Dark Skies) Sections 3.6.8 – Noise and Vibrations Section 4.3.5.8 – Noise Section 4.3.5.9 – Public Health and Safety Section 5.3.2.7 – Light and Noise Pollution
	Vibrations	Sections 3.6.8 – Noise and Vibrations
Public Health and Safety	General	Section 2.4.1.4 – Resource Topics (Public Health and Safety) Section 3.6.9 – Public Health and Safety Section 4.3.5.9 – Public Health and Safety Section 5.3.2.8 – Public Health and Safety
	Public Health	Section 2.4.1.4 – Resource Topics (Public Health and Safety) Section 3.6.9.1 – Public Health Section 4.3.5.9 – Public Health and Safety
	Hazardous Waste	Section 3.6.9.1 – Public Health Section 4.3.3 – Mine Proposal – Reclamation Section 4.3.5.9 – Public Health and Safety

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Impact Analysis, cont'd.		
Public Health and Safety, cont'd.	Public Safety	Section 3.6.9.2 – Public Safety Section 4.3.5.9 – Public Health and Safety
	Employee Health and Safety	Section 3.6.9.3 – Employee Health and Safety Section 4.3.5.9 – Public Health and Safety
	Risk Assessment	Section 3.6.9.4 – Risk Assessment Section 4.3.1 – Mine Proposal – Tailings
Recreation and Public Access	General	Section 2.4.1.4 – Resource Topics (Recreation) Section 3.6.10 – Recreation and Public Access Section 4.3.5.11 – Recreation and Public Access Section 5.2.4.2 – Resource Topics (Recreation)
	Campground	Section 2.4.1.4 – Resource Topics (Recreation) Section 3.6.10.5 – Oak Flat Campground
	Trails (including Arizona National Scenic Trail)	Section 2.4.1.4 – Resource Topics (Recreation) Section 3.6.10.1 – Trails Section 4.3.5.11 – Recreation and Public Access Section 5.2.4.2 – Resource Topics (Recreation)
	Rock Climbing	Section 2.4.1.4 – Resource Topics (Recreation) Section 3.6.10.2 – Rock Climbing
	Boyce Thompson Arboretum	Section 3.6.10.3 – Boyce Thompson Arboretum
	Recreation Access Roads	Section 3.6.10.4 – Recreational Access Roads Section 4.3.5.11 – Recreation and Public Access Section 5.2.4.2 – Resource Topics (Recreation)
	Recreation Displacement	Section 4.3.5.11 – Recreation and Public Access
	Recreational Values	Section 3.6.10 – Recreation and Public Access Section 4.3.5.11 – Recreation and Public Access
	Other Recreational Resources	Section 3.6.10 – Recreation and Public Access
Socioeconomics	General	Section 2.4.1.4 – Resource Topics (Socioeconomics) Section 3.6.11 – Socioeconomics
	Benefits/Losses (General)	Section 2.4.1.4 – Resource Topics (Socioeconomics) Section 3.6.11.1 – Socioeconomics Benefits and Losses Section 4.3.5.12 – Socioeconomics
	Socioeconomic Study	Section 2.4.1.4 – Resource Topics (Socioeconomics) Section 3.6.11.2 – Socioeconomic Study
	Regional History	Section 3.6.11.3 – Regional History
	Tax Revenue	Section 3.6.11.4 – Tax Revenues Section 4.3.5.12 – Socioeconomics
	Employment	Section 2.4.1.4 – Resource Topics Section 3.6.11.5 – Employment Section 4.3.5.12 – Socioeconomics
	Property Values	Section 3.6.11.6 – Property Values and Taxes Section 4.3.5.12 – Socioeconomics
	Property Taxes	Section 3.6.11.6 – Property Values and Taxes Section 4.3.5.12 – Socioeconomics
	Copper Demand and Uses	Section 2.4.1.4 – Resource Topics (Socioeconomics) Section 3.6.11.7 – Copper Demand and Uses Section 4.3.5.12 – Socioeconomics

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Impact Analysis, cont'd.		
Socioeconomics, cont'd.	Public Costs	Section 3.6.11.8 – Public Costs Section 4.3.5.12 – Socioeconomics
	Tourism	Section 3.6.11.9 – Tourism
	Social Impacts Assessment	Section 3.6.11.10 – Social Impact Assessment
	Resource Related Impacts	Section 2.4.1.4 – Resource Topics (Socioeconomics) Section 3.6.11.11 – Socioeconomics-Related Resource Impacts Section 4.3.2 – Mine Proposal – Water Source Section 4.3.5.12 – Socioeconomics
Transportation	Traffic	Section 3.6.12.1 – Traffic Section 4.3.5.13 – Transportation
	Road Closures	Section 3.6.12.2 – Road Closures
	Infrastructure	Section 3.6.12.3 – Infrastructure Section 4.3.5.13 – Transportation
Visual Resources	Visual/Scenery	Section 2.4.1.4 – Resource Topics (Visual Resources) Section 3.6.13 – Visual Resources Section 4.3.5.4 – Cultural Resources Section 4.3.5.14 – Visual Resources
	Light Pollution	Section 2.4.1.4 – Resource Topics (Noise and Dark Skies) Section 3.6.13 – Visual Resources Section 5.3.2.7 – Light and Noise Pollution
Water Resources	General	Section 2.4.1.4 – Resource Topics (Water Resources) Section 3.6.14 – Water Resources Section 5.2.4.2 – Resource Topics (Water Resources) Section 5.3.2.10 – Water Resources
	Surface Water	Section 2.4.1.4 – Resource Topics (Water Resources) Section 3.6.14.1 – Surface Water Section 4.3.5.15 – Water Resources Section 5.2.4.2 – Resource Topics (Water Resources) Section 5.3.2.10 – Water Resources
	Groundwater	Section 2.4.1.4 – Resource Topics (Water Resources) Section 3.6.14.2 – Groundwater Section 4.3.5.15 – Water Resources Section 5.2.4.2 – Resource Topics (Water Resources) Section 5.3.2.10 – Water Resources
	Hydrogeology	Section 3.6.14.3 – Hydrogeology Section 4.3.5.6 – Geology and Minerals Section 4.3.5.15 – Water Resources
	Water Quality	Section 2.4.1.4 – Resource Topics (Water Resources) Section 3.6.14.4 – Water Quality Section 4.3.5.15 – Water Resources Section 5.2.4.2 – Resource Topics (Water Resources) Section 5.3.2.10 – Water Resources
	Water Supply	Section 2.4.1.4 – Resource Topics (Water Resources) Section 3.6.14.5 – Water Supply Section 4.3.2 – Mine Proposal – Water Source Section 4.3.5.15 – Water Resources Section 5.2.4.2 – Resource Topics (Water Resources)
	Water Quantity	Section 2.4.1.4 – Resource Topics (Water Resources) Section 3.6.14.6 – Water Quantity
	Regulatory Compliance	Section 3.6.14.4 – Water Quality Section 5.2.4.2 – Resource Topics (Water Resources)

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
Impact Analysis, cont'd.		
Wildfire	General	Section 3.6.2.4 – Plants
	Fuels and Fire Management	Section 4.3.5.7 – Fuels and Fire Management
	Wildfire Risk	Section 3.6.2.4 – Plants
NEPA Process		
Public Involvement	Public Meetings	Section 2.3 – Scoping Meetings Section 2.4.1.5 – NEPA Process (Public Involvement) Section 3.7.2 – Public Involvement Process
	Public Comment	Section 2.4.1.5 – NEPA Process (Public Involvement) Section 3.7.2 – Public Involvement Process Section 5.3.2.11 – NEPA Process (Public Involvement)
	Tribal/Agency Involvement	Section 2.4.1.5 – NEPA Process (Public Involvement) Section 3.7.2 – Public Involvement Process Section 3.7.9 – Tribal Consultation Section 3.7.10 – Cooperating Agencies Section 5.2 – Cooperating Agency Scoping Summary Section 5.3 – Tribal Scoping Comment Submittal Summary
	Transparency	Section 2.4.1.5 – NEPA Process (General) Section 3.7.1 – NEPA Process General Section 3.7.2 – Public Involvement Process
Decision-Making Process	EIS Process	Section 1.4.3 – Next Steps in the NEPA Process Section 2.4.1.5 – NEPA Process (General) Section 3.7.1 – NEPA Process General Section 4.2 – Internal Scoping Process Section 5.2 – Cooperating Agency Scoping Summary
	Project Background	Section 1.1 – Background Section 1.3 – Project Description
	Purpose and Need	Section 1.2 – Purpose and Need Section 3.7.3 – Purpose and Need Section 5.2.4.3 – NEPA Process (Purpose and Need)
	National Defense Authorization Act	Section 1.1 – Background Section 1.2 – Purpose and Need Section 1.3 – Project Description Section 2.4.1.5 – NEPA Process (Decision Space) Section 3.5.3.1 – Land Exchange Legislation Section 3.7.3 – Purpose and Need
	Forest Service Decision Authority	Section 2.3.1.2 – Meeting Description Presentation Section 2.4.1.5 – NEPA Process (General) Section 2.4.1.5 – NEPA Process (Decision Space) Section 3.5.3.1 – Land Exchange Legislation Section 3.7.3 – Purpose and Need Section 3.7.8.1 – Land Exchange Legislation
	Other Laws and Regulations	Section 2.4.1.5 – NEPA Process (Decision Space) Section 3.7.8 – Other Laws and Regulations Section 5.3.2.11 – NEPA Process (Other Laws and Regulations)
	GPO Content and Data Gaps	Section 3.7.4 – General Plan of Operations Content and Data Gaps Section 5.3.2.11 – NEPA Process (General Plan of Operations Content and Data Gaps)
	Decision Timeline	Section 2.4.1.5 – NEPA Process (General) Section 3.7.1 – NEPA Process General

Table 1.5.1-1. Guide to Related Scoping Comment Topics and Their Report Locations (Continued)

Category	Scoping Comment Topic	Scoping Report Section(s)
NEPA Process, cont'd.		
	Scope of Analysis	Section 2.4.1.5 – NEPA Process (Bounds of Analysis) Section 3.7.1 – NEPA Process General
	Connected Actions	Section 3.7.7 – Connected Actions Section 5.3.2.11 – NEPA Process (Connected Action)
	Cumulative Impacts	Section 2.4.1.5 – NEPA Process (Cumulative Effects) Section 3.7.6 – Cumulative Impacts Section 5.2.4.3 – NEPA Process (Cumulative Impacts) Section 5.3.2.11 – NEPA Process (Cumulative Impacts)
	Tribal Consultation	Section 2.4.1.5 – NEPA Process (Tribal Consultation) Section 3.7.9 – Tribal Consultation Section 5.2.4.2 – Resource Topics (Cultural Resources) Section 5.3 – Tribal Scoping Comment Submittal Summary Section 5.3.2.11 – NEPA Process (Tribal Consultation)
	Cooperating Agencies	Section 2.4.1.5 – NEPA Process (Agency Coordination) Section 3.7.10 – Cooperating Agencies Section 5.2 – Cooperating Agency Scoping Summary
	No Action Alternative	Section 2.4.1.5 – NEPA Process (Decision Space) Section 3.7.11 – No Action Alternative Section 3.7.12 – Alternatives
	Alternatives	Section 2.4.1.5 – NEPA Process (Alternatives Development) Section 3.7.12 – Alternatives Section 4.3.6 – NEPA Process (Alternatives) Section 5.2.4.3 – NEPA Process (Alternatives) Section 5.3.2.11 – NEPA Process (Alternatives)
	Mitigation	Section 3.7.13 – Mitigation Section 4.3.5 – Resource Topics (Various Sections) Section 4.3.6 – NEPA Process (Mitigation) Section 5.2.4.3 – NEPA Process (Mitigation) Section 5.3.2.11 – NEPA Process (Mitigation)

CHAPTER 2

Public Meeting Summary



2.0 CHAPTER 2 – PUBLIC MEETING SUMMARY

The 120-day public scoping period for the Resolution Copper Project and Land Exchange EIS began on March 18 and ended on July 18, 2016. The Forest Service announced the EIS project, published notice of the scoping meetings, and held five public scoping meetings during the scoping period. This chapter summarizes the initial public scoping process, scoping meetings, and public questions and concerns brought forward during the scoping meetings.

2.1 Chapter Organization

This chapter contains summary descriptions of the following EIS scoping initiation and public meeting components:

- scoping public notices, advertising, communications, mailing list, and project website development;
- public meeting description, including agenda and meeting materials; and
- questions and concerns brought forward during the scoping meetings.

2.2 Advertisements and Communications

2.2.1 Advertisements

2.2.1.1 NOTICE OF INTENT

The NOI was published in the Federal Register on March 18, 2016. This notice presented the proposed project, announced the 60-day public comment (scoping) period, solicited public comment, and announced four scheduled scoping meetings ([Appendix C](#)).

2.2.1.2 FEDERAL REGISTER ANNOUNCEMENT

During the public scoping meetings, numerous individuals and several organizations requested an extension of the public scoping period, as well as additional public scoping meetings. The TNF forest supervisor decided to accommodate these requests by extending the public scoping period from 60 to 120 days, through July 18, 2016, and holding one additional public scoping meeting on June 9, 2016. This change was announced in the Federal Register on May 25, 2016. This notice was translated into Spanish and published in *La Voz* to reach additional members of the public (see [Appendix C](#)).

2.2.1.3 LEGAL ADVERTISEMENTS

The Forest Service published two legal notices in the newspapers listed in [Table 2.2.1.3-1](#). The first notice announced the NOI and scoping period. The second notice announced the extension of scoping period and an additional scoping meeting in San Tan Valley, Arizona. This legal notice was also translated into Spanish and published in *La Voz* (see [Appendix C](#)).

Table 2.2.1.3-1. Legal Notice Publication Dates

Newspaper	Publication Dates
<i>Arizona Capitol Times</i>	3/18, 5/20
<i>Sierra Vista Herald</i>	3/18, 5/20
<i>Arizona Republic</i>	3/18

Table 2.2.1.3-1. Legal Notice Publication Dates (Continued)

Newspaper	Publication Dates
<i>Arizona Business Gazette</i>	3/24, 5/26
<i>Arizona Silver Belt</i>	3/23, 5/25
<i>San Carlos Apache Moccasin</i>	3/23, 5/25
<i>Payson Roundup</i>	3/22
<i>Arizona Daily Star</i>	3/18, 5/20
<i>Florence Reminder and Blade Tribute</i>	3/24, 5/25
<i>Coolidge Examiner</i>	3/23, 5/25
<i>Tri Valley Dispatch</i>	3/23, 5/25
<i>La Voz</i>	3/25, 5/27
<i>Copper Basin News</i>	3/23, 5/25
<i>Superior Sun</i>	3/23, 5/25
<i>San Manuel Miner</i>	3/23, 5/25
<i>Oracle Town Crier</i>	4/13, 5/25
<i>Pinal Nugget</i>	3/30, 5/25
<i>Southeast Valley Ledger</i>	4/6

2.2.1.4 MEDIA AND PRESS RELEASES

The TNF published media releases about this project on the News & Events page of the TNF webpage. The news releases provided information to the public on how to provide comments and locations and times of the public scoping meetings. The three media releases published to date by the TNF are listed below (see [Appendix C](#)).

- March 18 – Tonto National Forest to Begin Resolution Copper Project and Land Exchange Environmental Impact Statement
- May 20 – Resolution Copper Project Comment Period Extended, Additional Meeting Scheduled
- June 20 – Forest Still Accepting Public Comments for the Resolution Copper Mining Project

2.2.1.5 FLYER POSTINGS

On March 21, 2016, a public meeting flyer was posted at 24 area bulletin boards ([Table 2.2.1.5-1](#)). The flyer provided details about the first four public meetings, along with information for the project website and contact information for the Forest Project Manager (see [Appendix C](#)).

Table 2.2.1.5-1. Flyer Posting Locations

City	Posting Place
Queen Valley	Recreation Center Fire station Golf course RV park Sanitary district Café/general store

Table 2.2.1.5-1. Flyer Posting Locations (Continued)

City	Posting Place
Globe	Globe Elks Lodge Chamber of Commerce Library Municipal building/City Hall Fry's Pharmacy on Broad Street Gila County Courthouse
Superior	Town Hall Save Money Market Post Office Senior Center Pinal County court house Copper Triangle Circle K Superior Farmers Market Porter's
Miami	City Hall Library

2.2.2 Communications

2.2.2.1 MAILING LIST DEVELOPMENT

The initial project mailing list was compiled from multiple sources and included government agencies, elected officials, tribal governments, adjacent landowners, and interested individuals and organizations (Table 2.2.2.1-1). The initial mailing list started with 6,300 entries from the Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Activities Environmental Assessment project. This initial list was expanded to approximately 7,300 entries and includes additional interested parties and adjacent landowners within one-half mile of proposed project components. In addition, the residents of several specific communities of interest were added to the mailing list using information available from County tax assessor records; these communities include Queen Valley and Top of the World. The mailing list includes both physical mailing addresses and email addresses for electronic notifications. The mailing list will continue to be updated throughout the EIS process with interested parties and those who submit comments.

Table 2.2.2.1-1. List of Federal, State, and Local Agencies and Tribes Contacted

Federal	Bureau of Land Management Forest Service U.S. Army Corps of Engineers U.S. Environmental Protection Agency U.S. Fish and Wildlife Service
State	Arizona Department of Agriculture Arizona Department of Environmental Quality Arizona Department of Transportation Arizona Department of Water Resources Arizona Game and Fish Department Arizona Geologic Survey Arizona State Historic Preservation Office Arizona State Mine Inspector Arizona State Land Department Boyce Thompson State Park

Table 2.2.2.1-1. List of Federal, State, and Local Agencies and Tribes Contacted,
(Continued)

Local	Apache Junction Arizona Chamber of Commerce City of Globe Coconino County East Valley Chamber of Commerce Gila County Globe-Miami Regional Chamber of Commerce Maricopa County Pinal County Santa Cruz County
Local, Cont'd.	Sonoita Elgin Fire District Superior Chamber of Commerce Town of Benson Town of Carefree Town of Cave Creek Town of Hayden Town of Kearny Town of Mammoth Town of Miami Town of Patagonia Town of Payson Town of Queen Creek Town of Sierra Vista Town of Superior Town of Winkelman Yavapai County
Tribes	Ak-Chin Indian Community Colorado River Indian Tribes Fort McDowell Yavapai Nation Fort Mojave Indian Tribe Gila River Indian Community Hopi Tribe Hualapai Tribe Pueblo of Zuni Salt River Pima-Maricopa Indian Community San Carlos Apache Nation Tohono O'odham Nation Tonto Apache Tribe White Mountain Apache Tribe Yavapai Apache Nation Yavapai Prescott Indian Tribe

2.2.2.2 COMMUNICATION #1

On March 18, 2016, the TNF sent an email notification to 5,763 recipients on the mailing list. This email was sent by GovDelivery and included a Dear Interested Party letter with a four-page brochure explaining the project and schedule and providing maps of the proposed project and offered land exchange parcels ([Appendix D](#)).

On March 21, 2016, a supplemental mailing containing the same notification information described above was sent to 39 known residents of Top of the World, Arizona.

On March 25, 2016, the same notification information described above was mailed by the U.S. Postal Service to the 1,650 addresses on the project mailing list that do not have an email address.

2.2.2.3 COMMUNICATION #2

On May 20, 2016, the Forest Service sent an email notification to 21,148 email addresses from the project mailing list (this list included all those who had submitted scoping comments and/or attended public meetings). The email was sent by GovDelivery and included information about the extended comment period and additional public scoping meeting details (see [Appendix D](#)).

On May 24, 2016, a postcard was sent to 1,792 recipients on the project mailing list who do not have an email address to notify them of the extended scoping period and the additional public meeting scheduled in San Tan, Arizona, on June 9, 2016 (see [Appendix D](#)).

2.2.3 Project Website

The Resolution Copper Project and Land Exchange EIS website (www.ResolutionMineEIS.us) was made available to the public at the beginning of the scoping period on March 18, 2016. The website is constantly being updated to provide the public information about the project and the EIS process. The following describes the general website content.

- **News/Announcements.** This column appears on the left side of the screen on all pages of the website. It includes all new information announcements and is constantly updated to provide information on project updates and new website information.
- **About the Project.** This page provides a summary of the project, including project history, project components, and the land exchange. Hyperlinks are included to important documents with additional details and to other regulatory agency websites.
- **Public Involvement.** The public involvement page contains all information about public involvement and will be continually updated throughout the EIS process. It currently describes the ways in which the public can provide scoping comments. It includes hyperlinks to documents and videos that were presented at the public open house meetings (scoping announcement letter, scoping handout, A Citizen's Guide to NEPA, video of the Forest Service scoping presentation at the April 4 meeting in Superior, scoping posters, and transcripts from each scoping meeting).
- **Project Documents.** The Forest Service intends to provide the public with the maximum amount of information as possible. This background and project related information will be available on the project documents webpage. Current documents available include the Resolution Copper GPO, NOI, land exchange documents, and more than 110 background reports available for download or online viewing.
- **FAQs.** The Frequently Asked Questions (FAQs) page includes answers to questions asked of the management team about this project. The webpage initially included 10 questions asked prior to the scoping meetings, along with answers. This page will be updated throughout the life of the project to include new questions and answers as they arise. Questions that were asked during the public meetings will also be added to this webpage.
- **Web Comment Form/Mailing List Signup.** The website contains a web-based comment form that allows for public comment submission. Individuals can also request to be added to the project mailing list on the website.

2.3 Scoping Meetings

Five public scoping meetings were held during the 120-day scoping period. Each meeting was held from 5:00 p.m. to 8:00 p.m. The meetings were in an “open house” format, which is described in greater detail below. The sign-in sheets for each meeting are documented in the project record.

As a result of public interest, the Tonto Forest Supervisor added a fifth meeting in San Tan, Arizona.

Attendees were asked to sign in to each meeting venue.

[Table 2.3-1](#) presents the meeting locations, dates, and attendance sign-in numbers.

Table 2.3-1. Scoping Meeting Locations, Dates, and Attendance Numbers

Meeting Location	Date	Number of People Who Signed In
Queen Valley, Arizona – Recreation Hall	March 31, 2016	106
Superior, Arizona – Superior High School	April 4, 2016	78
Globe, Arizona – Globe Elks Lodge	April 5, 2016	63
Gilbert, Arizona – South East Regional Library	April 6, 2016	88
San Tan, Arizona – Central Arizona College	June 9, 2016	50

2.3.1 Meeting Description

2.3.1.1 OPEN HOUSE

The public scoping meetings were held in an open house format. The meetings included a formal slide presentation by the Forest Service, followed by a question and answer session that all attendees were invited to participate in ([Figure 2.3.1.2-1](#)). Posters describing various components of the EIS process were set up around the meeting room. Forest Service personnel were stationed at the posters and in other areas of the room to answer questions and help attendees better understand the project and the EIS process.

2.3.1.2 PRESENTATION

Each meeting included a slide presentation by the Forest Service line officers and the Forest Service project manager. This presentation lasted between 30 and 50 minutes and covered the Forest Service decision to be made; known controversy; general project information; and issues identification and information that can help the Forest Service in the NEPA process.

2.3.1.3 QUESTION AND ANSWER

After each presentation, the public was given time to ask questions of the Forest Service. These questions were documented by a note taker and projected on a screen for attendees to view. The meeting questions are being used to inform and revise the FAQs available on the project website. Question totals for each meeting are listed below in [Table 2.3.1.3-1](#).



Figure 2.3.1.2-1. April 6, 2016, public meeting in Gilbert, Arizona.

Table 2.3.1.3-1. Question and Answer Totals for Each Scoping Meeting

Meeting Location and Date	Number of Questions from the Public
Queen Valley – March 31, 2016	23
Superior – April 4, 2016	46
Globe – April 5, 2016	26
Gilbert – April 6, 2016	37
San Tan – June 9, 2016	48

2.3.2 Verbal Comments

To facilitate public comments, a court reporter was at each public meeting for individuals to provide oral comments. The court reporter was positioned away from the presentation so the public could speak freely without distraction or interruption from the presentation.

2.3.3 Translators

The TNF requested that a Spanish and Apache translator be present at each meeting. A Spanish translator was available at each of the five meetings, but those services were not needed during any of the five meetings. An Apache translator was also scheduled for each of the five meetings. One person used the translation services of the Apache translator at the Queen Valley meeting, but those services were not used by the public at the remaining meetings. The translator was sick and unable to attend the Superior meeting; no members of the public needed this service during the Superior meeting. To alleviate any concerns, a second translator was hired to attend the Globe and Gilbert meetings.

2.3.4 Meeting Materials Description

2.3.4.1 PRESENTATION

The presentation by the Forest Service also included a Microsoft PowerPoint slideshow. The first slideshow was used for the initial four meetings (see [Appendix B](#)). A second slide show was used at the fifth meeting in San Tan Valley. This second PowerPoint included additional slides with regard to the proposed Filtration/Loadout facility located near San Tan Valley at the end of the Magma Arizona Railroad Company (MARRCO) corridor (see [Appendix B](#)).

2.3.4.2 HANDOUT

Handouts provided to each attendee at the public meetings included a four-page brochure on the project; a comment form; and a two-page list of FAQs (see [Appendix B](#)).

2.3.4.3 COMMENT FORM

Comment forms and a comment drop box were available at each public meeting (see [Appendix B](#)). Every person who attended the meetings was provided with a comment form in the handout materials. These comment forms could be filled out and turned in at the comment drop box, or mailed or faxed at a later date.

2.3.4.4 FAQs

A two-page handout was provided with FAQs on the project. This initial FAQ list included the FAQs from the website www.ResolutionMineEIS.us. The 10 questions on this handout were ones asked by the public prior to the scoping meetings (see [Appendix B](#)).

2.3.4.5 POSTERS

Large-format posters were displayed around each public meeting venue. The 11 posters provided additional information or visual maps for the public. Forest Service personnel were stationed near the posters to answer questions. The posters are also available for viewing on the project website and are provided in [Appendix B](#) of this report.

2.3.4.6 DESCRIPTION OF MODEL PRESENTED BY NGOS

The Concerned Citizens and Retired Miners Coalition commissioned 3D scale models showing what Rio Tinto's current plans look like. The Forest Service determined that the models appeared accurate and would be beneficial for the public to view at the five public scoping meetings. Two models were shown at the first four meetings (see [Figures 2.3.4.7-1](#) and [2.3.4.7-2](#)). [Figure 2.3.4.7-1](#) has an aerial overview of the proposed mine tailings facility and subsidence crater at the East Plant Site. [Figure 2.3.4.7-2](#) shows the subsidence crater from a side view. This view allows the viewer to see fracture and cave zones above the ore body. The fifth scoping meeting included three model boards, consisting of the two already shown to the public and a new model of the Offered Lands parcel known as 7B Ranch along the San Pedro River ([Figure 2.3.4.7-3](#)).

2.3.4.7 VIDEO OF PRESENTATION

The presentation on April 4, 2016, at the Superior High School was recorded and is viewable for all interested parties by a YouTube link. This 33-minute video shows the presentation portion of the public open house scoping meetings (<https://www.youtube.com/watch?v=qKIRoHCbtPY>).

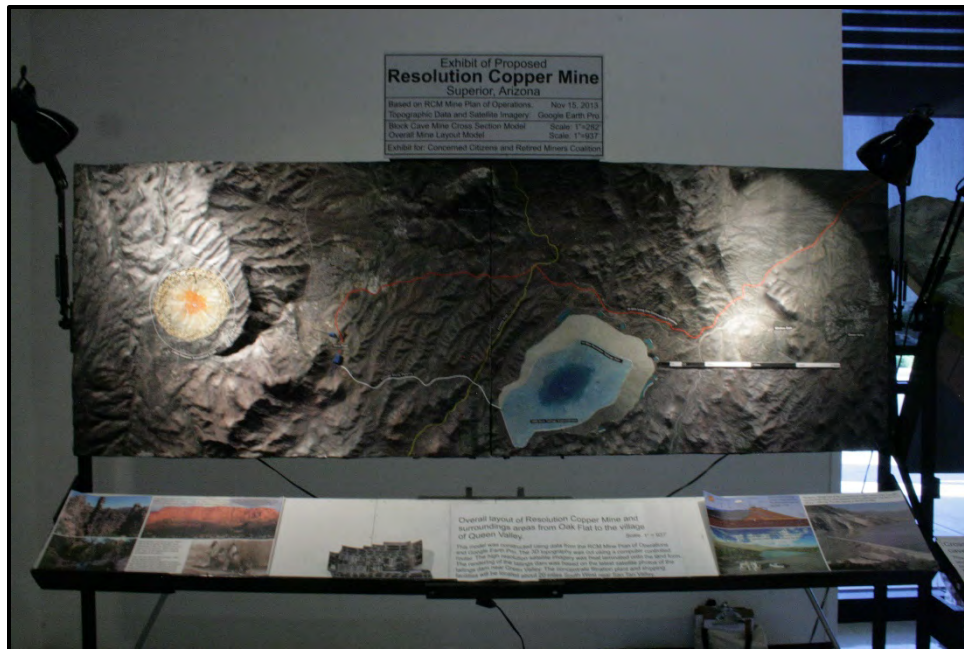


Figure 2.3.4.7-1. Photo of model section 1; aerial view of proposed tailings storage and subsidence crater.



Figure 2.3.4.7-2. Photo of model section 2; cut-out view of subsidence crater and ore body.



Figure 2.3.4.7-3. Photo of Offered Lands Parcel San Pedro River/7B Ranch near San Manuel Mine.

2.4 Scoping Meeting Concern Summary

During the question and answer portion of the five public scoping meetings, the Forest Service received and attempted to answer a total of 180 questions from the public. The questions ranged through a wide variety of topics related to the proposed Resolution Copper Project and Land Exchange. Persons asking questions were allowed to make general comments during their time at the microphone and were generally allowed to speak for up to 3 minutes. However, it was made clear that official public comments were not being recorded during the question and answer process and that official comments needed to be submitted through a provided comment method (comment form, email, web form, mail, and verbal submittal to court reporter).

A summary of the questions was conducted by categorizing similar questions into like categories. [Table 2.4-1](#) shows the overall question categories determined during question synthesis.

The Forest Service developed a scoping meeting Question and Answer Summary ([Appendix E](#)) using the general synthesized questions and categories. This summary does not include an exhaustive list of or answers to all scoping meeting questions; rather, it consists of a summary of the questions received from the public and the applicable answers provided by the Forest Service. Full transcripts that capture the complete questions and answers from the scoping meetings are available in the project record.

Table 2.4-1. General Public Concerns Identified

General Category	Specific Topic Area or Concern
Mine Proposal	Facilities
	Tailings
	Water Source
	Reclamation
Land Exchange	General
	Schedule
	Valuation
Resource Topics	Air Quality
	Biological Resources
	Cultural Resources
	Geology and Minerals
	Noise and Dark Skies
	Public Health and Safety
	Recreation
	Socioeconomics
	Visual Resources
	Water Resources
NEPA Process	General
	Decision Space
	Public Involvement
	Bounds of Analysis
	Cumulative Effects
	Agency Consultation
	Tribal Consultation
	Alternatives Development

2.4.1 Scoping Meeting Question Synthesis

The following includes a summary description of the various questions categorized under each question category.

2.4.1.1 GENERAL

The general question category included questions that did not fit within other specific categories. It includes questions about the Forest Service’s relationship with mining companies, the Forest Service mission, and the level of experience working on mining projects. It also includes specific questions about Forest Service jurisdiction and why Resolution Copper does not have to purchase the land where the tailings facility is proposed, the timing for closure of Oak Flat, and the ability for groups to stay beyond 14 days at the Oak Flat Campground. A questioner made a specific request for a copy of the Oak Flat “withdrawal” language.

2.4.1.2 MINE PROPOSAL

Many questions were asked concerning specific components of the mine proposal, including questions about mine facilities, reclamation, tailings, and water usage. These categories are summarized below.

Facilities

The public asked multiple specific questions about the proposed GPO. Specific questions about facilities associated with the mine proposal included the following:

- What is the proposed source for the electricity that will power the mine, and how does it get to the mine?
- Is there an existing mine that the Forest Service can use for comparison to illustrate the size and scale of the proposed Resolution Copper Mine? Are there other mines of this size already in operation?
- Questions specific to the proposed loadout facility included:
 - Was there a study done by Salt River Project or Arizona Public Service Company on the power needs of the facility?
 - Will the 560-acre private parcel intended for the loadout facility also be analyzed in the EIS?
 - Is the large berm located at the end of the MARRCO corridor included in the Resolution Copper Mine proposal?

Tailings

Several people asked for details and answers about the design, safety, location, and potential environmental impact from the proposed tailings facility. These questions included the following:

- Does the land exchange legislation dictate the location of the tailings facility?
- What is the safety plan for the tailings facility relative to potential failure of the tailings dam? How many tailings have failed in North America, and is the Forest Service considering this in the EIS?
- Will placing the tailings facility over Benson Springs impact water resources?
- What chemicals are in the tailings?
- What will the Forest Service do if the baseline characterization shows that the proposed tailings location is unsuitable? Will Resolution Copper have to find another location?
- Is there something different that can be done with the tailings? For example, what about placing the tailings back underground at the mine site?

Water Source

Questions about the water source for the mine operations focused on how much water will be used to operate the mine, the location of the mine operation water source wells, and specifically where in the mine operation the water is being used.

Reclamation

Several people asked for details about long-term mine reclamation plans. These questions included the following:

- Who will be responsible for long-term maintenance and cleanup of the tailings facility after mining is complete? Who is responsible for the tailings area in perpetuity, and will the EIS consider this?
- What are the reclamation plans for the subsidence area after mining is complete? Is there a reclamation plan for the subsidence area that addresses groundwater and the potential for a lake?
- Is there a requirement for the mining company to put aside money to use for mine reclamation or closure in the future?
- After mine closure and reclamation, what is the plan for the subsidence area and tailings area?
- What will be done during the 5 to 10 years of “reclamation”?

2.4.1.3 LAND EXCHANGE

Questions categorized as “land exchange” include inquiries and concerns about the land exchange process and how it will be managed in the EIS process.

General

General questions about the land exchange asked about how the land exchange can override current Federal law and whether the land exchange sets any precedents for future activities and Federal and tribal lands. Also asked was how, with the 2,000-acre land exchange, did Resolution Copper obtain the rights to more than 6,000 acres of lands?

Schedule

What is the schedule for completion of the land exchange?

Valuation

Questions about the land exchange valuation process included the following:

- What is the value of the lands being exchanged to the Forest Service?
- How is the land valuation done for the appraisal? Is this based on natural resource values or purchase/sales values?
- Will the land exchange appraisal include the value of the mineral estate? Will the Forest Service look at core samples to determine whether there is gold and silver in the ore body?

2.4.1.4 RESOURCE TOPICS

Questions categorized as “impact analysis” include inquiries and concerns about how specific resources will be impacted by the proposed project and be subject to detailed analysis in the EIS process.

Air Quality

Questions were asked about the potential for air quality impacts from the loadout facility and the tailings facility.

Biological Resources

Biological resources questions included questions about the proposed mine's potential impacts to wildlife, riparian areas, and the nearby Devil's Canyon area.

Cultural Resources

Questions about cultural resources and how designations and impacts would be evaluated in the EIS were asked at each meeting. These questions included:

- What protocol will be used to survey and evaluate archeological sites?
- What influence will the designation of Oak Flat as a Traditional Cultural Property have on this process and decision?
- Will the ground movement from the proposed project impact the cemetery in Superior?

Geology and Minerals

Geology and minerals questions included inquiries about how earthquakes will be considered in the analysis and how long after mining begins the land subsidence will begin to occur.

Noise and Dark Skies

It was asked whether the EIS would include study of noise and light pollution impacts associated with the proposed project.

Public Health and Safety

Questions about potential public health and safety impacts associated the project included:

- Will the EIS study the cancer rates and public health issues related to historic mining operations in the Superior area?
- What impact will the new mine have on the cancer rates in Superior? Will disturbing the old tailings from the Magma Mine result in public health impacts to Superior?
- How will the EIS study public health issues?
- What is the hazard from blowing dust from the tailings facility?

Recreation

A question was asked about how the tailings facility would impact recreation resources and the Arizona National Scenic Trail. Concern was expressed for the loss of camping in the Oak flat campground, loss of rock climbing in the Oak Flat area, and loss of recreation at the tailings storage facility.

Socioeconomics

Questions regarding socioeconomic resources included questions about how socioeconomics would be studied in the EIS and what the geographic and temporal bounds of the analysis would be for the analysis. It was asked whether the socioeconomic study would include the East Valley of Phoenix, San Tan Valley, schools in Pinal County, potential for boom/bust cycles, and long-term post-mining job losses. It was also asked how the mining company profits would be considered in the economic study.

It was asked whether the Forest Service would be conducting an independent socioeconomic and jobs study and whether they would consider an economic study commissioned by the San Carlos Apache Tribe.

It was requested that the study include analyses of the economic impacts of water usage to the region and the state of Arizona and impacts from transportation of the mined ore to the final copper smelting destination. Questions were asked about how the mining proposal (particularly the tailings facility) would impact property values, area tourism, and whether the study would include job losses from decreased recreation activities in the area.

Visual Resources

It was asked whether the EIS would include study of visual resource impacts to nearby areas, including the Arizona National Scenic Trail.

Water Resources

Questions regarding water resources included:

- What is the source and quantity of water needed for the mine operations and what will this use do the water table; is there is enough water available for the mining operation; and will there be a study of the sustainability of using Central Arizona Project (CAP) water? Will the EIS consider drought conditions in Arizona?
- What are the impacts to water quality from acid rock drainage? Will the Forest Service require a liner under the tailings facility? What is the time frame for the tailings facility infrastructure, and what is the long-term impact of this facility on water quality?
- Can the Superior water treatment plant handle the mine's and the growing community's needs?
- Are mine operations impacting Queen Creek, and will it flow again?
- What are the long-term impacts from underground mining relative to the cone of depression and post-mining conditions?
- What will the impacts be from water pumping along the MARRCO corridor? Why are these wells not located in the recharge area?
- What will the impacts be to springs and other water sources in the area?
- What will the Forest Service do if it is determined that groundwater will be contaminated and threaten public health?
- Where are the locations of the 30 groundwater wells mentioned in the GPO? Will these be analyzed in the EIS?
- Will survey work for springs and other natural water resources in the area be conducted?
- What constituents are in the water after it runs through the filtration plant such that it is required to be blended at a 10:1 ratio with CAP water? How safe is it for use in agricultural operations?

2.4.1.5 NEPA PROCESS

The Forest Service received many questions about the NEPA process. There were general NEPA process questions and specific questions regarding agency coordination, alternatives development, cumulative effects, decision space, public scoping, schedule, and tribal consultation. These NEPA process questions are described below.

General

General NEPA process questions included the following:

- Who is paying for the EIS? Is the Forest Service paying for the EIS?
- How long will it take to complete the EIS?
- Is there a conflict of interest if Resolution Copper is paying for the EIS? Can the Forest Service guarantee an honest analysis if Resolution Copper is paying the consultant team?
- How is the Forest Service working with and involving Resolution Copper in the EIS process?
- Will the Forest Service continue to provide the public with information on resource studies?
- How does the Forest Service determine whether the information provided is true and accurate?
- Can the Forest Service explain what the appeal and objection process will entail at the end of this process?
- Does a person have to have submitted a formal comment to have legal standing to comment or object after the EIS has been completed?
- What happens if mine plans change after the EIS is completed and mine operations have begun?

Decision Space

Decision space refers to how NEPA decisions are made, items that are within or outside the jurisdiction or authority of the Forest Service, and what is covered in the EIS process. A number of questions regarding the NEPA/EIS decision space were asked at the public meetings and include the following:

- Is it possible to expand the decision beyond the Forest Supervisor to a panel of multiple persons?
- Has the NDAA left the Forest Service with no ability to choose the no action alternative? Did the NDAA leave the Forest Service without the ability to determine whether or not the proposal is in the public interest? If the Forest Service has no choice but to approve this mine, are we just going through the motions in this NEPA process?
- How is the Forest Service going to evaluate the issues at Oak Flat relative to the land exchange and the land becoming private property? What authority does the Forest Service have to compel the mine to implement EIS alternatives on the private parcel? Why spend resources and time on analyzing impacts on private and State land when the Forest Service does not have jurisdictional authority to regulate these lands?
- Why is the protected withdrawn area at Oak Flat no longer protected under this proposal?
- Is the Forest Service required to provide the space for the tailings facility on Forest Service lands?
- If the proposed legislation currently in Congress to overturn the land exchange legislation passes, how does this impact the current NEPA process?
- Does NEPA or the Forest Service enforce regulations to keep us safe? What kind of environmental protections does the Forest Service provide the people of Queen Valley?
- Who will hold Resolution Copper accountable for implementing the project as stipulated in the EIS?

Public Involvement

Public involvement for the Resolution Copper Project and Land Exchange EIS began with public scoping and will continue throughout the EIS process. Questions about public involvement activities that were asked at the public meetings included the following:

- Will the Forest Service hold additional public meetings in Phoenix, Tucson, Queen Creek, and San Tan, Arizona?
- How were the public meetings advertised? Will the Forest Service better advertise future meetings in the San Tan Valley?
- Will there be other opportunities for public participation during the EIS process? Will the Forest Service have any workshops?
- Will the public be allowed to comment on the scope of the EIS?
- Would the Forest Service consider releasing the scoping report as soon as it is done? And will the Forest Service consider having another public comment meeting after the public scoping report is published?
- Is the Forest Service responsible for notifying the people in San Tan Valley about the Resolution facility there or does that responsibility lie with Pinal County?
- How did the Forest Service select the Apache interpreter assisting with the public scoping meetings?

Bounds of Analysis

Questions regarding the “bounds of analysis” were related to the components of the proposed project that will be analyzed in the EIS. It was asked whether the EIS would cover all of the mining operations or only those components on Forest Service lands. A specific question was asked about the inclusion of impacts to San Tan Valley from the loadout facility.

Cumulative Effects

Questions categorized as cumulative effects included questions about whether the EIS will include analysis of mine processing water being used for agricultural lands and analysis of the water demands from a growing community in the Superior area, and whether the EIS will take into account the past environmental records of the Rio Tinto and BHP mining companies.

Agency Coordination

Specific questions regarding agency consultation in the NEPA process included questions about what agencies would be collaborating with the Forest Service in the EIS process. This included questions about creating an interagency “super team” and involving the U.S. Environmental Protection Agency (EPA) and Arizona Game and Fish Department (AGFD). Another person asked which Federal and State agencies will provide environmental protections and what their specific responsibilities might entail.

Tribal Consultation

Questions about tribal consultation included inquiries about how the Forest Service is working with the consulting tribes and whether the Forest Service is considering having a scoping meeting on the San Carlos Apache Reservation.

Alternatives Development

Questions about the NEPA alternatives development included the following:

- What are the mine plan alternatives? When will we see the alternatives?
- Will the EIS consider alternative mining techniques? Is there an alternative to the proposed block cave mining method?
- Can the Forest Service require an alternative mining technique or tailings location?
- Does the NEPA process require that the Forest Service choose the most feasible alternative with the least environmental impact?
- Is there an alternative way to manage and/or locate the mine tailings? Can the mine tailings be placed in an open pit area? Is there an alternative location for the tailings facility? Can the tailings be placed back underground in the mine area?
- What is the current NEPA process underway for the tailings facility?

CHAPTER 3

Public Comment Summary



3.0 CHAPTER 3 – PUBLIC COMMENT SUMMARY

3.1 Chapter Organization

This chapter contains a description of the public scoping comment analysis process and a summary of the public scoping comments received during the 120-day scoping period. The public comment summary in this chapter includes the following:

- description of the public scoping content analysis process (description of the comment database, development of the coding structure, identification and coding of comments, comment summary process);
- description and summary of comment submittals received; and
- summary of public comment content for key topic areas.

3.2 Scoping Content Analysis Process

Public and agency comments on the Resolution Copper Project and Land Exchange EIS were analyzed and categorized using a standard Forest Service process called “content analysis.” The four-phase content analysis process includes

1. importing and organizing all submittal content in a comment database;
2. developing an issue and rationale coding structure;
3. carefully reading each submittal and assigning codes to relevant comments; and
4. preparing a narrative report of the results of the analysis.

The goals of the content analysis process are to 1) ensure that every comment is considered, 2) identify the concerns raised by all respondents, 3) represent the breadth and depth of the public’s viewpoints and concerns as fairly as possible, and 4) present those concerns in a way that facilitates the Forest Service’s consideration of comments. It is important to note that the content analysis process is not and should not be considered a vote. 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 who wrote it or the number of submitters who agreed with it.

3.2.1 *Scoping Comment Database*

Names, contact information, and letter text for all respondents who submitted comments were entered into an electronic comment database; each database entry is considered a “submittal” in this report. The majority of the submittals were delivered to the Forest Service in electronic format (emails and attached letters in Portable Document Format [PDF] format), which expedited creating submittal records in the database using various import procedures. Hard-copy submittals, including those delivered by postal service or at public meetings, were entered into the database manually (commenter information and comment text). Each submittal entered into the database was assigned a unique number and identified the sender type to indicate the entity from which it was received (i.e., individual, government, non-governmental organization [NGO], or tribe). Submittals that included only a person’s name and any address information were categorized as having been received from an individual (including comments affiliated with a business). Other submittals showing affiliation with a government (Federal, State, local), tribe, or NGO were assigned to the corresponding category. Submittals from elected officials were categorized as government or tribe, depending upon their affiliation. Submittals were then divided into the

following four categories, depending on submittal content: Unique, Duplicate, Form Letter Master, or Form Letter + (see descriptions below).

The content of the electronic submittals was filtered using various database queries and by reading through submittal text, to identify potential form letters (see form letter discussion below). If the content of a submittal was distinct from identified form letters or deviated from the original content of the form letter enough to change the meaning or intended message of the form letter, the submittal was identified as “Unique.”

Any submittals identified as having the same commenter information and content, regardless of delivery format (e.g., hard-copy letter, email) or date, were counted as one submittal: one record was categorized as “Unique,” and all other copies of the identical submittal were categorized as “Duplicate.”

3.2.2 Form Letters

Form letters are identified as any submittal with the same content that is received more than five times. The electronic submittals were pre-screened in the database, using various queries to identify any like content and potential form letters. As consistent content among submittals was identified, a form letter record with that content was created in the database and assigned a number; additional submittals with the same content were placed into that form letter category. The first form letter identified was marked “Master” and then coded for comment content; all additional like forms were then tallied. The form letters are tallied to track comment submittals; however, only the form letter master comments are counted in the comment totals. [Appendix F](#) includes all identified form letter master submittals.

Any form letter content that was in addition to the content of the master form letter was read and analyzed for additional comments. In these cases, where the additional form letter content contained comments that were not already captured in the form master, the submittal was categorized as “Form Letter +” (e.g., Form 1+). All Form Letter + content was coded and counted in the comment totals.

3.2.3 Development of the Coding Structure

A coding structure was developed to help sort submittal content into logical categories that represent respondents’ concerns and rationale. Codes provide an efficient and accurate grouping of similar comments; coded concerns are referred to as “comments” in this report.

The coding structure contains “issue” and “rationale” codes. Issue codes categorize overall project-related issue topic areas, and rationale codes represent the rationale or reasons for concern. The coding structure identifies applicable project elements, environmental resources, planning processes, and rationale in comment submittals. An initial coding structure was developed based on expected issues and concern; this structure evolved through the process of reading submittals and identifying new and additional concerns. Issue and rationale codes were assigned numeric values, which allows for quick access to comments on specific topics. [Table 3.2.3-1](#) shows the issue and rationale categories that were determined to be most inclusive and representative of the comments received during public scoping.

Table 3.2.3-1. Comment Coding Issue and Rationale Category Codes

Issue Category			
101	Code TBS / Pending	142	Subsidence Zone / Oak Flat
102	Support / Opposition	143	Mineral Processing / West Plant Site
110	NEPA Process	144	Groundwater Pumping

Table 3.2.3-1. Comment Coding Issue and Rationale Category Codes (Continued)

Issue Category			
111	Public Involvement / Meetings	145	MARRCO Corridor
112	Best Available Science	146	Loadout Facility
113	Alternatives	150	General Analysis / Management
115	Baseline EA	160	Heritage Resources
120	Socioeconomic Study	161	Apache Leap Special Management Area
130	Land Exchange	170	Recreation / Public Access
131	Land Exchange Valuation	180	Public Health and Safety
132	Land Exchange Legislation	190	Transportation
140	General Mine Operations	200	Mine Reclamation
141	Tailings Facility	210	Laws and Regulations
Rationale Category			
501	Code TBD / Pending	584	Apache Leap
502	General Support	585	Tribal Consultation
503	General Opposition	586	Regional History
504	No Rationale	600	Biological Resources
505	Multiple Affected Resources / Reasons	601	Wildlife
506	Persons or Groups	602	Riparian / Aquatics Resources
520	NEPA Process	603	Special Status Species
521	Mitigations	604	Plant Salvage
522	Connected Action	605	Invasive Species
533	Comment Process	606	Bird Species
534	Scoping Meetings	607	Fish
535	Other Permits / Regulations	608	Plants
536	Mining Withdrawal Area	620	Recreational Resources
537	Alternatives	621	Trails
538	Mine Plan of Operations	583	NRHP – National Register of Historic Properties
539	Cumulative Impacts	584	Apache Leap
540	Socioeconomics	622	Rock Climbing
541	Multiplier	623	Boyce Thompson Arboretum
542	Tax Dollars	624	Public Access
543	Benefits (general)	625	Hunting
544	Jobs	626	Arizona National Scenic Trail
545	Study	640	Visual Resources
546	Property Values	650	Public Health and Safety
547	Property Taxes	651	Wildfire
548	Public Costs	660	Roads
549	Tourism	670	Air Quality
550	Losses (general)	680	Ranching / Grazing / Farming
551	Copper Demand / Uses	690	Noise and Vibration

Table 3.2.3-1. Comment Coding Issue and Rationale Category Codes (Continued)

Rationale Category			
552	Social Impact Assessment	691	Night Sky / Light Pollution
560	Water Resources	700	Trains
561	Water Supply	710	Traffic
562	Water Quality	720	Climate Change
563	Water Quantity	730	Geology
564	Groundwater	731	Mining Claims
565	Surface Water	740	Land Conservation
566	Wastewater	741	Public Lands
567	Acid Mine Drainage	742	Land Ownership
568	Groundwater Recharge	750	Company History
569	Pit Lake	760	Bond Structure / Amount
580	Cultural Resources	770	Mine Reclamation
581	American Indian Religious Freedom Act	780	Cooperating Agency
582	Tribal Values	790	Environmental Justice

3.2.4 Identification and Coding of Comments

All Form Letter Master, Form Letter +, and Unique submittals were carefully read to identify comments that will be used to formulate the issues and analysis conducted in the EIS process. Each individual statement identified as a comment was assigned to an issue code (numeric) (see [Table 3.2.3-1](#)) and at least one rationale code. A rationale code (numeric) identifies a specific rationale for comments within the identified issue category (see [Table 3.2.3-1](#)). For example, a comment that discussed the proposed land exchange and property values would first be coded as 130 (Land Exchange) to identify this as a land exchange issue, and then it would be coded as 546 (Property Values) to document that property values was the specific comment rationale. Comments could be coded to multiple rationale codes, depending on the comment content. For example, a comment that discussed the NEPA process, alternatives, and mitigation would first be coded as issue category 110 (NEPA Process), then as rationale codes 521 (Mitigations) and 537 (Alternatives) to identify the specific NEPA process rationale for the comments. For any submittal received, there may have been several comments, each coded separately based on the issue and the specific rationale. This form of analysis allows for specific comments to be captured and then grouped under the umbrella of a general resource issue. It also allows for cross-referencing and comparison between specific proposed action components and resources concerns. Codes were assigned by staff members trained in this comment analysis process. Each discrete comment was entered into the comment database.

3.3 Summary of Public Comment Submittals

3.3.1 Submittals Received

In total, 133,653 submittals were collected during public scoping, 141 of which were identified as duplicate submittals. Of the 133,512 non-duplicate submittals received, 98.56% (131,592 submittals) were identified as form letters, 0.51% (683 submittals) as form letters with additional comments (Form Letter +), and 0.93% (1,237) as unique submittals. [Table 3.3.1-1](#) shows the distribution of submittals by submittal type. [Figure 3.3.1-1](#) shows the percentage of submittals distributed by submittal type. [Appendix F](#) provides a table showing the comment text and form letter sponsors for each of the 14 form letters identified in the submittals received.

In total, 133,653 submittals were received during the public scoping period.

Table 3.3.1-1. Distribution of Submittals by Submittal Type

Submittal Type	Letter Count
Duplicate	141
Unique	1,237
Form 1	478
Form 1+	37
Form 2	16,854
Form 2+	122
Form 3	722
Form 3+	5
Form 4	219
Form 4+	42
Form 5	193
Form 5+	43
Form 6	5,949
Form 6+	64
Form 7	109
Form 7+	1
Form 8	106,911
Form 8+	369
Form 9	22
Form 10	18
Form 11	37
Form 12	22
Form 13	18
Form 14	40
Total	133,512

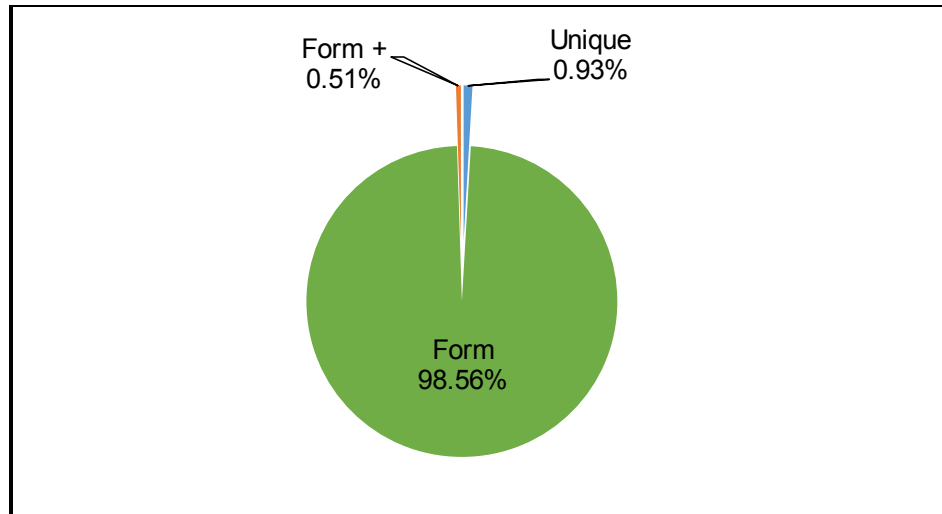


Figure 3.3.1-1. Distribution of submittals by submittal type.

The vast majority of submittals received—99.43% (132,746)—were submitted via email. The remaining 0.57% of submittals were hand-delivered or delivered via oral testimony (26), mail (512), telephone (14), fax (3), or web form (211). [Table 3.3.1-2](#) shows the total number of submittals received by delivery type.

Table 3.3.1-2. Distribution of Submittals by Delivery Type

Delivery Method	Letter Count
Email	132,746
Hand-Delivered or Oral Testimony	26
Mail	512
Telephone	14
Fax	3
Web Form	211
Total	133,512

Individual submittals accounted for 99.89% (133,368) of the total submittals received during public scoping. NGOs, governments, and tribal entities, combined, represented the remaining 0.11% (144) of submittals. [Table 3.3.1-3](#) shows the distribution of submittals by sender type. One submittal received was sent on behalf of 16 NGOs and individuals, some of whom also submitted additional comments individually. [Tables 3.3.1-4](#), [3.3.1-5](#), and [3.3.1-6](#) list the NGOs, government entities, and tribal entities that submitted comments during public scoping.

Table 3.3.1-3. Distribution of Submittals by Sender Type

Sender Type	Letter Count
Individual	133,368
NGO	66
Government	74
Tribal	4
Total	133,512

Table 3.3.1-4. NGOs that Submitted Comments during Public Scoping

NGO	
Avaaz	Globe-Miami Chamber of Commerce
Access Fund	Great Old Broads for Wilderness, Arizona South/Central
American Council of Engineering Companies of Arizona	Greater Phoenix Economic Council
American Exploration and Mining Association	Greater Phoenix Leadership
Apache League Coalition	Greater Phoenix Chamber of Commerce
Arizona Bankers Association	Legends of Superior Trails, Inc./Legends of the Lost Trail, Inc.
Arizona Builders Alliance	Maricopa Audubon Society
Arizona Cattle Growers Association	Patagonia Area Resources Alliance
Arizona Chamber of Commerce and Industry	Pinal Partnership
Arizona Mining Association	Prosper
Arizona Mining Reform Coalition	Salt River Project
Arizona Restaurant Association	Save the Scenic Santa Ritas
Arizona Rock Products Association	Save Tonto National Forest
Arizona Trail Association	Sierra Club
Audubon Arizona	Sierra Club – Grand Canyon Chapter
Arizona Association of General Contractors	Sky Island Alliance
Center for Biological Diversity	Southern Arizona Business Coalition
Center for Science in Public Participation	Southern Gila County Economic Development Corporation
Climbing Association of Southern Arizona	Southwest Center for History and Public Policy
Cobre Valley Institute of Technology	Superior Community Working Group
Concerned Citizens and Retired Miner Coalition	Superior Optimist Club
Concerned Climbers of Arizona	Superior Unified School District
Copper Corridor Economic Development Coalition	Superstition Area Land Trust
Don't Waste Arizona	The Nature Conservancy
Earthworks	Tucson Audubon Society
East Valley Hispanic Chamber of Commerce	Valley Partnership
East Valley Partnership	Valley Unitarian Universalist Congregation – Green Sanctuary
Eastern Arizona Counties Organization	WildEarth Guardians

Table 3.3.1-5. Government Entities that Submitted Comments during Public Scoping

Government	
Arizona Corporation Commission	Mesa City Council
Arizona Department of Environmental Quality	Mohave County Board of Supervisors
Arizona Game and Fish Department	Navajo County Board of Supervisors
Arizona House of Representatives	Paradise Valley Town Council
Arizona State Senate	Phoenix City Council
City of Chandler	Pinal County
City of Globe	State of Arizona
City of Mesa	Superior Town Council
City of Tempe	Town of Cave Creek
County Supervisors Association of Arizona	Town of Paradise Valley
Environmental Protection Agency	Town of Payson
Gila County Board of Supervisors	U.S. Environmental Protection Agency
Graham County Board of Supervisors	United States House of Representatives
Greenlee County Board of Supervisors	United States Senate
Maricopa County Board of Supervisors	Yavapai County

Table 3.3.1-6. Tribal Entities that Submitted Comments during Public Scoping

Tribal
Inter Tribal Association of Arizona
San Carlos Apache Tribe
White Mountain Apache Tribe

3.3.2 Comments Identified

In total, 6,948 comments were coded from the form letter master, form letter +, and unique submittals. As described in the comment analysis section, comment text identified in the form letters were counted only one time for the form letter master. Form letter masters contained a total of 108 comments. [Table 3.3.2-1](#) and [Figure 3.3.2-1](#) show the general distribution of comments by submittal type.

Table 3.3.2-1. General Distribution of Comments by Submittal Type

Submittal Type	Comment Count
Unique	5,689
Form 1	12
Form 1+	78
Form 2	15
Form 2+	380
Form 3	11
Form 3+	5

Table 3.3.2-1. General Distribution of Comments by Submittal Type
(Continued)

Submittal Type	Comment Count
Form 4	12
Form 4+	61
Form 5	11
Form 5+	95
Form 6	13
Form 6+	99
Form 7	6
Form 7+	3
Form 8	2
Form 8+	430
Form 9	4
Form 10	4
Form 11	3
Form 12	4
Form 13	5
Form 14	6
Total	6,948

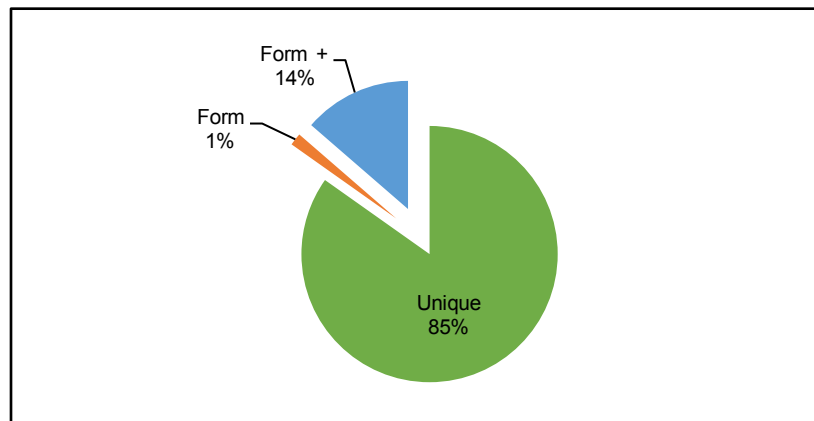


Figure 3.3.2-1. General distribution of comments by submittal type.

Of the 6,840 non-Form letter comments identified in the submittals, 72% were submitted by individuals. The remaining comments were submitted by NGOs (15.6%), government entities (9.9%), and tribal entities (2.5%). [Table 3.3.2-2](#) and [Figure 3.3.2-2](#) show the general distribution of comments identified by sender type.

Table 3.3.2-2. General Distribution of Comments by Sender Type

Sender Type	Comment Count
Individual	4,928
NGO	1,067
Government	676
Tribal	169
Total	6,840

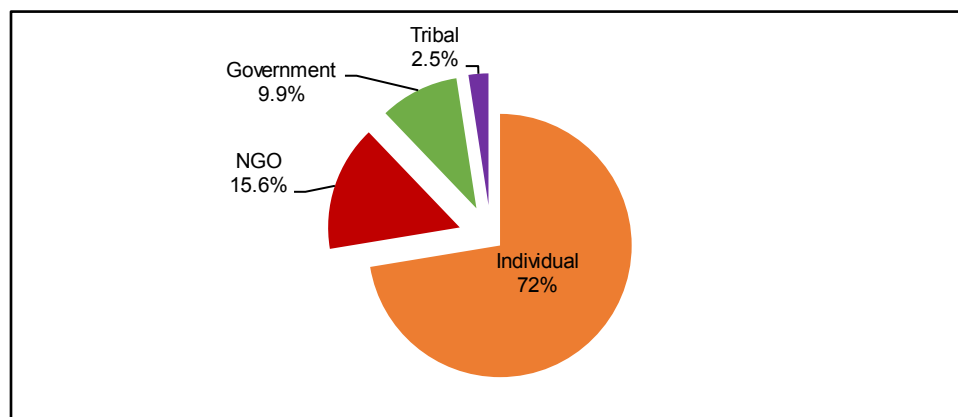


Figure 3.3.2-2. General distribution of comments by sender type.

[Appendix G](#) provides a summary table of the distribution of individual comments received by issue and rationale code. [Figure 3.3.2-3](#) shows the distribution, by comment count, of the most frequently mentioned unique comments by issue code. For the purposes of displaying comment counts by rationale, the rationale codes were grouped into topic areas similar those presented in the comment summaries in [Sections 3.5, 3.6, and 3.7](#) of this report. [Figure 3.3.2-4](#) shows the distribution, by comment count, of the most frequently mentioned unique comments organized by rationale topic area.

3.3.3 Geographic Distribution

Public scoping respondents were able to self-report their geographic information along with their comment submittal. While some respondents provided this information, the majority of submittals did not contain identifiable geographic information. Of the comments for which geographic information could be determined, comments were submitted from around the state of Arizona, the United States, and internationally. Due to the large volume of submittals received and the minimal respondent geographic information provided, a statistically relevant geographic distribution summary of the total comments received could not be compiled.

3.4 Comment Summary Process

The final phase of the public scoping process included summarizing the content of the comments into a narrative summary and preparing this report. The intent of the narrative comment summary is to provide representative summaries that capture, with a minimum of repetition, all major topic areas or concerns expressed during the public scoping period. The topic areas or concerns contained in the summary of public comment will be used to develop the issues, alternatives, and mitigation strategies that will be analyzed in the EIS process.

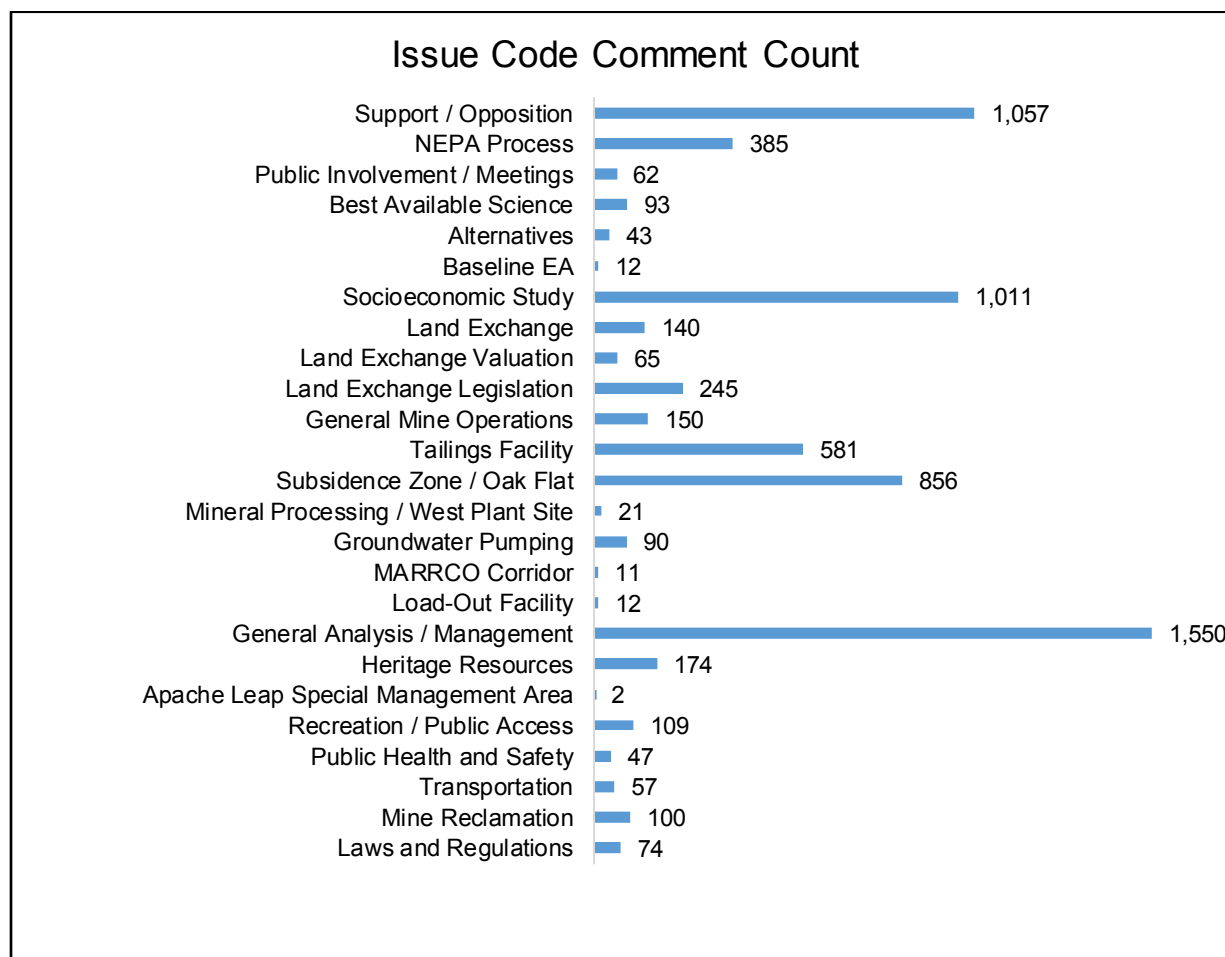


Figure 3.3.2-3. Distribution of comments submitted during public scoping, categorized by issue code.

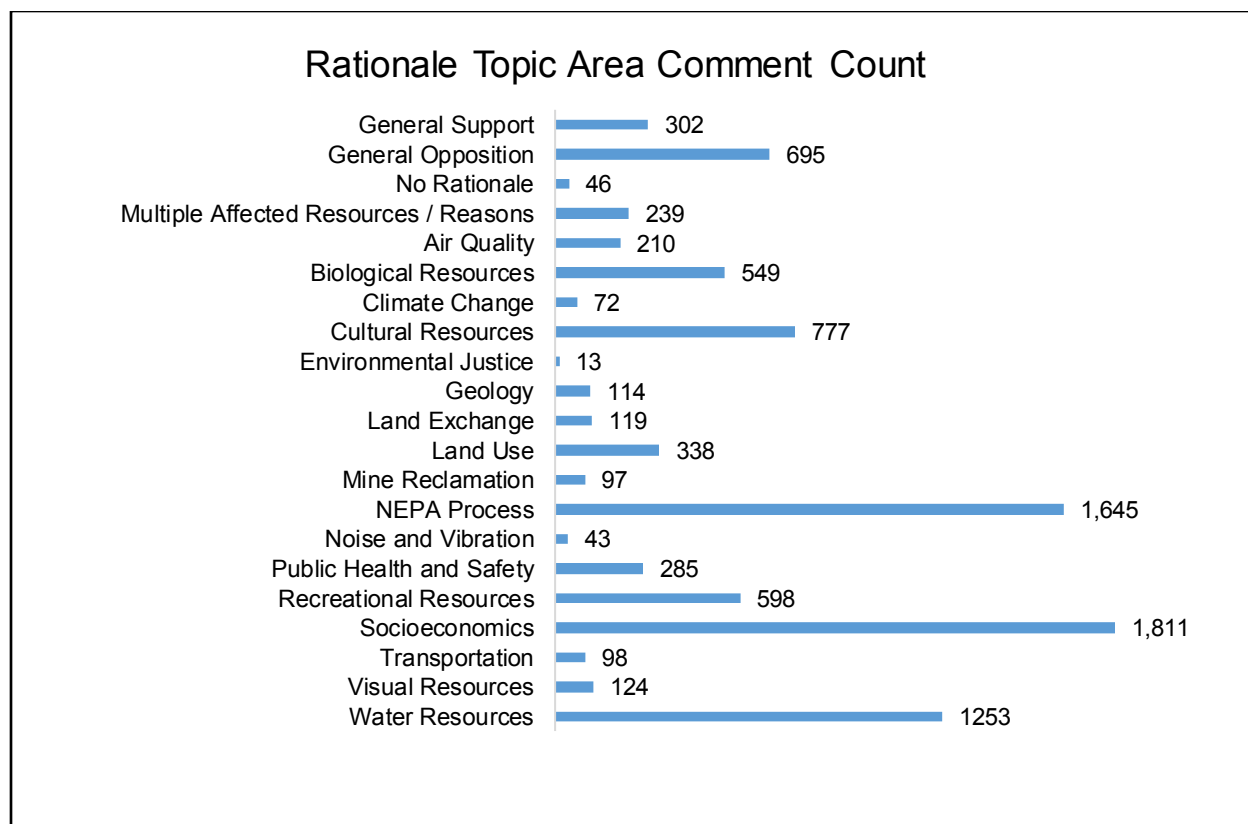


Figure 3.3.2-4. Distribution of comments submitted during public scoping, categorized by rationale topic area.

Development of the narrative comment summary began by exporting all of the coded comments from the comment database organized by issue code and rationale code. Similar and related issue and rationale codes were combined into broader theme categories that represent the overall content of the comments. Tables provided at the beginning of each comment summary section show the issue and rationale codes summarized within that section.

During the summary writing process, comment analysts thoroughly read each comment to understand the overall content of the comment and to carefully identify topic areas or concerns in similar comments from different respondents. Similar comments were summarized into concise narrative statements and organized by the theme categories. The comment summary attempts to provide a fair representation of the wide range of views submitted, but it does not attempt to treat input as if it were a vote or a statistical sample. It is important to note that during the process of identifying topic areas or concerns, all comments have been treated equally, and comments are not weighted by the number of respondents. It does not matter if an idea was expressed by hundreds of people or a single person.

Every effort was made to summarize the topic areas or concerns that were frequently mentioned, as well as those that were mentioned only once or twice. Statements such as “one,” “a few,” “multiple,” or “many” are used in the narrative writing to convey, in general terms, how often topic areas or concerns were expressed in the comments. Direct comment quotes are included in the narrative writing to serve as representative examples of the topic areas or concerns expressed by respondents, demonstrate commenters’ statements of opinions, and add interest and variety to the writing. For reference purposes, when a direct quote is used, the submittal identification number is included in square brackets at the end

of the quote (e.g., “*What are the environmental impacts of the mine?*” [12345]). When quoted comment text is found in more than three submittal letters, the submittal letter numbers are omitted.

The summary of public comment in Sections 3.5, 3.6, and 3.7 is organized as follows:

- **Section 3.5, Summary of Public Comment – Proposed Action.** This section provides a summary of the general public opinion comments and an overarching summary of the proposed action (Mine Operations and Land Exchange) comments. This section is meant to be used by the reader as a general introduction to the proposed action topic areas or concerns that are expressed in the comments.
- **Section 3.6, Summary of Public Comment – Resource Topics.** This section provides a detailed summary of public comments organized by resource topic (e.g., air quality, biological resources, climate change, etc.). This section summarizes resource-specific comments, such as comments concerning wildlife habitat loss, loss of recreational climbing access in the subsidence zone, and dust and emissions at the mineral processing facility.
- **Section 3.7, Summary of Public Comment – NEPA Process.** This section provides a summary of public comments on the National Environmental Policy Act (NEPA) process. NEPA process topics include the public involvement process, purpose and need, GPO, best available science, cumulative impacts, connected actions, other laws and regulations, tribal consultation, cooperating agencies, and the no action alternative. Public comment suggestions for proposed action alternatives and mitigation measures are also included in this section.

3.5 Summary of Public Comment – Proposed Action

This section provides a summary of the general public opinion comments and an overarching summary of the proposed action (Mine Operations and Land Exchange) comments. This section is organized into the following subsections:

- General Opinion
- Mine Operations
- Land Exchange

3.5.1 General Opinion

Commenters express both support and opposition to the proposed action (Mine Operations and Land Exchange). The following sections describe the rationale for support and opposition to the proposed action. The issue and rationale codes summarized in this section are shown in [Table 3.5.1-1](#).

Table 3.5.1-1. Issue and Rationale Codes Summarized in Section 3.5.1, General Opinion

Comment Summary Section	Issue and Rationale Codes
3.5.1 General Opinion	102 Support / Opposition 502 General Support 503 General Opposition

3.5.1.1 GENERAL SUPPORT

The proposed project is supported by many commenters. The main reason for supporting the mining project is socioeconomic benefit. Supporters state that mining operations would provide long-term

employment opportunities to the Superior area. One comment reads, *“In a true win-win, important lands will become available to the public for conservation and the mine’s operations will provide jobs, personal income, and increased growth for the state and national economy”* [90].

Education is another factor in public support for the project. Increased profits and taxes would provide schools with much-needed resources. Commenters are also hopeful that the added local and regional revenues would help the town of Superior and surrounding communities invest in sustainable infrastructure.

Some commenters note that mining technology has advanced and improved tremendously over the years and state that there is little negative environmental impact: *“The copper will be extracted under some of the best environmental and safety controls worldwide”* [101; 11771]. Commenters who support the project also reflect on the environmental awareness of Resolution Copper and its parent companies, noting that the company has expended millions of dollars mitigating past environmental impacts.

Additionally, mining culture has been a part of the local and regional community for decades, and many commenters would like to see that culture continue.

3.5.1.2 GENERAL OPPOSITION

Multiple rationales are presented in the comments for general opposition to the project, including the intrinsic natural beauty of the land, loss of public lands, and impacts to resources. Commenters would like the land to remain publicly owned. One commenter states, *“Protection of land as special as this is imperative, especially as people recognize the value in the land”* and *“it is valuable ecologically, hydrologically, recreationally, culturally, not because there is a resource to be mined”* [24].

Many commenters are concerned about the loss of Native American sacred lands. Commenters are concerned about how a sacred area is being disrespected by Resolution Copper: *“The Native peoples have known it, and many still know it in their hearts, as home and the source of their true being, culture and religion, their meaning as individuals and as a people”* [26274].

Recreation is an important resource in the area, and commenters do not want to see their recreation sites lost or destroyed by the proposed project. One commenter states, *“This land is extremely valuable due to the recreational activities that take place on it”* [2429]. Much of the recreational opposition to the project comes from the climbing community. Climbers say that they would not be able to enjoy their outdoor hobby any longer and that the proposed project would inhibit rock climbing in the area: *“The rock climbing opportunities at Oak Flat cannot be replaced by mitigation or alternative locations”* [21219].

Many commenters are concerned that air and water quality would decline because of the mining activities. There are concerns about toxic waste contaminating water quality, dust from activities polluting the air, and tailings piles being left on public lands. The public is concerned about the *“unnecessary health risks and public health concerns related to the project’s impact.”*

Additionally, commenters are concerned about the land exchange. Many respondents state that the land exchange is not equivalent in resources or monetary value to what is being traded. Commenters are also concerned that the land exchange was made without representation of the Tribes and other communities within the region.

3.5.2 Mine Operations

The mine operations section provides an overarching comment summary of the concerns associated with the proposed mine operations. [Table 3.5.2-1](#) lists the issue and rationale codes summarized in the mine

operations section. This section is meant to introduce the reader to the wide array of topic areas or concerns associated with each major component of the mine operations. A more detailed discussion of the resource-specific and NEPA process topic areas or concerns reported in this section can be found in [Sections 3.6](#) and [3.7](#), and references to the corresponding sections are provided.

Table 3.5.2-1. Issue and Rationale Codes Summarized in Section 3.5.2, Mine Operations

Comment Summary Section	Issue and Rationale Codes
3.5.2 Mine Operations	140 General Mine Operations 141 Tailings Facility 142 Subsidence Zone / Oak Flat 143 Mineral Processing / West Plant Site 144 Groundwater Pumping 145 MARRCO Corridor 146 Loadout Facility 200 Mine Reclamation 750 Company History 760 Bond Structure / Amount 770 Mine Reclamation

3.5.2.1 GENERAL MINE OPERATIONS

In general, the mine operations comments reflect concern about the proposed project's impacts to a broad range of resources. Resource areas of concern range from water, air, and biological resources to public health and safety and cultural resources. Many of the comments include questions and concerns regarding the proposed mining methodology and concerns with various mine operations facilities, including slurry pipelines, mineral processing facilities, and the tailings storage facility.

Additionally, comments include discussion of Resolution Copper and its parent companies' regional and international history. Respondents express positive views toward Resolution Copper's previous investments in mine reclamation, local engagement in environmentally and socially responsible mining practices, and local investments in tribal communities. In contrast, respondents also express concern about Resolution Copper's parent companies' historical record of closing mines in the region, environmental disasters at international mines, and human and labor rights concerns.

3.5.2.2 POWER FACILITIES

Power facility concerns in the comments include the proposed project's power supply needs and the environmental impacts of the proposed new and upgraded electrical power facilities. Commenters request that the EIS include analysis of power supply and power facility impacts. [Table 3.5.2.2-1](#) lists power facilities topics and the sections in which further discussion can be found.

Table 3.5.2.2-1. Power Facilities Concern Topics

Power Facilities Concern Topic	Associated Report Sections
Environmental impacts of construction power facilities and from increased power generation. Resource areas of concern include water usage, air quality, greenhouse gas emissions, and bird species.	3.6.1.2 Sources of Air Pollution 3.6.2.6 Bird Species 3.6.3 Climate Change 3.6.14.6 Water Quantity
Public costs of expanding existing and developing new power facilities.	3.6.11.8 Public Costs
Visual impacts from powerline construction.	3.6.13 Visual Resources
Connected action of new power line corridor and substation expansion.	3.7.7 Connected Actions

3.5.2.3 SUBSIDENCE ZONE

Many of the mine operation comments concern the subsidence impacts to the Oak Flat area that would result from the proposed mining method. The major topic of concern is the impacts to cultural resources in the Oak Flat area. Respondents are also concerned about the depth and extent of the subsidence zone, loss of recreation areas and public access, employee safety, and irreversible impacts to environmental resources. [Table 3.5.2.3-1](#) lists subsidence zone topics and the sections in which further discussion can be found.

Table 3.5.2.3-1. Subsidence Zone Concern Topics

Subsidence Zone Concern Topic	Associated Report Sections
Mine reclamation of the subsidence zone.	3.5.2.10 Mine Reclamation
Land exchange legislation.	3.5.3.1 Land Exchange Legislation
Air quality impacts and greenhouse gas emissions resulting from mine operations in the subsidence zone.	3.6.1.2 Sources of Air Pollution 3.6.3 Climate Change
Loss of a biologically rich environment in the subsidence zone.	3.6.2.2 Riparian, Aquatic Resources, and Fish 3.6.2.3 Special Status Species
Impacts to flora and fauna, including birds and special status species in the subsidence zone.	3.6.2.2 Riparian, Aquatic Resources, and Fish 3.6.2.3 Special Status Species
Loss of cultural resources in the subsidence zone area, including tribal values, archaeological sites, traditional cultural properties, and historic properties.	3.6.4.2 Archaeological Sites and Historic Resources
Proposed depth and extent of the subsidence zone.	3.6.6.2 Subsidence
Geologic stability of the subsidence zone, both during mine operations and post-closure.	3.6.6.2 Subsidence
Geologic impacts to the surrounding areas and communities.	3.6.6.2 Subsidence
Public safety in the subsidence zone.	3.6.9.2 Public Safety
Advanced and robotic mining techniques impact on employment and mine safety.	3.6.9.3 Employee Health and Safety 3.6.11.5 Employment
Loss of recreation resources, including trails, climbing areas, wildlife viewing, public access roads, and camping areas in the subsidence zone and surrounding areas.	3.6.10 Recreation and Public Access
Socioeconomic benefits in employment and tax revenues.	3.6.11.4 Tax Revenues 3.6.11.5 Employment
Public costs resulting from impacts associated with the subsidence zone.	3.6.11.8 Public Costs
Socioeconomic losses to the recreation and tourism industries.	3.6.11.9 Tourism 3.6.11.11 Socioeconomics-Related Resource Impacts (Recreation Resources)
Loss of public lands and access to public lands in the subsidence zone.	3.6.7.3 Land Conservation – Public Lands 3.6.10.4 Recreational Access Roads
Visual impacts of the subsidence crater.	3.6.13 Visual Resources
Groundwater and surface water impacts resulting from mine operations in the subsidence zone and long-term impacts post-closure.	3.6.14.1 Surface Water 3.6.14.2 Groundwater
Acid mine drainage in the subsidence zone.	3.6.14.4 Water Quality
Development of a pit lake post-closure and long-term water quality management.	3.6.14.4 Water Quality
Role of Public Land Order 1229, Oak Flat Picnic and Campground Mining Withdrawal.	3.7.8 Other Laws and Regulations
Long-term monitoring and management of the subsidence zone and subsidence zone impacts.	3.7.13.1 Mitigation – Subsidence Zone 3.7.13.3 Mitigation – Oversight, Enforcement, Laws, and Regulations

3.5.2.4 GROUNDWATER PUMPING

The proposed mine's use of groundwater, through groundwater pumping, is of concern to many respondents. Generally, commenters are concerned that the proposed groundwater pumping would have long-term negative impacts on the area's aquifer and result in a reduction in groundwater availability for existing and future uses, including private wells and community water supplies. Additionally, respondents are concerned that groundwater pumping would impact surface water, riparian resources, and wildlife. [Table 3.5.2.4-1](#) lists groundwater pumping topics and the sections in which further discussion can be found.

Table 3.5.2.4-1. Groundwater Pumping Concern Topics

Groundwater Pumping Concern Topic	Associated Report Sections
Watershed impacts to Devil's Canyon, Mineral Creek, riparian areas, seeps, and springs.	3.6.2.6 Bird Species 3.6.14 Water Resources 3.6.14.1 Surface Water 3.6.14.2 Groundwater
Cumulative impacts of a prolonged drought and climate change.	3.6.3 Climate Change
Impacts to surface waters and drinking water sources used for recreational purposes.	3.6.10 Recreation and Public Access 3.7.13.2 Mitigation – Recreation and Public Access
Public vs. mine operator's costs to construct new groundwater pumping wells.	3.6.11.8 Public Costs
Long-term drawdown of the aquifer from groundwater pumping.	3.6.14.2 Groundwater
Mine shaft dewatering impacts to groundwater supply.	3.6.14.2 Groundwater 3.6.14.5 Water Supply
Hydrogeological faulting resulting from groundwater pumping.	3.6.14.3 Hydrogeology
Resolution Copper and other users water rights.	3.6.14.5 Water Supply
Region's historic and current mining groundwater pumping impacts on water supply.	3.6.14.5 Water Supply
Impact of groundwater pumping on community water supplies and downstream users.	3.6.14.5 Water Supply
Availability of groundwater to support the proposed mine operations.	3.6.14.6 Water Quantity
Impact of groundwater pumping on water availability for farming.	3.6.7.2 Ranching, Grazing, and Farming 3.6.14.5 Water Supply
What is the purpose of the Queen Valley pumping station?	3.7.4 General Plan of Operations Content and Data Gaps
Proposed plans for groundwater recharge.	3.7.12.2 Alternatives – Water Resources

3.5.2.5 MAGMA ARIZONA RAILROAD COMPANY CORRIDOR

Respondent comments on the Magma Arizona Railroad Company (MARRCO) corridor are primarily concerned about the pipeline infrastructure and impacts to recreation trails. [Table 3.5.2.5-1](#) lists MARRCO corridor topics and the sections in which further discussion can be found.

Table 3.5.2.5-1. MARRCO Corridor Concern Topics

MARRCO Corridor Concern Topic	Associated Report Sections
Air quality impacts from construction and mine operations in the MARRCO corridor, including dust pollution and impacts to Particulate Matter 10 non-attainment areas.	3.6.1.2 Sources of Air Pollution
Recreation impacts to the Arizona National Scenic Trail, including safety at pipeline trail crossings.	3.6.10.1 Trails 3.7.12.1 Alternatives – MARRCO Corridor
Impacts to existing and planned recreational trails, specifically those identified in the “Pinal County Open Space and Trails Master Plan.”	3.6.10.1 Trails 3.7.13.3 Mitigation – Oversight, Enforcement, Laws and Regulations
Visual resource impacts from mine operations and mine facilities in the MARRCO corridor on adjacent land uses.	3.6.13 Visual Resources
Water pollution impacts to Queen Creek and Gila River.	3.6.14.4 Water Quality
Connection between the project and the existing MARRCO corridor special use permit.	3.7.7 Connected Actions

3.5.2.6 SLURRY PIPELINES

Comments specifically discussing the proposed slurry pipeline infrastructure are concerned about the construction methods, slurry alternatives, and the environmental risks of pipeline breaks. [Table 3.5.2.6-1](#) lists slurry pipeline topics and the sections in which further discussion can be found.

Table 3.5.2.6-1. Slurry Pipeline Concern Topics

Slurry Pipeline Concern Topic	Associated Report Sections
Environmental impact of pipeline breaks, including air and water contamination.	3.6.1.2 Sources of Air Pollution 3.6.14.4 Water Quality
Ground vibration effects on wildlife and surrounding communities, including people, pets and livestock.	3.6.2.1 General Wildlife 3.6.6.5 Other Geological Concerns 3.6.8 Noise and Vibrations
Noise impacts from the pipeline construction and operation.	3.6.8 Noise and Vibrations
Pipeline crossings of washes and potential surface water impacts.	3.6.9.1 Public Health
Public health and safety risk of pipeline break.	3.6.9.1 Public Health
Recreational impacts from pipeline construction, including trail crossings and recreational target shooting of pipelines.	3.6.10.1 Trails 3.7.13.1 Mitigation – Slurry Pipelines
Chemical contents of the slurry and potential for groundwater contamination.	3.6.14.4 Water Quality 3.7.4 General Plan of Operations Content and Data Gaps
Construction methods and durability of the pipeline infrastructure, including maintenance and replacement schedules.	3.7.4 General Plan of Operations Content and Data Gaps
Pipeline water usage and alternative designs.	3.7.12.1 Alternatives – Slurry Pipelines 3.7.12.2 Alternatives – Water Resources
Monitoring and mitigation plan for pipeline breaks, including a spill prevention and response plans in the event of a pipeline break or failure.	3.7.13.1 Mitigation – Slurry Pipelines

3.5.2.7 MINERAL PROCESSING

Comments on the proposed mineral processing site and proposed facilities span a wide array of environmental resources. Mineral processing impacts to the communities of Superior and San Tan Valley

are of concern to multiple respondents. [Table 3.5.2.7-1](#) lists mineral processing topics and the sections in which further discussion can be found.

Table 3.5.2.7-1. Mineral Processing Concern Topics

Mineral Processing Concern Topic	Associated Report Sections
Dust pollution and dust abatement measures during construction and operation of the mineral processing facilities.	3.6.1.2 Sources of Air Pollution
Odors and fume impacts to surrounding communities from mineral processing.	3.6.1.2 Sources of Air Pollution
Ground vibration effects on wildlife and surrounding communities, including people, pets, and livestock.	3.6.2.1 General Wildlife 3.6.6.5 Other Geological Concerns 3.6.8 Noise and Vibrations
Noise and light pollution from mineral processing facilities.	3.6.8 Noise and Vibrations 3.6.13 Visual Resources 3.7.13.1 Mitigation – Mineral Processing
Hazardous waste disposal.	3.6.9.1 Public Health (Hazardous Waste)
Visual resource impacts from mineral processing facilities.	3.6.13 Visual Resources 3.7.13.1 Mitigation – Mineral Processing
Acid mine drainage from mineral processing waste.	3.6.14.4 Water Quality
Water usage for mineral processing and mineral processing chemicals.	3.6.14.4 Water Quality 3.6.14.6 Water Quantity

3.5.2.8 LOADOUT FACILITY

Respondents are primarily concerned about the loadout facility impact to the community of San Tan Valley. [Table 3.5.2.8-1](#) lists loadout facility topics and the sections in which further discussion can be found.

Table 3.5.2.8-1. Loadout Facility Concern Topics

Loadout Facility Concern Topic	Associated Report Sections
Noise, light, air pollution, and odor impacts.	3.6.1.2 Sources of Air Pollution
Increased automobile and rail transport impacts to surrounding communities, including traffic and air quality impacts.	3.6.1.2 Sources of Air Pollution 3.6.12 Transportation
Open-water storage ponds' impact on birds and wildlife.	3.6.2.2 Riparian, Aquatic Resources, and Fish 3.6.2.6 Bird Species
Proposed land use change from residential to commercial.	3.6.7 Land Use
Impacts to adjacent landowners.	3.6.7 Land Use
Impacts on future residential growth in the surrounding communities.	3.6.7 Land Use

3.5.2.9 TAILINGS STORAGE FACILITY

Comments on the proposed tailings storage facility reflect respondent concerns with a broad range of topics and resource areas. The most common concern among respondents is the environmental risks associated with the tailings storage facility design and location. Additional concern areas include fugitive dust, acid mine drainage, and long-term management implications. [Table 3.5.2.9-1](#) lists tailings storage facility topics and the sections in which further discussion can be found.

Table 3.5.2.9-1. Tailings Storage Facility Concern Topics

Tailings Storage Facility Concern Topic	Associated Report Sections
Tailings storage facility reclamation and long-term liability.	3.5.2.10 Mine Reclamation
Public health impacts from toxic dust.	3.6.1.2 Sources of Air Pollution 3.6.1.3 Air Quality–Related Resource Impacts (Public Health) 3.6.9 Public Health and Safety
Impacts to wildlife, including special status species, from the tailings storage facility.	3.6.2 Biological Resources
Cultural resource impacts.	3.6.4 Cultural Resources
Geologic stability of tailings storage facility location, including earthquake risk.	3.6.6.3 Seismic Activity 3.6.6.4 Tailings Storage Facility 3.7.4 General Plan of Operations Content and Data Gaps
Use of public lands for the tailings storage facility.	3.6.7.3 Land Conservation (Public Lands)
Environmental risk of a tailings storage facility design failure.	3.6.9.4 Risk Assessment
Known failures of the proposed tailings storage facility design plan at other mine locations.	3.6.9.4 Risk Assessment 3.7.13.1 Mitigation – Tailings Storage Facility
Development of a “ <i>Tailings Risk Management Plan</i> ” [22874].	3.6.9.4 Risk Assessment 3.7.13.1 Mitigation – Tailings Storage Facility
Impacts to recreational resources, including trails, roads, and the Boyce Thomson Arboretum.	3.6.10 Recreation and Public Access
Public access road closures.	3.6.10.4 Recreational Access Roads
Loss of access to game hunting lands at the tailings storage facility site.	3.6.10.4 Recreational Access Roads
Economic impact of lost ranching land.	3.6.11.11 Socioeconomics-Related Resource Impacts (Land Use)
Visual impacts to adjacent communities.	3.6.13 Visual Resources
Contamination of surface and groundwater.	3.6.14.1 Surface Water 3.6.14.2 Groundwater
Water infiltration and hydrogeological connectivity at the tailings storage facility site.	3.6.14.3 Hydrogeology 3.6.14.4 Water Quality
Stormwater management at the tailings storage facility.	3.6.14.4 Water Quality
Acid mine drainage at the tailings storage facility and separation of two tailings streams.	3.6.14.4 Water Quality
Contamination of regional drinking water supply.	3.6.14.5 Water Supply
Water usage by the tailings storage facility during operation and post-closure.	3.6.14.6 Water Quantity

3.5.2.10 MINE RECLAMATION

Mine reclamation comments include discussion of the long-term mine reclamation process, the financial responsibility of mine reclamation, both for Resolution Copper and the public, and the feasibility of mine reclamation, given the proposed mining methods and past examples of failed mine reclamation projects.

One commenter states that “*anything short of complete restoration must be prohibited*” [19085]. Other comments express concerns that the mine reclamation would never restore the land to its current condition. One respondent states, “*Although I understand the desire to mine for the uptick in employment and the goldmine for the companies involved in the mining, but the aftermath is ugly, dangerous and never, ever the same as before*” [19671].

Analysis of Reclamation Process

Comments request that the EIS analysis include discussion of the mine reclamation process and provide realistic expectations for mine reclamation outcomes. One commenter specifically requests that the following mine reclamation items be included in the EIS:

- *A detailed account of measures that would be taken to decommission mine operations and stabilize and revegetate slopes, subsidence zones, roads and other areas;*
- *Identification (including estimated acreage) of the areas targeted for reclamation, and description of the intended degree of treatment in each area;*
- *Timing of reclamation relative to mining operations, procedures for concurrent reclamation activities, and duration of reclamation treatment;*
- *Standards for determining, and means of assuring, reclamation success; and*
- *Means of assuring that all maintenance required for reclaimed areas would continue after operations cease or while operations are suspended.* [26498]

Financial Responsibility

Respondents are concerned that Resolution Copper would not meet its long-term obligations for the cleanup and that the financial responsibility for the reclamation process would be left to the public. One commenter states, *“The EIS should describe all necessary long-term monitoring and management of the mine, as well as the enforcement mechanisms by either the Forest Service or other regulators should the mine operator fail to properly follow the long-term post-closure plan. The EIS should describe the time frame over which long term management activities would occur or if they might be necessary into perpetuity”* [26498]. Other commenters note, *“A financial assurance estimate that turns out to be too low can put the public/taxpayer at risk for tens or hundreds of millions of dollars. All of the assumptions and calculations for these amounts should be disclosed during the EIS process so that the public can comment on their viability”* [22366].

To address the public’s financial responsibility concerns, commenters, as represented by the following comment, request that *“substantial bonds should be put forward to assure compliance”* [13602] and that the financial sureties evolve over time as mine conditions change. One commenter also requests that the EIS disclose the long-term financial responsibilities should the mine and/or lands be sold to another company, asking, *“Can the EIS document please disclose or reference any transfer of ownership provisions for the final approved mine plan of operations including reclamation requirements if the mine is sold to another company in the future?”* [216].

Reclamation History

Failed mine reclamation projects at other mine operations, completed by Resolution Copper’s parent companies and other companies, are of concern to the respondents. They do not want the proposed mine reclamation to have similar outcomes and request that the EIS analysis consider the *“many examples of mines in Arizona and document how well or how poorly ‘reclaimed’ mines of all types are doing in Arizona”* [26274]. In contrast, a few commenters note that Resolution Copper’s parent companies’ history includes positive reclamation outcomes, citing the Magma Mine as a notable example of the companies’ commitment to reclamation.

Subsidence Zone

Mine reclamation of the subsidence zone is a topic of concern raised by many respondents. Commenters are not supportive of the long-term proposal of fencing off the subsidence zone from public use. One respondent states, *“This EIS should evaluate the feasibility of true reclamation of the subsidence zone and not simply accept that Oak Flat and the flanks of Apache Leap will become a sacrifice zone, forever off-limits to humans”* [24610]. Additionally, one respondent asserts that the Mining Law of 1872 *“requires the mine operator to ‘restore the surface resources and minimize adverse environmental impacts’”* [8412]. The respondent expresses concern that that reclamation of the subsidence zone would not be in compliance with this law.

Tailings Storage Facility Reclamation

Reclamation of the tailings storage facility is of concern to respondents. Reclamation concerns specific to the tailings storage facility include water contamination, acid mine drainage, and plant cover establishment. Respondents would like the EIS to *“fully describe the long-term post-closure management of tailings seepage, including corrective action management strategies”* [26060]. Another respondent would like the EIS to *“describe in detail how seepage from the Tailings Storage Facility would be prevented or captured, treated and controlled over the closure and post-closure period. The EIS should discuss the fate and transport of any anticipated constituents from the Tailings Storage Facility over the course of closure and post-closure”* [26498]. Additionally, commenters suggest use of a *“Holistic Resource Management”* [314] approach to mine reclamation, which would improve soil conditions for future establishment of native plant cover:

By employing Holistic Resource Management into this remediation process using ruminant animals as a tool, carbon will be sequestered into the tailings material creating the base for soil development. This will provide a medium for plant growth which, in turn, will create habitat for a diverse wildlife community of birds and animals of all sorts. The possibilities are endless and the result will change a tailings structure from an eyesore into a place of refreshment. It is my hope that Resolution Copper will incorporate this process into their tailings plan. [314]

3.5.3 Land Exchange

Respondent comments include discussion of various aspects of the proposed land exchange, including the land exchange parcels ([Figures 3.5.3-1](#) and [3.5.3-2](#)), valuation, legislation, and mining claims. Commenters express concern about placing public property in private hands and are concerned that public rights to use the lands would be violated by the land exchange. Commenters are also concerned about the balance of resources of the exchanged parcels, noting that the parcels *“are more remote and difficult to access”* [113; 2210] and *“dry and overgrazed – a real loss to the citizens of Arizona”* [243].

The issue and rationale codes that are summarized in the following Land Exchange section are shown in [Table 3.5.3-1](#).

Table 3.5.3-1. Issue and Rationale Codes Summarized in Section 3.5.3, Land Exchange

Comment Summary Section	Issue and Rationale Codes
3.5.3 Land Exchange	130 Land Exchange 131 Land Exchange Valuation 132 Land Exchange Legislation 742 Land Ownership 731 Mining Claims



Figure 3.5.3-1. Cave Creek land exchange parcel; view facing north.



Figure 3.5.3-2. Dripping Springs land exchange parcel.

3.5.3.1 LAND EXCHANGE LEGISLATION

Commenters express concerns about Section 3003 of the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA), which authorizes the land exchange to allow for the completion of the Resolution Copper Project. With regard to the EIS analysis, one respondent asks how the EIS would evaluate other elements of the proposed project *“since NDAA does not direct any decision regarding any other aspect of the project than the exchange”* [19514]. Respondents request that EIS alternatives development and impact analysis carefully consider the other elements of the proposal not under the land exchange legislation, including the power facilities construction and tailings storage facility.

3.5.3.2 LAND EXCHANGE VALUATION

The valuation of the land exchange parcels is a concern in many comments. Respondents opposed to the project voice concern that the public lands are being exchanged for lands of lower ecological and monetary value. One commenter states, *“The land trade they propose is not equitable. There is no way they can replace Oak Flat and Devil’s Canyon with what they have offered. The trade properties are not developed and probably never will be – so what are we really getting?”* [20343]. In contrast, some commenters are in support of the land exchange because of the ecological value of the exchange lands. One comment states, *“From what I have read, the federal land exchange contains valuable ecosystems within Arizona, specifically the 7B ranch and Appleton ranch”* [582].

Multiple respondents express that the EIS should contain a *“detailed analysis of the ecological and economic values of the federal and nonfederal lands involved in the land exchange.”* Commenters request that the required appraisals include the value of minerals within the exchange parcels. For the land exchange appraisal, one respondent asserts that the TNF must follow the valuation process set forth in Federal Land Policy and Management Act (FLPMA) regulations.

Commenters would also like cultural resources to be included in the valuation. One commenter states, *“Not only must the Forest Service include the tangible values of Oak Flat in its valuation, it must also include the religious and spiritual value of Oak Flat, which is priceless and irreplaceable”* [26240]. Some commenters also state that the lands are sacred to Native Americans and should be given to them, rather than exchanged with a foreign mining company.

One respondent is concerned about the total valuation of the land exchange, given the proposal to use additional public lands for the tailings storage facility, asking, *“Will the 4,400 acres of the tailings site on public land be DEDUCTED from the value of the acreage RCC has offered in trade for Oak Flat?”* [26274].

Respondents request that the TNF initiate a public review of the appraisal prior to approving the land exchange, including having the appraisal information in the EIS document: *“As the exchange, under law, needs to be equitable and in the interest of the public, and is at the heart and underpinning of this entire review process, all appraisal information should be included in the DEIS. In the interest of fairness and disclosure, appraisals, including mineral appraisals, should not be held to be proprietary or redacted, but should be published in full for the public to review and comment on”* [310].

If the valuation of the exchanged lands is found to be disproportionate, commenters would like the EIS to consider alternatives and/or additional land parcels in the land exchange.

3.5.3.3 MANAGEMENT OF LAND EXCHANGE PARCELS

Several respondents would like the EIS to detail the long-term management proposals for the exchanged lands. One respondent says, “*The EIS should discuss how the land exchange of selected and offered lands are consistent with Forest Service management plans, describe how the offered lands would be managed, and indicate whether they would be withdrawn from mineral entry. The EIS should discuss any deed restrictions, easements, or rights-of-way on the offered or selected lands, or other provisions of the land exchange that the Forest Service considers for the purpose of mitigating potential impacts*” [26498].

3.5.3.4 MINING CLAIMS

Respondents are also concerned about Resolution Copper’s mining claims on the subject parcels. Commenters note that there are potential conflicts between Resolution Copper’s mining claims and mining claims belonging to other parties. A few commenters would also like disclosure of Resolution Copper’s full mining claims in the area so that they can better understand the potential for future mine expansions. One respondent would like a map produced that depicts the full mining claim, stating that the respondent wants “*to understand how big the mine could be upsized to affect other areas with future expansions and how close it could get*” to private lands [5717; 9077].

3.6 Summary of Public Comment – Resource Topics

This section provides a detailed summary of public comment organized by resource topic (e.g., air quality, biological resources, climate change, etc.). The resource topic comment summary includes general and specific topic areas or concerns, such as comments concerning wildlife habitat loss, loss of recreational climbing access in the subsidence zone, and dust and emissions at the mineral processing facility.

This section is organized into the following resource topics:

- [Air Quality](#)
- [Biological Resources](#)
- [Climate Change](#)
- [Cultural Resources](#)
- [Environmental Justice](#)
- [Geology](#)
- [Land Use](#)
- [Noise and Vibrations](#)
- [Public Health and Safety](#)
- [Recreation and Public Access](#)
- [Socioeconomics](#)
- [Transportation](#)
- [Visual Resources](#)
- [Water Resources](#)

The issue and rationale codes summarized in each section are shown in a table at the beginning of each section.

3.6.1 Air Quality

The following section summarizes air quality topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.1-1](#).

Table 3.6.1-1. Issue and Rationale Codes Summarized in Section 3.6.1, Air Quality

Comment Summary Section	Issue and Rationale Codes
3.6.1 Air Quality	670 Air Quality

3.6.1.1 GENERAL CONCERNS

Many respondents are concerned about the proposed project having negative air quality impacts. One commenter states, *“I am concerned about the potential air and water quality damage that would result if the Oak Flat/Resolution Copper project moves forward.”* Based on this concern, respondents request that *“the draft EIS must fully evaluate the direct and indirect impacts of this project on the air quality in the area”* [10862].

Baseline Assessment and Impact Analysis

Some respondents note that the EIS needs to include a baseline assessment of air quality surrounding the proposed mining site. Specifically, one commenter asks, *“What is the current air quality of the area and how will the mine and tailings pile affect it?”* [26240].

Several commenters request that *“a detailed analysis of all construction and operations impacts, and all attached mitigation measures, on Arizona environment, specifically including: Wind born particulate pollution impacts”* [20527]. Respondents would like the analysis to include both short- and long-term air quality impacts. Communities to be included within an analysis area are named by the respondents: central Arizona, Queen Valley, Green Valley, the greater Phoenix area, Superior, Superstition Vistas, San Tan Valley, and southern Arizona, including Tucson.

Regulatory Compliance

Many commenters are concerned that the proposed project would exceed National Ambient Air Quality Standards (NAAQS) and Prevention of Significant Deterioration (PSD) increments. One commenter states, *“The EIS should discuss PSD applicability and whether a PSD permit might be required. The EIS should discuss impacts to the NAAQS and PSD increments from projected emissions of the project and alternatives, considering the effects from all aspects of mine exploration, excavation, construction, operation, and support activities, such as vehicle traffic, as well as cumulative emissions from other sources in the project area”* [26498]. Respondents are concerned about other air quality regulations as well, including Arizona Department of Environmental Quality (ADEQ) regulations, EPA standards, nonattainment areas, and maintenance areas. One respondent requests that the EIS *“identify all Class I PSD areas located within 100 kilometers of the proposed project site”* [26498].

3.6.1.2 SOURCES OF AIR POLLUTION

Respondents are concerned about the mine operations contributions to air pollution and the impacts it would have on residences and communities near the MARRCO corridor, mineral processing facility, loadout facility, and tailings storage facility. One commenter states, *“We already have 2 cement plants adjacent to our subdivision that produce tons of dust, noise and carbon toxins in our air. We don't need*

more air and water pollution in Arizona” [21076]. Mine sources of air pollution raised in the comments include the following:

- Construction and fugitive dust: *“Disturbance of particulate matter is anticipated during construction. Considering prevailing winds, to comply with other applicable air pollution control requirements and minimize adverse impacts on public health and welfare”* [15].
- Mine traffic and equipment exhaust: *“Particulates and truck exhaust associated with mine operations is significant”* [24280].
- Mine ventilation and exhaust shafts: *“Dust containing 50% silica would be released from exhaust shafts. What would be the impact of these dust clouds impact on health and safety of people, plants, and animals?”* [26240].
- Ore transportation: *“Arizona and possibly other states will experience significant impacts on air pollution and traffic with trains hauling all that ore over 40 years”* [17; 25813].
- Mineral processing and loadout facility fumes and odors: *“The odors and fumes emanating from these types of operations are offensive and dangerous to living things, and the impacts from this need to be quantified and mitigated”* [6].
- Tailings storage facility toxic gas and fugitive dust: *“Winds will cause fine-particle, toxic tailings dust to blow over the region. In addition, tailings piles produce significant quantities of radon gas, especially copper mine tailings. Whether covered by dirt to mitigate pollution or left uncovered, tailings piles present a threat to regional plant, animal, and human communities”* [17; 25813].

Connected to the mine operations is a concern with the air pollution impacts resulting from the proposed project’s power needs. One respondents asks how *“this increased power generation and usage would impact Pinal County’s total energy use and its ability to meet current air pollution and emission standards should also be studied”* [26240]. Commenters request that EIS include the direct, indirect, and cumulative air quality impacts that would result from the proposed project’s power generation needs.

3.6.1.3 AIR QUALITY-RELATED RESOURCE IMPACTS

Public Health

Many commenters are concerned that public health would be negatively impacted by air quality impacts of the proposed project. Some respondents identify groups that would be more susceptible to air quality-related health impacts, including Queen Valley residents, people with preexisting health issues, children, the elderly, recreational users, mine workers, and the general public. One commenter notes, *“Any air pollution will affect our health and we will no longer be able to live in Queen Valley”* [19587]. Some commenters are concerned about how air quality-related illness would strain healthcare systems and what the public cost would be of these additional public health issues. Commenters note that public health concerns related to air quality are due to:

1. The size of the particles. One commenter asks, *“What are the likely air quality issues for both residents and recreational users due to PM2.5 and PM10 pollution from the tailings?”* [11671].
2. The content of the particulate matter. One respondent notes that *“copper mining processes emit large quantities of particulate matter, trace elements, and sulfur oxides, which can have adverse effects on human health. Particulate matter emitted from smelters may include toxic metals such as arsenic, cadmium and mercury”* [26240].
3. The potential for hazardous air pollutants (HAPs) to be emitted. Respondents want the EIS to identify sources of potential HAPs and describe measures to minimize these emissions.

-
4. Prevailing winds. Commenters note that the prevailing winds near Queen Valley place this community in danger because of the location of the tailings storage facility. A few respondents wanted to know the wind velocities and directions of prevailing winds.

Viewsheds

Some respondents are concerned that the negative air quality would impact various viewsheds around the proposed project. One commenter asks, “*Will viewsheds, lines of sight, and spatial relationships between geographic features that are important in Apache history and culture be adversely affected by mining-related changes to the landscape and topography, and/or by dust and haze generated by mining-related activities?*” [26530]. Other respondents are concerned about additional viewsheds, including the Superstition wilderness class I airshed and general viewsheds around the proposed project.

Water Quality

Commenters note that air quality impacts can lead to water quality concerns as well. One commenter states, “*The winds will pick up this finely ground particulate matter and fill our air and lungs with the poisonous material. This toxic matter will settle on swimming pools, open lakes and rivers and in lungs*” [19553].

Other Resource Concerns

Other air quality concerns expressed in the comments include water availability for dust control measures, loss of recreational opportunities due to air quality impacts, and air pollution impacts to wildlife.

3.6.2 Biological Resources

The following section summarizes biological resource topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.2-2](#).

Table 3.6.2-2. Issue and Rationale Codes Summarized in Section 3.6.2, Biological Resources

Comment Summary Section	Issue and Rationale Codes
3.6.2 Biological Resources	600 Biological Resources
	601 Wildlife
	602 Riparian / Aquatic Species
	603 Special Status Species
	604 Plant Salvage
	605 Invasive Species
	606 Bird Species
	607 Fish
	608 Plants
	651 Wildfire

Commenters express general concerns about the project’s impacts to biological resources, including, but not limited to, the following:

- Aquatic life
- Biodiversity and the area’s ecosystem
- Description of the positive ecological impacts
- Desert ecosystems

-
- Loss of wildlife watching, hunting, birding opportunities
 - Plants
 - Special status species
 - Springs and riparian habitats; rare riparian desert habitat
 - Wildlife corridor loss
 - Wildlife habitats
 - Wildlife species

3.6.2.1 GENERAL WILDLIFE

Numerous commenters express concerns about general wildlife and the impacts the proposed project would have on a variety of species. Commenters request that the environmental analysis consider how the proposed project would directly, indirectly, and cumulatively impact general wildlife species. Respondents are concerned about how habitat destruction, artificial lighting, noise, vibration, odors, perimeter fencing, water pollution, and water depletion would affect wildlife in and around the project area.

Respondents mention concerns about general wildlife, including mammals, birds, bats, snakes, cactus, reptiles, insects, bighorn sheep, mountain lion, bobcat, fox, coyote, coatimundi, black bear, deer, javelina, skunk, and ringtail. Commenters request that independent, multi-year surveys be conducted to determine species diversity and density for birds, mammals, reptiles, amphibians, and fish, with special attention on springs and riparian areas.

Commenters request that the analysis use HabiMap Arizona—the Heritage Data Management System (HDMS) and Arizona’s State Wildlife Action Plan (SWAP)—to identify Species of Greatest Conservation Need (SGCN) and Species of Economic and Recreational Importance (SERI) in considering potential impacts to wildlife. The EIS should contain a discussion of AGFD’s conservation policies contained within the SWAP and include analysis of project impacts to SGCN and SERI. Mitigating impacts to Arizona’s trust wildlife is recommended, including offsetting impacts through the transfer of lands to conservation ownership. Specifically, *“Conservation lands must offset the loss of habitat by demonstrating no net loss of wildlife values through higher benefits such as funded habitat enhancement activities, activities increasing ecological integrity, or actions that increase viability for species”* [26060].

Commenters are concerned about the potential impact to important wildlife linkage zones/wildlife corridors. One commenter questions whether the land exchange would help with the loss of wildlife corridors. It is mentioned that the general area is an important wildlife corridor and that *“there is a potential wildlife linkage zone that parallels U.S. Highway 60 in this area, and its utility could be severely compromised due to the impacts of RCM, including the loss of important springs in the area. The EIS should analyze this linkage area, including the role that springs play and the potential impacts of RCM and the currently proposed TSF on its ecosystem functionality”* [26240].

3.6.2.2 RIPARIAN, AQUATIC RESOURCES, AND FISH

Respondents state concerns about impacts to riparian areas and aquatic resources. These include concerns about impacts to riparian areas and vegetation from groundwater drawdown during mining construction and operation activities and the impact this could have to various wildlife, aquatic, and fish species. Specific riparian habitats of concern mentioned in the comments include Devil’s Canyon, Queen Creek, Arnett Creek, and Mineral Creek.

Commenters state,

I am very concerned the Resolution Copper Mining Project Land Exchange would have a devastating impact on the riparian waterway of Devils Canyon. This creek east of the project has some of the most beautiful natural wet areas in the state. Like any riparian canyon in the desert, it is a wildlife magnet. I have personally seen Coatimundi, Great Blue Heron, Fish, Gila Monsters, Dragonflies, Frogs and Snakes along with all the other common species attracted by water in the desert such as coyote, rabbits, and countless bird species. [13134]

As a riparian ecosystem Oak Flat comprises a unique asset within the surrounding desert environment. Riparian ecosystems comprise less than 2% of the total area within the arid southwest according to the University of Arizona. As drought becomes increasingly common, preserving these unique national assets for future generations becomes ever more important. [19549]

The EIS should carefully analyze the direct, indirect and cumulative impacts to riparian habitats, as this increasingly rare habitat type supports the life cycle of many migrant species. [26240]

Address the impacts on perennial and ephemeral drainages and associated riparian communities, at all hydrological unit scales, included within the GPO, land exchange and areas affected by any amendments to the Forest Plan and/or Public Domain lands administered by BLM. [3828]

Commenters request that the EIS process include thorough multi-year surveys of habitats in the mine operation areas that focus special attention on springs and riparian areas and include survey of invertebrate populations. Related requests ask that a thorough hydrological analysis of the area's aquifer and the relationship of groundwater to surface water and the potential impacts of subsidence to surface vegetation and water sources must be conducted to inform the EIS impact analysis. Commenters state,

There should be thorough surveys for all of these species and potential impacts to these species should be thoroughly analyzed in the Draft EIS, including in conjunction with a hydrological analysis of potential impacts to Ga'an Canyon and its high quality aquatic and riparian habitats. [21501]

A thorough and independent hydrological analysis of the area's aquifer and the groundwater/surface water relationship, as well as serious consideration of predictions of drought effects should be conducted before any decision is made on the mine, in order to determine precisely the impacts of the inevitable dramatic drawdown of the aquifer and its effects on riparian and aquatic habitat. [16339; 21501]

The FS must first determine what fish, reptile, and amphibian species are present, based on actual data, rather than assumptions. The FS should study the impact of [Resolution Copper Mine's] plans on these species, addressing the following: Determine whether the lowland leopard frog still inhabits the [analysis area]; if it does, the EIS should analyze impacts to this species, and discuss measures to avoid, minimize and mitigate impacts to this population. Assess the impacts on fish, reptiles and amphibians due to habitat loss and/or contamination. Conduct a detailed inventory of springs, seeps, water holes in the affected area and the native biota they support. What impacts can be expected from dewatering, including loss of riparian areas, springs, and water holes? Analyze the impact of the proposed mine and ancillary facilities in terms of habitat loss, degradation, fragmentation and the resulting isolation of populations. How will the proposed mine and ancillary facilities impact habitat selection, foraging/hunting local prey species populations, breeding behaviors and breeding success? For example, how will edge effects associated with changes in microclimate, artificial night lighting, noise, vibration, olfactory pollution and associated disturbances impact fish, amphibians and reptiles? [26240]

Respondents are also concerned about how the mineral processing, loadout facility, tailings storage facility ponds, and the formation of a subsidence zone pit lake could impact aquatic wildlife species. Commenters are concerned that wildlife would be attracted to these open water areas and negatively impacted by reduced water quality. As one commenter states, “*Audubon is very concerned about the open water storage pond planned for the load out facility as an attractive nuisance to birds, bats, and other wildlife. Scoping should include an evaluation of water quality and hazards to birds that may be attracted to the open water at this facility*” [26351].

3.6.2.3 SPECIAL STATUS SPECIES

Commenters express concerns about the proposed project’s potential impacts to special status species, including species designated under the Endangered Species Act (ESA) and species listed as Forest Service Sensitive Species. Respondents request that the EIS identify all petitioned and listed threatened and endangered species and critical habitat, as well as Forest Service sensitive species, that might occur in the project area and identify how these could be directly, indirectly, or cumulatively affected by each alternative.

Some specific species mentioned in the comments include

- Agaves
- Arizona hedgehog cactus
- Barrel cacti
- Cactus ferruginous pygmy owl
- Colorado pike minnow
- Critical habitat for Gila chub
- Gila chub
- Lesser long-nosed bat
- Lowland leopard frog
- Mexican spotted owl
- Mexican wolf
- Narrow-headed garter snake
- Northern Mexican garter snake
- Ocelot
- Seven species of bats
- Sonoran desert tortoise
- Southwestern willow flycatcher
- Western burrowing owl
- Western yellow-billed cuckoo
- Yuma clapper rail

Specific fish species mentioned in the comments include Gila chub and Gila longfin dace. Questions and concerns about these species include 1) what would be the impact of the proposed project to Gila chub, and the prospect of recovery and successful reintroduction of this species, and 2) what would be the impact to Gila longfin dace, and the prospect of reintroduction of this species?

Specific concerns regarding species surveys and analyses expressed in the comments include the following:

Discuss how surveys were conducted for each species, their findings, and all follow-up surveys and monitoring that would be conducted before, during, and after mining occurs. [26498]

Effects of local and regional groundwater depletion, contamination of regional aquifers with waste material, aerial dispersal of fine particulates, and reduced connectivity between distinct biogeographical populations, on species recovery. [19507]

Potential for reduced abundance of aquatic insects due to degraded water quality and quantity, and interrupted habitat connectivity between biogeographical populations, on species recovery. [19507]

Reduced plant cover and insect abundance, and interrupted connectivity between distinct biogeographical populations and other impacts on species recovery. [19507]

Concerns about adequate consultation with the U.S. Fish and Wildlife Service (USFWS) are included in the comments. Respondents request that the Forest Service consult with the USFWS on all ESA concerns and that the biological assessment (BA) and the biological opinion (BO), produced for the consultation process, be included as appendices in the EIS.

Respondents also express concerns about how the proposed project would affect migratory birds protected under the Migratory Bird Treaty Act (MBTA). Concerns are expressed about how the tailings storage facility and the mine subsidence zone at Oak Flat could impact migratory birds. Commenters request that the project pay close attention to compliance the MBTA. A specific comment states,

The MBTA analysis proposed by the GPO should: Comply with the procedural requirements of Executive Order #13186 [“Responsibilities of Federal Agencies to Protect Migratory Birds”]. Analyze the corridors used by each migrant species documented in the affected area. Evaluate the viability of migratory corridors and stop-over sites if Oak Flat and the TSF are converted from native habitat to mining facilities. Calculate the amount of riparian habitat used by migrants now and the amount that will remain if the mine is built, to include projections of habitat loss due to de-watering. Calculate the amount of all habitat types utilized by migratory species in the affected area that is projected to be lost or degraded by the [Resolution Copper Mine] proposal. Evaluate concerns stipulated in the [National Migratory Bird Treaty Act]. Although the TNF lists 25 Migratory Species of Concern for Oak Flat it is likely that this list does not reflect current knowledge of species that utilize the [Analysis Area]. Update the TNF [Migratory Species of Concern] listings to reflect current knowledge and consider the following: Evaluate existing data, and if necessary, conduct surveys to identify migratory bird species that occur in the [Analysis Area]. Differentiate between neotropical and local migrants and determine of the extent to which these species are utilizing the [Analysis Area] and surrounding areas. Identify all vulnerable species that utilize the [Analysis Area] including those listed by the following organizations: [Fish and Wildlife Service], Watch Listed by [North American Bird Conservation Initiative], Arizona State SGCN, and [Arizona Partners in Flight] Priority Species. [26240]

3.6.2.4 PLANTS

Numerous commenters have concerns about the proposed project’s impacts to plants in the area. Concerns include plant impact from groundwater drawdown, dust, toxic chemicals, and mine and facility construction and operations. Respondents recommend that independent plant surveys be completed by a non-biased party and the results analyzed in the EIS. Requests also include that the EIS present the extent of revegetation in the analysis area from construction, mining activity, and air pollution.

Several commenters mention the cultural value of plants in the Oak Flat area, including medicinal plants and acorns from the area's oak trees. Concerns include the proposed project's impact on sensitive biotic and endemic plant communities. One respondent states,

Several biotic communities (Interior Chaparral, Madrean Evergreen Woodland, Interior Riparian Deciduous Forest and the Arizona Upland Subdivision of Sonoran Desert scrub) converge in a relatively small area around the proposed mine project, which includes the protected Arizona hedgehog cactus, Echinocereus triglochidiatus. These complex plant communities already suffer from their proximity to the urban pollution of Phoenix, prior mining in the area, overgrazing and climate change. The mine's impact on the biotic communities must be fully disclosed and addressed in the EIS, and alternatives should be considered that would avoid or minimize these impacts. Mitigation should also be fully explored. [24280]

Plant salvage is recommended in several comments, including the following: “RC must be required to salvage all useable plant life and material within TSF and borrow pit areas. All quality specimens must be safely transplanted at RC's expense to areas agreed upon by Tonto National Forest. Or, donated to museums and/or for other public uses like along highways and schools etc. All remaining plant and landscape shall be opened to the public with low cost salvage permits to benefit Tonto National Forest and not the United States General Operations Fund” [26629].

Some vegetation comments regarding wildfire were received. Wildfire questions include how the proposed project would impact the landscape's fire regime and native vs. non-native plant composition. A general concern in the wildfire comments is with regard to the overall project analysis, with the respondents asking whether wildfires or other worst-case scenarios would be considered in the EIS. One specific concern was in regard to the J I Ranch property near Top of The World as an alternative campground to replace the Oak Flat Campground. The respondent was concerned about campground-related wildfire risks to the residents of Top of the World and the damage these residents could sustain due to fire.

3.6.2.5 INVASIVE SPECIES

Respondents express concerns about the proposed mining operation's potential to cause the spread of invasive species and pathogens, which could cause diseases or alteration to ecological function. It is requested that the EIS analyze the potential for introduction of noxious weeds, pathogenic fungi (*Chytridiomycota*), and other organisms and include ways to mitigate the risk to wildlife and wildlife habitat. Respondents are also concerned about whether Resolution Copper has an adequate plan to control noxious weeds.

One commenter's questions about invasive species impacts include:

What will be the impact from invasive plants upon native plant communities under various scenarios? . . . Do the existing TNF procedures designed to control invasive plants and designating chemical agents to control noxious weeds require revision in light of the scale of the RCM project? . . . How will cross-contamination of non-native and invasive seed species between sites via all RCM machinery and staff operations be analyzed and addressed? [26240]

3.6.2.6 BIRD SPECIES

Respondents express concerns about the loss of bird habitats, including breeding, wintering, nesting, resident, and roosting habitats and what impact this would have on native bird populations' breeding and success. Commenters have questions about the impacts of an increase in habitat edges on “edge effects” (e.g., noise impacts to bird communication and other breeding behaviors, increased bird predation, nest

parasitism) and bird food supplies. Commenters also express concerns about the impacts to local populations of bird prey species.

Specific mining project components or effects related to impacts to bird species include

- an increase in the distribution of non-native vegetation;
- mine construction and operation noise, vibration, and disturbance;
- groundwater pumping and dewatering and the effects on riparian area bird habitats;
- power lines construction and operation;
- mine waste/settling ponds and water pollution; and
- exclusion fencing and non-lethal harassment.

Specific responses related to bird habitat loss in the mine subsidence zone in the Oak Flat area include concerns about how habitat would be altered and the impacts to breeding and wintering bird species.

Many respondents have specific comments regarding impacts to bird habitat in the tailings storage facility area and the mining subsidence zone at Oak Flat. Representative comments follow:

The location identified for the tailings storage facility is important habitat for many avian [bird] species. The Department recommends that the proponent develop an Avian Conservation Plan in consultation with the Arizona Game and Fish Department. [26060]

Several biotic communities (Interior Chaparral, Madrean Evergreen Woodland, Interior Riparian Deciduous Forest and the Arizona Upland Subdivision of Sonoran Desertscrub) converge in a relatively small area around the proposed mine site. This combination of complex biotic communities interspersed with riverine, pond, and cliff habitat, attract an abundance of avifauna to Oak Flat and the surrounding area (Oak Flat). Individual observations, E Bird listings, North American Migration Count (NAMC), and Audubon Christmas Bird counts combine to offer a rich picture of the birds that utilize the proposed mine site. In addition, Westland Resources (Westland), compiled prior data, conducted independent surveys, and published the Bird Survey and Occurrence Record Compilation in 2012. This compilation documents the occurrence of 172 bird species at Oak Flat. [26240]

How will loss of habitat from the subsidence crater and ancillary facilities impact resident, breeding and wintering avifauna? [26240]

Respondents also request that the EIS use adequate relevant current and historical data from all available reliable sources to analyze impacts to bird species.

3.6.3 Climate Change

The following section summarizes climate change topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.3-1](#).

Table 3.6.3-1. Issue and Rationale Codes Summarized in Section 3.6.3, Climate Change

Comment Summary Section	Issue and Rationale Codes
3.6.3 Climate Change	720 Climate Change

Commenters request that the EIS 1) consider how climate change would impact the project and affected environment, and 2) consider the project’s direct, indirect, and cumulative effects on greenhouse gas (GHG) emissions and climate change. Climate change topics of concern include drought, carbon sequestration, and habitat fragmentation. Multiple commenters express concern that the project would exacerbate existing climate change impacts that are occurring in the desert environment. One respondent notes that in light of climate change, the Oak Flat area is an important high-elevation refuge for wildlife and plants. Most notably, commenters express interest in drought-related impacts to water availability for mine operations vs. water availability for the ecosystem and human consumption. As several commenters state, *“The EIS needs to account for the possible continuation of drought conditions over the lifetime of the mine, along with projected growth of demand by others users in the Colorado River basin”* [24174; 24280]. Additionally, respondents voice concerns that climate change would limit the ability of the environment to recover from disturbances.

The project’s contribution to GHG emissions was another topic of concern in many comments. Respondents ask that the EIS quantify the GHG emissions over the full life cycle of the project, from construction of the mine facilities to the processing of the extracted copper ore, and that the impacts of those emission on climate change be analyzed and mitigated for. Project-specific GHG emission comments express concern about transportation and power generation emissions. One respondent states, *“Resolution Copper Mine’s demand is likely to be in the hundreds of megawatts, and give that Salt River Project power is roughly 85% powered by coal and natural gas, carbon emissions to power Resolution Copper Mine will be extremely high. Carbon emissions from both power generation and the operation of all fuel-operated mining machinery must be calculated both annually and over the life of mine in the DEIS”* [24260; 21793]. In contrast, one respondent requests that the EIS *“analyze the benefits of copper as it relates to reducing the United States global carbon footprint and its effect on climate change”* [21913].

Additionally, respondents request that the EIS impact analysis follow the CEQ’s draft guidance,¹ titled “Revised Draft Guidance for Federal Departments and Agencies on Considerations of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews,” comply with Executive Order (EO) 13653, “Preparing the United States for the Impacts of Climate Change;” and consider other Federal plans and programs relating to climate change.

3.6.4 Cultural Resources

The following section summarizes cultural resource topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.4-1](#).

Table 3.6.4-1. Issue and Rationale Codes Summarized in Section 3.6.4, Cultural Resources

Comment Summary Section	Issue and Rationale Codes
3.6.4 Cultural Resources	160 Heritage Resource 580 Cultural Resources 581 American Indian Religious Freedom Act 582 Tribal Values 583 NRHP - National register of Historic Places 584 Apache Leap 586 Regional History 587 Ethnographic Study

¹ The CEQ issued the “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews” on August 1, 2016.

3.6.4.1 ADVERSE IMPACTS TO CULTURAL RESOURCES (GENERAL)

In the public scoping comments regarding cultural resources, respondents raise concern over the proposed project's potential adverse impacts to cultural resources, especially impacts to Native American cultural resources. One respondent states, the project's effects on historic properties and cultural resources would “constitute irreversible and irretrievable commitments” [24610]. The majority of the concerns raised are about potential adverse impacts to the San Carlos Apache Tribe, including impacts to archaeological resources, impacts to tribal culturally important resources such as plants, animals, minerals, and springs, and the change in access to and destruction of Oak Flat (*Chi'chil Bildagoteel*)—a sacred site to the San Carlos Apache and a traditional cultural property listed in the National Register of Historic Places (NRHP). Several commenters question the validity of the sacredness of the Oak Flat area to the San Carlos Apache and their historic use of the site. Commenters also raise concern about historic resources such as historic ranches at the tailings storage facility. Respondents request that the EIS analyze the direct, indirect, and cumulative cultural resource impacts of the proposed project.

3.6.4.2 ARCHAEOLOGICAL SITES AND HISTORIC RESOURCES

Comments regarding cultural resources express concern about the potential adverse impacts that the proposed mine would have on archaeological and historic resources.

Regarding archaeological resources, commenters request that full inventories of these resources be conducted at areas that would be disturbed by the mine and that the impacts to the resources identified in the surveys be disclosed in the EIS. For example, “A complete survey and inventory of all rock exposures by archaeologists with experience in rock art discovery and recording is an obvious prerequisite to meeting the Section 106 requirements. This must be completed before the final EIS is released if it is to accurately reflect impacts on resources” [22414]. Archaeological resources within Oak Flat area are of particular concern:

The Chi'chil Bildagoteel Historic District and Traditional Cultural Property . . . includes 17 archaeological and historical sites related to protohistoric and historic Apache occupation of Oak Flat and Apache Leap. . . 21 known archaeological sites occupied by other Native American groups including (but not limited to) the Hohokam and Salado cultural traditions. These 21 sites are considered non-contributing components of District because they are believed to pre-date the Apache occupation of Oak Flat and Apache Leap. The 21 sites nonetheless deserve and require full documentation, assessment, and treatment in their own right as historic properties likely eligible for the National Register. [26240]

Commenters express concern for Historic period resources: “We note that there are ranches in the tailings area that have been operated by several generations of families, and so must have historic significance. The EIS should evaluate the possible effects of tailings development on these historic ranches and grazing management in the area” [79].

Commenters also express concern for indirect impacts to historic resources:

What impacts may occur to historic properties outside of the project area when Oak Flat and other nearby scenic and recreational areas are closed to the public, and recreational activities (including off-road driving, camping, shooting, etc.) are diverted onto other lands and concentrated into smaller areas? Will historic properties outside of the project area be subject to the effects of seismic events within the subsidence zone (e.g., earthquakes, rockfalls, and landslides)? How will historic properties along Queen Creek downstream from the project area be affected by major physical and hydrological changes in the upstream basin? [26240]

3.6.4.3 ADVERSE IMPACTS TO NATIVE AMERICANS

A general theme in the comments regarding cultural resources is concern for how potential impacts to cultural resources would impact Native Americans in particular. While citing the historic treatment of Native Americans by the Federal Government, potential impacts to burial sites, sacred sites, and resources that are important to Native Americans are identified as particularly problematic. Examples of this sentiment include the following:

More generally, we feel this project is an act of cultural vandalism, the latest in a long legacy of terrible mistreatment of Native Americans, which sets a dangerous precedent for native peoples and their sacred sites across the world. [23481]

Our culture needs to put an end to the ongoing theft of Native American land, and relegate this shameful behavior to the past. Native American land should not be seen as something to be taken and exploited when the opportunity to do so happens to come along. Native Americans have rights to the lands that they have occupied for centuries, and no one has any right to deprive Native Americans of their rights. [23994]

In addition, one commenter states, “*The United States history includes regrettable policies to wipe out the Native American way of life, including that of Apaches. We should not be repeating that insult. Freedom includes mutual respect and tolerance, and should not be secondary to economic considerations. I urge the committee to listen to and give priority to the Native American concerns about the proposed project*” [19599].

Many comments regarding cultural resources state concern for the mine’s potential adverse impact to a wide range of resources that are important to the San Carlos Apache Tribe and its ability to conduct traditional resource collection and practice religious ceremonies. These include impacts to culturally significant plants, animals, minerals, geologic features, and springs, among other resources, which would be impacted by the mine, especially in the Oak Flat area. The following comment represents this view: “*There are many sacred and holy sites throughout our traditional lands, on and off the Reservation. These are natural places filled with power, and we go to them (or invoke them in our prayer) for a variety of reasons: for prayers and ceremonies, to get healing and ceremonial items, or for peace and personal cleansing. These places are best known by the families whose ancestors originate from the areas in which these sites are located*” [26530]. This view, commenters note, is supported by the ethnographic and ethnohistoric studies that were conducted for the Superior area with representatives from the San Carlos Apache Tribe, Zuni Tribe, Hopi Tribe, and other Native American tribes.

Important Tribal Resources

Commenters express concern that important resources to the Native Americans would be impacted by the mine: “*The land includes burial grounds, ceremonial lands, and territory where tribal members gather medicinal plants and acorns. Mining this area could permanently destroy irreplaceable cultural resources, and I believe that the land transfer should not occur over the objections of the affected tribes*” [19571].

Specific reference is made to the ethnographic and ethnohistoric study of the Superior area, which

identified numerous plants, minerals, and animals in the [Proposed Resolution Copper Mine] [Area of Potential Effect]. These cultural resources possess, at a minimum, cultural, historical and religious values and significances and merit respectful consideration in light of the proposed mining. In fact, the Draft EIS for the [Proposed Resolution Copper Mine] must identify all cultural resources and associated values that are part of the human environment. Simply

referencing and attending to tangible cultural resources and archaeological sites is a manifest failure to comply with relevant law and policy. [24610]

A few commenters state that impacts to water resources (groundwater and surface water) should be considered as an impact to cultural resources as well. One commenter states, *“If they put in a big mine at Oak Flat then it will poison, damage, or destroy all the things there that we need to survive and conduct our ceremonies, especially the springs and underground water. It will add to the many problems and sufferings that our community already faces.”* Another commenter states, *“Springs often have very important cultural significance in Native American contexts, so Tribes should be consulted as to the cultural significance and historical use of any springs that are included in the EIS analysis”* [26530].

Oak Flat (Traditional Cultural Property, National Register of Historic Places)

As respondents state in the comments, the TNF, including the Oak Flat area (Figure 3.6.4.3-1), is relied upon by Native Americans for *“many natural resources, such as herbs and hot springs, native to the area that are necessary in rituals and ceremonies. For example, herbs from the area are used for medical purposes that have been passed down for generations”* [20558]. Commenters clarify that the plants that are harvested in the Oak Flat area are of particular importance because *“while some of these plants can be gathered in other areas, only the plants within the Oak Flat area are imbued with the unique power of this area”* [24280]. Several commenters specifically express concern that acorns, an important food source harvested from Emory oak trees in the Oak Flat area, would no longer be available. Acorns would therefore need to be harvested at other locations that may be too far for tribal elders or may not be accessible to tribal members.

Other commenters focus on the sacredness of the Oak Flat area and its use in important religious ceremonies. Regarding the area’s sacredness, one commenter states that *“for certain Western Apache, including certain members of the San Carlos Apache Tribe, Oak Flat is also the home of important Ga’an (or holy spirits) that are directly associated with this place”* [24280].



Figure 3.6.4.3-1. Oak Flat parcel; view facing southwest.

Regarding ceremonies, the Na’ii’ees ceremony, known in English as the Sunrise Ceremony, is identified as an important religious ceremony that occurs at the Oak Flat area. According to one commenter, “The Sunrise Ceremony is one of the most important rituals for the San Carlos Apache, and is an important demonstration of their spiritual beliefs, connection to place, celebration of female identity and power, and identity as Apache people” [3855].

has been a historically significant area for resource gathering and religious ceremonies. The following comment represents this view:

There has been a lot of misinformation going around about Oak Flat on how this place has a significant value to the Apache people. Yes at one point this was a place of gathering for acorn, medicinal plants, and sadly a place of gathering to raid neighboring tribes. We have many other

In contrast, several commenters question the validity of the claims that the Oak Flat area is sacred to Native Americans and

places that we can gather the medicinal plants and acorn, not just in this region. We were a nomadic tribe so that is how we made our living, going place to place and always on the move, made Apache territory such a wide span in Arizona. Many places have been lost to the lack of our oral history since stories sometimes die with the keeper of these tales. Growing up I have never knew of Oak Flat to be a sacred site. Living the Apache way of life we were taught at a very young age, to always know our creation story, Oak Flat is not where we as Apache People came from. Places of significance need to have a name, a song, and story behind them in order for them to be considered sacred. I have never known of Oak Flat to have any of these three until recently. This is why we need to have a strong cultural history committee compromise of elders, medicine men/women to help identify our history. A diversified representation not only leaning to one side should be evaluated in this process. [22369]

While acknowledging disagreement with the claims of Oak Flat's cultural significance, several commenters request that the EIS should disclose all beliefs of the Oak Flat area by stating, *"I do not believe the area of Oak Flat is sacred and many San Carlos members feel the same way. Can the EIS please recognize and disclose that although there are some individuals who believe that Oak Flat is sacred, that there are many who believe it is not sacred - all information should be reported in the EIS document, not just the opinions of a few individuals"* [25253].

3.6.4.4 CULTURAL RESOURCE STUDIES, SURVEYS, AND ANALYSIS

Several commenters express concern for the process of surveying for cultural resources and the process for analyzing the impacts to the cultural resources that are identified within impact areas. For example, one commenter requests that the Forest Service do the following:

(1) all threatened cultural resources are properly and expertly identified; (2) the full range of values associated with the cultural resources are considered and assessed; (3) the full spectrum of [Proposed Resolution Copper Mine] effects to cultural resources and cultural resource values are considered; (4) the full range of treatment options are considered as means for avoiding and reducing the adverse effects of the [Proposed Resolution Copper Mine]; and (5) each and every one of these essential and indispensable steps is completed, as appropriate, in close and continuing consultation with the San Carlos Apache Tribe, with other affected tribes and with other parties attaching values to cultural resources. [24610]

One commenter requests that surveys that have already been completed for cultural resources in the analysis area be reevaluated for adequacy and/or updated in accordance with new survey and reporting standards. In particular,

Due to the many changes in archaeological survey techniques over a period of time, the ongoing application of new knowledge and insights acquired from recent archaeological studies, and the dynamic nature of the environment in which archaeologists work, the results of archaeological surveys conducted more than approximately 10 years ago should be carefully re-evaluated. In some cases, resurvey may be necessary to ensure that the archaeological information is current, accurate, and presented in accordance with the lead agency's standards. These conclusions are supported by the Arizona State Historic Preservation Office (SHPO) in a publication entitled 'SHPO Position on Relying on Old Archaeological Survey Data' (SHPO Guidance Point No. 5, 2004). [26240]

Commenters request that potential impacts to cultural resources be analyzed in the EIS. In particular, commenters state that impacts to cultural resources that are important to Native Americans should be addressed:

The 94 tribal representatives think the proposed mining operations are likely to cause direct, indirect, and cumulative effects to all of the identified historic properties and cultural resources and that these effects will constitute irreversible and irretrievable commitments that will bring far more harm than good. The Draft EIS must directly recognize and address these issues and concerns and propose an alternative that avoids or radically reduces adverse effects and significant impacts to cultural resources. [24610]

3.6.4.5 REGIONAL HISTORY

Several comments about regional history focus on the role that mining has played and continues to play in Arizona, and specifically the areas of Globe, Miami, Superior, Hayden, Winkelman, and Kearny—known as the Copper Triangle. Commenters share both personal and historic insights about the role that mining has had in the regional history of the Copper Triangle. One commenter states, “*Potential environmental and cultural impacts should be evaluated in an accurate and appropriate historical context. For more than a century, Arizona’s heritage has had deep roots in mining and ranching*” [20425].

One comment about regional history provides information about the Apache Tribe’s historic ties to the region:

Before the Reservation was founded, Apaches lived throughout this part of Arizona: from the Blue Mountains on the New Mexico border, down to the Catalinas and other mountains near Tucson, over to the Verde River and mountains just north and east of Phoenix, up to the San Francisco Peaks, and back over to New Mexico. Our clans originated from within this area, and all of us on the Reservation have ancestors who came from within this region, before being forced to Old San Carlos. [26530]

One commenter expresses a concern regarding the loss of cultural resources if the mine is not approved: “*Can you analyze the customs, culture, history and heritage of copper mining in the region and what customs and culture might be lost if the mine plan is not approved?*” [235].

3.6.4.6 HISTORIC PERIOD RECREATIONAL RESOURCES

Several commenters state the importance of analyzing the “*picnic areas, campgrounds, and other public features constructed by the Civilian Conservation Corps in the 1930s. Additionally, hundreds of check dams, contour terraces, and rock alignments in the Oak Flat area form a substantially intact and visually impressive record of CCC erosion control techniques across a rugged landscape*” [26240]. Additionally, one commenter expresses the need to protect the historic rock structure at Barnett Camp by developing and installing an interpretative sign explaining the site’s significance and directing etiquette for visitors to preserve remnants of the area’s cultural heritage.

3.6.5 Environmental Justice

The following section summarizes environmental justice topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.5-1](#).

Table 3.6.5-1. Issue and Rationale Codes Summarized in Section 3.6.5, Environmental Justice

Comment Summary Section	Issue and Rationale Codes
3.6.5 Environmental Justice	790 Environmental Justice

3.6.5.1 CULTURAL RESOURCES

Some commenters state that impacts to cultural resources would be especially adverse to Native Americans because they would prevent the collection of traditional resources, lead to destruction of archaeological resources, and lead to loss of access to sacred sites to perform religious ceremonies. Because Native Americans are a minority population, commenters indicate that impacts to Native Americans would be disproportionate and therefore a violation of EO 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”

3.6.5.2 SOCIOECONOMICS

Commenters request that the EIS analyze the socioeconomic impacts to environmental justice populations. The Copper Triangle region is economically depressed, and many respondents state that the proposed project would have a positive impact on employment that would revive the local economy. In contrast, a few commenters express concern with the project’s negative socioeconomic impacts to Native American populations. Commenters are concerned that the proposed project represents a disproportionate impact to Native Americans. One commenter states that *“groups that have historically been cut off from access to economic and social capital have been unable to mobilize effectively to fight their own oppression”* [20558].

3.6.6 Geology

The following section summarizes geology topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.6-1](#).

Table 3.6.6-1. Issue and Rationale Codes Summarized in Section 3.6.6, Geology

Comment Summary Section	Issue and Rationale Codes
3.6.6 Geology	730 Geology

Geological concerns arising in the comments include soil contamination, seismic activity, and geological faults. Specific mine operations areas of concern include the tailings storage facility and the subsidence zone. Additionally, many commenters include specific requests for geological analysis in the EIS.

3.6.6.1 SOILS

Some commenters voice concern with significant, long-lasting effects of soils contamination. One commenter states, *“There will likely be significant effects to the soils in and surrounding the project area”* [19665]. The ecological value of the soils at the mine site is also of concern to respondents. One respondent states, *“The soil productivity and capability values of the project area in comparison to the exchange lands should be considered. And a value should be placed on the soil productivity and capability which would be lost or modified or changed in each EIS alternative”* [18708].

3.6.6.2 SUBSIDENCE

Subsidence impacts on the environment and to nearby communities are common concerns in the comments. One respondent states that subsidence *“will make the area un-restorable in accordance with the AZ Mining Law, and the land subsidence will continue indefinitely, creating life safety concerns around the campground due to unpredictable ground movement”* [8412]. Commenters are also concerned about the topographic impacts of subsidence, given the surrounding hills and valleys and the geological

stability of the subsidence area. One commenter notes, “The geologists say that the structure of the hills in this area are unsuitable for undermining” [6843].

Commenters request that the EIS further analyze the subsidence predictions in the GPO and that the methodology and results be made available for public scrutiny. Commenters also request that the EIS analyze the surrounding geology in the subsidence area to look for faults or other significant geological features that may impact subsidence predictions, including the Apache Leap escarpment (Figure 3.6.6.2-1). Additionally, commenters would like to know what monitoring and mitigations would be implemented to protect the surrounding region from subsidence impacts. Specific subsidence analysis questions follow:



Figure 3.6.6.2-1. Apache Leap escarpment

What is the expected impact, surface features or disturbance, on surface above the mining operation in the area of expected subsidence? [2125]

What is the range of expected subsidence? A contour map indicating the change in surface elevation, maximum range calculated that would be caused by mining activity at the end of mining operations. [2125]

Please analyze the Oak Flat site relative to the potential for subsidence and its possible effect on the adjacent landscape, including U.S. 60 and the formation known as Apache Leap. [236]

RCM's map appears to show that subsidence is less than 2000 ft. from the Apache Leap Escarpment so how will ground movement be controlled? [21551]

How is Superior to survive being so close to subsidence and ground movement? [21551]

3.6.6.3 SEISMIC ACTIVITY

Respondents voice concern with increased risk for seismic activity (i.e., earthquakes) resulting from mining operations. The areas of concern include the subsidence zone and the tailings storage facility. Commenters ask what the earthquake risks are at the subsidence zone and whether the earthquakes would impact the town of Superior. Additionally, multiple respondents are concerned about the potential for increased manmade earthquakes as a result of mining operations. One respondent states, “It is becoming more apparent what mining is doing to our environment with the newly released issue of manmade increases to earthquakes.” Another commenter notes that mine blasts send “tremors throughout town like a mini earthquake” [8876].

Several commenters are concerned about the analysis of earthquake risk in the GPO. They request that the EIS include an independent analysis of risk, that it include an explanation of methodologies chosen to be included in the EIS, and that the reports be made available for public review. Specifically, one commenter recommends the following:

And in a broader context, there needs to be discussion of how some technical/political choices are to be made: for example; how should the maximum design earthquake be chosen; and, should the recommendations of the Mt Polley Expert Panel for tailings impoundments be followed? . . . If an earthquake less than the Maximum Credible Earthquake (1- in-10,000-year event) is used, an explanation is needed to explain to the public the reason for assuming a higher level of risk than recommended by experts. . . . As with the choice of the maximum design earthquake, the choice of less-conservative predictions for magnitude of ground accelerations must be justified by the public officials responsible for protecting the public. [22366]

3.6.6.4 TAILINGS STORAGE FACILITY

The main geological concerns at the tailings storage facility site include the potential for seismic activity and tailings dam breaches. Additionally, commenters express concern with the design of the tailings storage facility and resulting landslides and earthquakes. Specific requests for further analysis of geological conditions at the tailings storage facility follow:

Geotechnical studies must be conducted to estimate the likelihood of seismic activity as well as a catastrophic tailings dam breach or failure at that site. [22847]

Will any test of vibration or seismic effects be carried out for the tailings for various stages of soil moisture? (Will liquefaction occur?) [26240]

Demonstrate the safety and effectiveness of subsurface geology to contain tailings discharges. [79]

3.6.6.5 OTHER GEOLOGICAL CONCERNS

Several commenters request other geological analyses in the EIS, including estimating the amount of lime and rock products needed for operation of the mine, testing the sulfur content of samples from the proposed mine depth of 7,000 feet, and conducting an independent study of ore samples.

Other geological concerns mentioned in the comments follow:

- loss of the aesthetic and educational value of the mine areas' unique geology;
- volcanic activity resulting from mining operations at the proposed depths;
- damage to the fault along the Apache Leap, resulting in the area's falling on the town of Superior below;
- ground tremors, specifically relating to slurry pipelines, causing disturbance to horses;
- Oak Flat is a magnetic field or vortex and these are motivating factors for the proposed mine; and
- geology of the area would not support deep shaft mining, resulting in a conversion to open-pit mining.

3.6.7 Land Use

The following section summarizes land use topic areas or concerns, including residential development, ranching, grazing, and farming, and land conservation. The issue and rationale codes summarized in this section are shown in [Table 3.6.7-1](#).

Table 3.6.7-1. Issue and Rationale Codes Summarized in Section 3.6.7, Land Use

Comment Summary Section	Issue and Rationale Codes
3.6.7 Land Use	740 Land Conservation 741 Public Lands 680 Ranching / Grazing / Farming

3.6.7.1 RESIDENTIAL DEVELOPMENT

The proposed mine’s impact on adjacent residential land uses and development concerns respondents. Commenters note that the impact of mine facility development, water resource consumption, and environmental pollution could negatively impact existing residents and slow residential development in the area. Specific mine facilities with which commenters express concern include the MARRCO corridor, mineral processing facility, loadout facility, and tailings storage facility. Respondents would like the EIS to “*determine the impact that the operations will have on the surrounding region, including how land use relating to development and operations of the mine will impact the quality of life for residents of the area*” [95]. One respondent is specifically concerned about the public costs associated with rezoning lands for the filter plant and loadout facility, as well as the costs to adjacent landowners from building walls to screen their properties from the visual impacts of these facilities.

Additional residential concerns expressed in the comments follow:

I am concerned about the negative impact it will have it all aspects of it’s development, but am most concerned as to how it will affect Queen Valley. I am a property owner there and the tailings from the project will leech into our only source of water and destroy the entire community. This will affect not only my investment but the lives of the many community members there. [19596]

The San Tan Valley site while currently very rural, is in right in the path of rapidly developing residential housing and light industry. As seen in other parts of metro Phoenix, residential growth brings many additional challenges to light industry even those in large industrial corridors. While currently unincorporated, approximately 90K people live in this unincorporated area. Should it incorporate, it could become the largest city in Pinal County immediately after incorporation. [25940]

3.6.7.2 RANCHING, GRAZING, AND FARMING

A few comments include concerns with the project’s impacts on ranching, grazing, and farming. There is a history of ranching and grazing in the Copper Triangle that has benefited the economy of the local area. Respondents are concerned about loss of grazing land as a result of the tailings storage facility’s location on NFS lands. Respondents state that a decrease in grazing area could negatively impact grazing permittees, including through a loss of access roads to grazing permit areas. The cumulative effects of the mine on ranching and grazing land represent another concern expressed in the comments. A respondent states, “*We also ask that any alternatives developed by the Forest Service analyze the cumulative effects of the land exchange and mine plan, including any possible impacts on livestock grazing.*” Additionally, some historical grazing was done on areas to assist in reclamation, and one respondent is concerned that “*cyanide and mercury dust will permeate the meat*” [149].

Some respondents are supportive of the land exchange portion of the project if the new lands acquired are allowed to be grazed, stating that the exchange “*will maintain or increase the number and quality’ of rangelands available to support cattle grazing*” [174]. In contrast, another commenter states that the lands near the San Pedro River have already “*been severely overgrazed by cattle*” [23540].

Respondents' concerns regarding farming are related to water resource impacts. Commenters are concerned that farming practices near the MARRCO corridor, where Resolution Copper plans to drill 30 new wells, would be impacted by the mine's water usage and the subsequent groundwater drawdown. A sample of these comments follows:

The large quantity of water needed in the flotation process could cause lowering of the water tables or negative impacts on urban/farming uses. [206]

This projects will demand that other water users make do with less. This means less water for development, for farming and for recreation. [19559]

[Resolution Copper Mine] will be drawing from multiple water sources, including Central Arizona Project (CAP) water. This consumption affects all users of CAP water source, including the farming community where I live in Marana, Pima County, which is dependent on CAP water for crop irrigation. Marana is 90 miles away from the proposed RCM mining project, yet it will be negatively impacted by this mine. [22782]

3.6.7.3 LAND CONSERVATION

Conservation and Management

There are several comments and concerns associated with land conservation. Land conservation concerns vary from land and resource preservation for future generations to mining reclamation activities. Most commenters are concerned about future generations not being able to enjoy the land. One commenter states, *"These areas of designated beauty need to be kept pristine for their own sake but also for enjoyment, exploration, exercise, and appreciation by the public"* [20182]. Commenters also would like the San Pedro River and its riparian habitat to be protected.

Additionally, land conservation and management of the exchange parcels is another concern of the public. Commenters are concerned that the land exchange parcels provided by Resolution Copper are not sufficient, in resources or monetary value, compared with the public lands exchanged to Resolution Copper.

The long-term management of the land exchange parcels is also a concern among the respondents. One commenter *"considers the exchange lands within the Appleton-Whittell Research Ranch of the National Audubon Society to be of high conservation value"* [26351] and requests that land management options for these parcels be included as part of the EIS analysis. Other respondents request that the land exchange and project mitigation include specific and binding land conservation measures for the exchange parcels.

Public Lands



Figure 3.6.7.3-1. Forest Service Road 315 east road closure.

Many respondents are concerned about the loss of public lands and public land access that would result from the proposed action (Figure 3.6.7.3-1). Many commenters see Oak Flat and Devil's Canyon as important tourist and recreation areas that need to be maintained by the public and not sold off to a private corporation. Respondents are concerned that the project would “negatively impact tourism, visitors to the Boyce Thompson Arboretum, and will shut down all recreation activities in the part of the Tonto National Forest

currently occurring where the tailings pile is proposed” [17]. Many respondents are also concerned about the destruction of public forest lands for a mine that has potentially irreversible consequences.

Additionally, commenters are concerned about the use of public lands for the tailings storage facility. The idea of a tailings disposal site on public lands upsets and concerns many respondents. One commenter states, “Public lands belong to Americans it is our heritage. Once they are damaged they never return” [8768].

3.6.8 Noise and Vibrations

The following section summarizes noise and vibrations topic areas or concerns. The issue and rationale codes summarized in this section are shown in Table 3.6.8-1.

Table 3.6.8-1. Issue and Rationale Codes Summarized in Section 3.6.8, Noise and Vibrations

Comment Summary Section	Issue and Rationale Codes
3.6.8 Noise and Vibrations	690 Noise and Vibrations

The majority of the noise and vibrations concerns focus on the disclosure of impacts in the EIS, specifically the magnitude of the construction and mine operation noise and vibration impacts, including those from the subsidence zone, transportation along the MARRCO corridor and pipelines, mineral processing facility, and the loadout facility.

Respondents request that a “noise analyses of both the facility and rail corridor should be performed” [202] as part of the EIS. Additionally, several commenters mention wildlife species’ being affected by the noise and ground vibrations and ask that the EIS address these concerns. Impacts of vibration to surrounding communities is also a concern for respondents. One respondent asks, “Will the noise and ground vibrations created by the surface operations of the copper producing processes near the town of Superior have a negative effect on the wellbeing of pets and livestock?” [4]. Another commenter states,

“If you think that living near the blasting (and resulting seismic instability) would be pleasant, you are insensitive to the many who would be harmed by the proposed mine” [15692].

3.6.9 Public Health and Safety

The following section summarizes public health and safety topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.9-1](#).

Table 3.6.9-1. Issue and Rationale Codes Summarized in Section 3.6.9, Public Health and Safety

Comment Summary Section	Issue and Rationale Codes
3.6.9 Public Health and Safety	180 Public Health and Safety 650 Public Health and Safety

Commenters are concerned about the public health and safety impacts associated with mine construction, operation, and reclamation. Respondents request that the EIS quantify, analyze, and mitigate public health and safety impacts that would result from the proposed project.

3.6.9.1 PUBLIC HEALTH

Many of the commenters are concerned about public health impacts that would result from air and water pollution. Specific health concerns mentioned in comments are respiratory illness, neurological illness, and increased cancer rates. Commenters cite examples of public health impacts from other mining operations in Arizona, across the United States, and internationally as reasons to carefully analyze and mitigate public health impacts associated with the proposed project.

One respondent requests that the area of analysis for public health impacts be a 400-mile radius of the mine, whereas others express specific public health concerns for the following communities: Queen Valley, Superior, Hayden, Globe, Apache Junction, Mesa, the Phoenix metropolitan area, and Native American communities. One respondent is specifically concerned about health impacts to nearby retirement communities, stating that that population’s preexisting health conditions may make them more vulnerable to pollution impacts: *“Provide sample medical data as related to respiratory ailments that are more commonly found in residences of retirement communities. Identify the effects of inhaling tailings dust by a subject with such a condition and how they are more susceptible to problems caused by tailings dust in the home. Identify tighter dust and toxicity standards that should be used on a per-incident inspection of these homes”* [25110].

Commenters also express concern for the physiological impacts that would result from the loss of public lands and recreation areas, including quality of life impacts. One commenter notes, *“Time spent in nature and the availability of nature have been proven to be scientifically time and again to improve happiness and productivity in life among other things”* [19461]. One respondent requests that the EIS include a Health Impact Assessment that evaluates these physiological impacts, including *“a primary emphasis on Native Americans, as their loss of access is tied to thousands of years of history and a type of deeply embedded spiritual connectedness to the land”* [21793].

A few commenters note that public health concerns resulting from the mine operation would have cumulative effects on the area’s economy, including rising health care costs and lowered property values: *“The EIS should analyze the public-health impacts from air and water pollution, its potential disruption and displacement of existing economic activity, and stresses on public services and infrastructure including transportation, schools and health-care facilities”* [19843; 22782; 23600].

Several commenters express concern for the disproportionate public health impacts to indigenous populations: “Mining is a most destructive process that always leaves behind massive destruction of the land resulting in disruption of the lives and negative health effects for the indigenous people” [25288]. In contrast, a few commenters note that an increase in jobs and wages would have beneficial impacts to public health for this community.

One respondent specifically requests that Resolution Copper work with the tribal community to develop drug and alcohol programs:

In terms of health and safety, is the company willing to partner with tribal communities to combat drug and alcohol abuse? Is this a program that the company would be willing to help fund and partner with the San Carlos community, possibly as a mitigation measure or voluntary measure to help ensure a healthy and thriving workforce. Can the EIS analyze the potential improvement and reduction in drug and alcohol abuse by San Carlos community members as a result of direct and indirect employment combined with an effective drug and alcohol abuse prevention program? [23558]

Mine Facilities

Water quality impacts and contamination of water supplies, specifically associated with the subsidence zone and tailings facility, are common concerns among respondents. Other respondents note that pipeline breaks could result in surface and groundwater contamination, thereby threatening public health.

A sample of these comments follows:

The danger lies within the possibility of tailings contaminating regional groundwater supplies used by many throughout the region. A cessation of pumping of tailings runoff and underdrain water would result in a tremendous amount of acidic, toxic water simply discharging into the ground. [21793]

Pipelines will cross numerous washes and areas where they could be impacted by weather events, including extreme flooding that could blow out pipelines and mine infrastructure. The pipelines (above and below ground) could also spill or leak due to (among other things) seismic events, train derailment or vehicle crashes as well as negligent or even deliberate human action. [24280]

Potential for small to large contamination events also exist at the [West Plant Site] stockpiles and concentrator complex, Filter Plant and Loadout Facility, as well as along the MARRCO rail line at numerous locations where pipelines will transport copper concentrate, tailings and contaminated water supplies. [24280]

During construction, operation, and post-closure, many commenters express concern with fugitive dust health impacts:

People will be exposed to tailings dust whenever high winds blow. Reports of similar wastes show that some of the material may be expected to be extremely fine, and subject to be retained in people’s lungs when breathed in. Asthma and lung cancer will be promoted. COPD [Chronic Obstructive Pulmonary Diseases] conditions will be promoted. It is not fair to the people of Arizona to expect them to live with this miserable hazard. [26619]

A few commenters specifically request that the EIS analyze the relationship between fugitive dust pollution and haboobs or other dust events. An additional weather-related public health concern raised in the comments was the monsoon season and potential exposure to toxins through flooding in washes.

Hazardous Waste

The handling of hazardous mine wastes and the potential for contamination and exposure to toxins is a public health and safety concern expressed in the comments. Residents and recreation users in the area do not want to be exposed to toxins and request that the EIS include toxicity data for all chemicals used at the site: *“Provide an overview that identifies the potential volume for all classifications of toxic materials that will be contained at the site. Identify the level of toxicity for each chemical that could endanger the health of persons camping or hiking down-stream from the site”* [25110]. Commenters would like the EIS to analyze hazardous waste disposal, specifically regarding the mineral processing facility. One commenter asks, *“What is the maximum capacity for disposing of hazardous waste relative to expected volumes?”* [2125].

Commenters also express concern that the mining operations would create a toxic site that would expose current and future residents to health impacts. One commenter states, *“Schlepping toxic materials across the state is a future superfund clean-up”* [157]. Another commenter notes that copper is identified as a hazardous waste in sites across the country:

The [Environmental Protection Agency] identifies the most serious hazardous waste sites in the nation. These sites are then placed on the National Priorities List (NPL) and are targeted for long-term federal clean-up activities. Copper has been found in at least 906 of the 1,647 current or former NPL sites. As you see a majority of these sites have showed signs of there being a hazardous amount of Copper in the area. [19509]

3.6.9.2 PUBLIC SAFETY

One respondent notes that the mine would increase the need for emergency services and requests that the EIS identify sources of funding for additional emergency services. The commenter states,

The main travel corridor from the Phoenix metropolitan area may not have emergency services sufficient to handle the types of situations that could arise if a mine were located here. The EIS should identify the types of emergencies that could occur at a mine like this, including those that would occur on the roads used by traffic to and from the mine. It should also identify where the closest emergency services are, what types of services are available, and what additional resources would be necessary, including costs and who would pay, to handle the additional burden of the mine. Local fire departments would need more resources in funding, equipment and trained personnel to deal with potential spills and crashes that increased trucking would likely generate. The implications of heavy toxic trucking on local highways are concerns that should be addressed in the EIS. [26240]

One respondent expresses concern with public access to the subsidence zone and the measures that would be taken to prevent trespass to this area, whereas another is concerned about the chance of explosions at mine facilities.

Additionally, one commenter is concerned that the copper extracted would be sold internationally and used to make improvised explosive devices and conventional weapons.

3.6.9.3 EMPLOYEE HEALTH AND SAFETY

Respondents voice concern for the health and safety of mine employees and request that the EIS disclose employee health and safety impacts. Specific employee health concerns raised in the comments include skin rashes, respiratory illness, and exposure to toxic chemicals. Safety concerns associated with the

proposed mining technique include exposure to extreme heat, air blasts, and vacuum pockets. One commenter notes,

Air blast is well known as a hazard in block caving. The air blast and associated fatalities that occurred at the Northparkes Mine in Australia in November 1999 led to a number of lessons learned, recommendations, and procedures to help prevent air blast. Precautions, such as air gap monitoring and control, that must be followed to help prevent air blast, are well known and documented, for example in the ‘Cave Mining Handbook.’ [24174]

Additionally, one commenter recommends that a “No Hunting and No Target Shooting” [25110] area be designated around the mine operations for employee safety.

In contrast, several respondents note that employee health would be improved through access to preventive health care. One commenter states, “These thousands and thousands of people will have access to quality care and preventative medicine that they wouldn’t have had if they were unemployed” [61].

3.6.9.4 RISK ASSESSMENT

Many commenters request that the EIS describe measures to control accidental releases of hazardous materials and discuss the impacts, short term and long term, that would occur when these measures fail. One respondent states, “The EIS should address the potential impacts of failure of the solution containment systems, methods for discovering such failures, and the degree to which impacts would be reversible” [26498]. Specific areas of concern included catastrophic failures of the tailings storage facility, explosions at mine facilities, failures along the slurry pipeline, and accidents involving train transportation of hazardous materials. Several commenters request that a risk assessment be included in the EIS. Specifically, one commenter requests a “risk assessment of the current tailings plan that demonstrates an understanding of the ways in which that type of tailings has failed in the past. I would also ask that there be very, very detailed contingency required of Resolution in the case of a tailings failure” [64]. Commenters also request that the EIS include in its risk assessment partial and total dam failures, along with 1,000-year floods and 24-hour rain event scenarios.

With regard to the tailings storage facility, many commenters express concern with past failures of the proposed tailings storage facility design as other mine operations. Commenters are concerned that “there have been numerous catastrophic tailings dam failures in recent years, and new research has determined that tailings dam failures globally are increasing in severity and rate” [21793]. Cited as recent tailings storage facility failures are mines in Mount Polley, British Columbia, and Samarco, Brazil. With these recent failures in mind, commenters would like the EIS risk analysis to include tailings risk management. One commenter states, “The NEPA analysis must include a complete tailings risk management plan for each of the proposed tailings sites, demonstrating prevention for failures and incidents including small excursions as well as large catastrophic failures such as the recent tailings dam failures at Mt. Polley and Samarco” [22874].

3.6.10 Recreation and Public Access

The following section summarizes recreation and public access topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.10-1](#).

Table 3.6.10-1. Issue and Rationale Codes Summarized in Section 3.6.10, Recreation and Public Access

Comment Summary Section	Issue and Rationale Codes
3.6.10 Recreation and Public Access	170 Recreation and Public Access 620 Recreational Resources 621 Trails 622 Rock Climbing 623 Boyce Thompson Arboretum 624 Public Access 625 Hunting 626 Arizona National Scenic Trail 660 Roads

Commenters are concerned about the significant disruption of many outdoor recreation activities that would occur as a result of the proposed project. One commenter states, *“The loss of recreation in, and enjoyment of, the affected national forest lands would be disastrous to the millions of people residing in the greater Phoenix region”* [15692]. Commenters express concern about the impact of the proposed action to recreational values, remoteness/setting, quietness, solitude, social encounters, personal experience, and visitor management. Recreational resources that are of concern to respondents include wildlife viewing and birding, hunting and angling, camping, climbing, hiking, off-highway vehicle (OHV) use, and water recreation.

Commenters note that wildlife viewing and birding are popular activities in the project area that could be negatively impacted by mine operations. If waters in the area are polluted, respondents are also concerned that the public would no longer enjoy their recreational water activities. Respondents are also concerned about the potential for groundwater pumping to impact water availability for recreational uses.

An additional recreational concern is target shooting in the mine area and the potential public safety hazards. One specific concern involves the potential for recreational target shooters to target the pipeline infrastructure. One respondent states, *“Local residents knowledgeable about existing pipelines in the area report that there is a long history of recreational shooters using the pipelines for ‘target practice’.* *Our concern is both for the safety of nearby residents and the safety of the pipelines”* [202].

3.6.10.1 TRAILS

Impacts to recreation trails, including the Arizona National Scenic Trail, is a common recreational resource concern among the comments. Commenters are concerned that the experience of trail users, including hikers, runners, backpackers, mountain bikers, and equestrians would be impacted by the mining project. One commenter states, *“The EIS should consider all impacts to the Arizona National Scenic Trail, including especially as it pertains to visual, noise, and natural resource impacts”* [20656]. Commenters note that project construction and operation would negatively impact trails, including causing trail closures and reroutes. An additional concern for trail users of the Arizona National Scenic Trail is user safety during mine construction and operation:

During construction of the Tailings Corridor crossing the Arizona Trail at Barnett Camp the safety of trail users must be a primary concern. Appropriate safety measures must be in place to protect all trail users and to warn construction workers of potential trail users. Safety protocols will need to be developed to allow for construction activities to cease in order to allow trail users safe passage. During closure activities of demolishing the Tailings Corridor infrastructure, safety of trail users must be a priority. [6462]

Respondents are concerned that pipeline construction at trail crossings would negatively impact use of the trail and be a safety concern for trail users. One commenter states, *“Currently, the Arizona Trail crosses the railroad and water pipelines just north of FR 357. Safety measures would be needed to protect users of the Arizona Trail while the corridor expands, with special consideration given to equestrians (the dominant user group in this area.)”* [64620].

Additionally, respondents would like the EIS to analyze impacts to future trail development in the project area, specifically, impacts to trails included in the *“Pinal County Open Space and Trails Master Plan”* [20656].

3.6.10.2 ROCK CLIMBING

The loss of climbing and bouldering recreation areas, including physical loss of climbing areas and loss of access to climbing areas, is of concern to respondents, who state that the *“mine plan will lead to the largest loss of climbing resources”* [19462] in Arizona. Climbing resources of concern include the Oak Flat area, Queen Creek Canyon, Devil’s Canyon, Apache Leap (Figure 3.6.10.2-1), and Hackberry Creek. Climbing access concerns include the closure (temporary and permanent) of Magma Mine Road and forest road spurs, which provide access and parking to climbing resources on Forest Service lands and private lands. Other climbing comments related to the Oak Flat area express concern with recreational user safety in the subsidence zone over the long term and trespass onto the exchanged lands.

Commenters state that the Oak Flat area is a well-known and very popular climbing and bouldering recreation area: *“the Oak Flat area is a high-value, site-specific resource with significant historical value”* [22847]; and *“for fifteen years running, until 2004, Oak Flat was the location of the world’s largest rock climbing competition”* [22874]. Commenters express concern with the physical damage to climbing resources, primarily bouldering, that would occur from the proposed block-cave mining method and subsidence: *“There are over one thousand established rock climbs in the Oak Flat area that will subside into an enormous crater if Resolution Copper Mine (RCM) is allowed to proceed with their present plan to ‘block-cave’ mine the underlying ore deposit”* [19438].



Figure 3.6.10.2-1. Apache Leap area bouldering rock.

Other commenters express a primary concern with the loss of access to climbing resources outside the subsidence zone: *“the largest amount of rock climbing is outside of the zone of subsidence and will physically remain intact no matter what occurs with the Land Exchange and Mine”* [19462]; and *“the central loss to rock climbing is access due to the loss of road and parking access”* [18042]. With regard to cumulative climbing access impacts, one commenter also notes that *“closures from the mine have already effected climbing access there and the quality of Phoenix rock climbing in general”* [19546].

One commenter states that climbing groups are currently working with Resolution Copper to address climbing access issues: *“aided by Resolution, [Queen Creek Coalition] is working with other recreational groups to achieve a recreation greenbelt around the Mine that will provide current and future generations of residents of the area, Arizona and Out-Of-State Visitors significantly improved recreational opportunities and the future of a green economic engine benefitting all”* [15141].

3.6.10.3 BOYCE THOMPSON ARBORETUM

Commenters are concerned that tourism to Boyce Thompson Arboretum would be negatively impacted by the proposed project. Commenters are concerned that recreation activities at the Arboretum would decrease tremendously once the mine project is in operation. Commenters state that the *“Boyce Thompson Arboretum will see toxic air/dust potentially eliminating species of birds and plants, not to mention the view of tailings pile across the street”* [17; 25813].

3.6.10.4 RECREATIONAL ACCESS ROADS

Commenters express concern with the project’s proposed temporary and permanent road closures for motorized and non-motorized use. Respondents are concerned that road closures would impact public access to recreation sites, trails, and climbing areas, and use of roads by OHV enthusiasts. Commenters are concerned about the loss of access roads to both public and private lands in the area. Commenters ask that the EIS disclose the temporary and permanent public access road closures, disclose the effects of closures on recreational resources, and develop alternative access routes that mitigate for losses. Access roads of concern, including U.S. Route (U.S.) 60, Magma Mine Road and other Forest Service roads and spurs, are shown in [Table 3.6.10.4-1](#).

Table 3.6.10.4-1. Commenter-Identified Recreational Access Roads of Concern

Road Type	Road Name or Number
State Highway	U.S. 60, Highway 177
Forest Service Road	Magma Mine Road (portions of Forest Service Roads 469, 315, 2432), 172, 252, 315, 342, 469, 518, 650, 982, 1903, 1907, 1908, 1914, 1915, 1916, 1917, 1918, 1919, 2359, 2360, 2362, 2364, 2438, 2440, 2466, 502S13E, 602S13E

Additionally, respondents are concerned about the loss of public access to hunting and other recreational resources at the tailings storage facility location. One commenter states, *“The tailings area has historically been used by many in the region for game hunting. The EIS should discuss disruption to game species and hunting opportunities in this area”* [79].

In contrast to the recreational access road loss comments, several respondents note that the land exchange would benefit recreation users by gaining *“access to thousands of acres of land that are currently in private hands”* [99].

3.6.10.5 OAK FLAT CAMPGROUND

Campers are concerned that they would lose camp sites in a *“gorgeous area”* [17; 25813]. Specifically, respondents *“are concerned about the loss of Oak Flat Campground due to the land exchange and mine development”* and would like the EIS to *“explain the effects of this on regional recreation opportunities”* [79]. Respondents note that the Oak Flat Campground is a popular campground enjoyed by various recreation user groups. Additionally, commenters state that the campground is in a unique environmental setting and is considered a sacred place by Native Americans. Respondents are concerned that campground benefits would be negatively impacted by the proposed project. To demonstrate these

concerns, multiple respondents include in their comments personal stories of their past visits to the Oak Flat campground:

The campground proper and the surrounding area is used by many, many people. Just last weekend on Easter the campground was filled with families spending their holiday there. [19500]

Over 25 years ago, four of us camped two nights at Oak Flat. We'd heard about a beautiful canyon where the rock climbers gathered. Being runners, we ran over and found this wondrous place – climbed part way down the rocks – and drank in the beauty. My first impression was one of awe – and that picture has remained with me since then. It is a place I recommend to others as a pleasant campground amongst the oak trees, with well-used trails leading to the magnificent canyon. [20994]

I have camped at Oak Flat camp ground three times and I think it's a very valuable campground to have, there aren't very many, actually in Southern Arizona not nearly enough for the large number of people between Phoenix and Tucson that want to go camping and it has springs which is also very unique and very important. [32]

3.6.11 Socioeconomics

The following section summarizes socioeconomic topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.11-1](#).

Table 3.6.11-1. Issue and Rationale Codes Summarized in Section 3.6.11, Socioeconomics

Comment Summary Section	Issue and Rationale Codes
3.6.11 Socioeconomics	120 Socioeconomics 540 Socioeconomics 541 Multiplier 542 Tax Dollars 543 Benefits (general) 544 Jobs 545 Study 546 Property Values 547 Property Taxes 548 Public Costs 549 Tourism 550 Losses (general) 551 Copper Demand / Uses 552 Social Impact Assessment

3.6.11.1 SOCIOECONOMICS BENEFITS AND LOSSES

Benefits

In general, commenters express positive support of the proposed project's economic benefits to the region and state of Arizona as a whole. Commenters are supportive of the increased employment, commercial and residential development, increased tax revenue, and other socioeconomic factors.

Respondents request that the EIS “analyze the economic benefits generated by the mine so far” [188] and “seek to quantify the economic benefits that the mine will undoubtedly create” [99]. One commenter proposes that the “important factors to consider include: job creation, new income generated, residential in-migration, new housing demand, and increased tax revenues to cities, counties and school districts” [125]. Commenters also note that the economic benefits from mining would reach far beyond the base

industry to “stimulate local market economies such as retail, construction, local business services, banks, hospitals and local, county, state and federal governments” [36; 10029].

Some commenters also express support for economic benefits that would result from the land exchange, with one commenter asking that the socioeconomic analysis consider the “*potential ecological and environmental benefits to the public that will come from the land exchange*” [93; 117].

Losses

Public comment also includes concerns about the general socioeconomic losses that would result from the proposed project. Respondents are concerned that “*the economic benefits touted by Resolution Copper are greatly exaggerated and pale in comparison to the economic losses that will occur through lowered property values, reduced tourism, health-associated costs, damage to roads, air quality costs, and impacts to local water resources resulting in higher water costs*” [17; 25813]. These economic losses are thought to be long term, contribute to “*specialization and lack of economic diversification*” [26240] in the region, and “*prohibit sustainable revenue streams like outdoor recreation from happening*” [11653]. Respondents are also concerned that the local communities would not realize economic benefits because “*much of the profits derived from this mine would be immediately transferred out of the country*” [19655].

The economic loss of ecological value and cultural resources is also of concern to commenters. One commenter states that the EIS analysis of “*economic impacts should not exclude the loss of the intrinsically valuable and irreplaceable natural resource that is America’s National Forests and National Historic Places*” [6266]. Additionally, one respondent requests that the EIS analyze the economic losses resulting from “*emigration of people not employed by the mine due to its negative social impacts*” [26240].

3.6.11.2 SOCIOECONOMIC STUDY

Multiple respondents suggest that the Forest Service conduct an independent economic study for the EIS. One commenter states, “*The Forest Service must conduct an economic impact study, funded by neither proponents nor opponents of the mine, that will review these previous studies, as well as provide an up to date independent prediction of the socioeconomic impacts of the mine*” [24174]. Respondents also request that the EIS consider the findings of a report by Power Consulting Inc. titled “Exaggerating the Net Economic Benefits of the Proposed Copper Mine” in the socioeconomic analysis.

Commenters request that the EIS analyze the lost benefit to the Arizona economy for each year the mine is delayed. Specifically, respondents ask the EIS to analyze the economic benefit loss to the State of Arizona and the local dollar loss to the region that would result from project approval delays. Commenters also request that the EIS process be streamlined so that the proposed project can move forward with its positive economic contributions to the region and state. One respondent states, “*As valuable as this study is, of greater importance is the ability to begin benefiting by the investment in the mine. As such, I request that the EIS be completed as efficiently as possible. Pinal County needs the lasting economic benefits this mine will produce. And the sooner, the better*” [125].

Finally, commenters also suggest that an economic feasibility comparison analysis be conducted by a nonaffiliated entity. Respondents suggest “*an analysis of associated costs for the additional burden of state and federal responsibilities for land and water management, oversight, and possible future mitigation*” [22782].

3.6.11.3 REGIONAL HISTORY

The regional economic history of mining in the Copper Triangle is of concern for respondents:

“The ‘Copper Triangle’ area of Arizona, including Superior, Miami, and Globe, is a region that remains economically stagnant after decades of reliance on mining as the primary industry” [24174].

Respondents request that the EIS economic analysis include consideration of the region’s historical mining economy.

Additionally, respondents express interest in the current and historical impact of Resolution Copper and its parent companies on the local and regional economy. Commenters request that the EIS analyze Resolution Copper’s economic investments in the area historically and since the beginning of the current mine proposal. One respondent notes that Resolution Copper *“has demonstrated a commitment to the environment in its multi-million dollar clean up and reclamation of former Magma Mining properties”* [205; 22634]. Another commenter states that the company’s *“investment in the area is already paying huge dividends”* [598].

Commenters also ask that the *“EIS document please provide an assessment of the past, current and future charitable contributions by Resolution Copper as well as agreements with local governments and groups and organizations and the overall positive social and educational benefits it has brought to local and regional communities and governments”* [19745].

3.6.11.4 TAX REVENUES

The proposed project’s impact on tax revenue is of interest to commenters. Respondents would like the EIS to detail the direct, indirect, and cumulative tax revenue effects that would result from the proposed project. While the commenters request that the EIS detail the regional, State, and Federal tax revenue impacts, many respondents are concerned about the specific tax revenue impacts on the local communities. One commenter asks, *“How much tax revenue will be generated for surrounding local communities? It is important that when a process such as this goes forward that there are direct benefits to the communities that will be most impacted”* [25795].

Respondents request that the EIS analysis include the projected impact of increased tax revenues to school funding and government services. Additional tax revenue analysis areas include State shared revenue, severance tax revenue, State income tax revenue, and Federal royalties and equalization payments.

Several respondents are also concerned that tax revenues from the proposed project may not have a beneficial impact. One commenter is concerned that the *“Town of Superior will not be receiving tax revenue from profits gained in any future mining activity by Resolution Copper”* [269]. Several other commenters note that Resolution Copper’s parent companies are foreign owned and that *“they will not be paying U.S. taxes on the billions of dollars in copper and other metals they intend to remove from the United States”* [17; 25795]. Respondents ask that the EIS discuss these additional factors in the analysis.

3.6.11.5 EMPLOYMENT

The economic impact of the project’s employment opportunities is an area of interest for many respondents. Multiple commenters ask that the EIS disclose the number of direct and indirect jobs that would result from the proposed project, including the type of jobs created, salary ranges, and geographic distribution of jobs regionally and statewide. A sample of these comments follows:

How many direct and indirect jobs will the approval of the project create? Is it known how many jobs will be created for local residents / Copper Triangle residents vs bringing people in from other states or other countries? [12105]

How is the proposed mine different from existing mining methods in the Copper Triangle and what are the positions needed to be filled when in construction and production phase? [23197]

How many mid-level skill jobs (jobs that require Certificate or Associates Degree) will be available? [312]

If the mine plan of operations changes (small mine), how will that affect the number of jobs that Resolution states it will provide, both directly and indirectly (i.e. the 3700 listed on their website)? [26626]

Related to new employment opportunities, some commenters express concern about Resolution Copper's plan for employee housing. One respondent asks, *"What is Resolution Copper going to invest in to ensure the communities of Globe, Miami, and Superior can tackle blight while also creating quality, affordable housing for the future workforce of thousands of people?"* [22634].

Employment Benefits

The direct and indirect benefits of employment on industries and business associated with the mine, including the Arizona rock product firms and tribal sand and gravel companies and batch plants, are also of interest to respondents. One commenter asks, *"White Mountain Apache Tribe has sand and gravel as well as batch plants that could be used to provide services and products to Resolution Copper, while increasing jobs and business opportunities for tribal members. Can the forest service define the positive economic impact for those tribal businesses as well as direct and indirect hire during construction and operations for White Mountain Apache tribal members? Unemployment is very high on our reservation, about 90% and people need jobs"* [26049].

Many commenters are supportive of the proposed project because it would bring employment opportunities to the economically depressed Copper Triangle region. Commenters state, *"We continue to believe that it is critically important that the Resolution Copper project move forward in order to put people to work in high-tech, well-paying jobs"* [39]; and *"a significant amount of employees for this mine will come from local tribes that have high poverty rates and surrounding communities that need these jobs"* [19620].

One commenter notes that the proposed project would have a beneficial impact to employment for the local Hispanic community as well as small businesses: *"We believe it would have a profound positive impact on the economics economic development of the East Valley of Maricopa County, particularly on the Hispanic and small businesses, who will benefit from increased employment and increased procurement opportunities for businesses"* [68].

Multiple respondents note that the proposed project would also provide employment opportunities that would benefit the local Native American population. One commenter states, *"Many natives are currently working at the mine site & are very positive about seeing the mine get its final approval so many of their people can work at the mine"* [19843; 24281]. Some commenters also request that Resolution Copper work with the local Native American tribes to ensure that employment opportunities are available for tribal community members. One commenter states, *"I could support an iron clad agreement written in cooperation with, or by, the Native American population there which stipulates that all jobs for the mine will be given first to natives, and in the case of highly technical jobs those will be offered first to qualified native"* [86653].

Employment Losses

Some respondents are also concerned about negative effects that the proposed project would have on employment in other industries in the region. Respondents state that employment losses to the local

tourism and recreation industries are likely to have negative socioeconomic impacts to the region. One commenter states, “*Preserving the wilderness would allow for job creation in the environmental sciences, wilderness conservation, eco tourism, outdoor outfitters, guides and retail*” [17202].

Commenters also express concern about the historical employment record of Resolution Copper’s parent companies. One respondent states,

This is a peculiar time to be commenting on employment in a copper mine, since hundreds of southern Arizona workers have lost their jobs in copper mining within the past two years. As recently as 1999, about 50 miles southeast of Oak Flat, over 2200 workers were laid off by the closure of the San Manuel mine, owned by BHP Billiton. Through subsidiaries, BHP Billiton also owns 45% of Resolution Copper Mining. A familiar sounding story is that at one time the San Manuel mine was the largest underground copper mine in the world in terms of production capacity, size of the ore body, and infrastructure. [24174]

Workforce Training

Respondents are concerned that the advanced mining techniques proposed by Resolution Copper would require more highly skilled workers than are present in the surrounding communities. One respondent states, “*I would like for the TNF to address how many jobs will actually be available for local people who may not have a college education or specialized robotics training*” [26633]. To meet the demand for skilled workers, commenters also request that Resolution Copper work with the local communities and education providers to create workforce training programs. Workforce training comments include the following:

What is Resolution Copper doing to prepare their future workforce? What programs and strategies are they going to utilize to ensure the local population is trained and fit for employment? [241; 22634]

Has Resolution Copper committed to investing in local schools to ensure that the next generation of students is trained in state-of-the-art skill sets and technology? [20210]

Will internship opportunities be available for high school students in workforce training? Will apprenticeship opportunities be available for local students and if yes, in which areas? [312]

Would Resolution Copper be open to opening a Technical Training Center on the reservation to train tribal members in jobs that can get them employed at Resolution Copper? [22717]

3.6.11.6 PROPERTY VALUES AND TAXES

Respondents are concerned about impacts, both positive and negative, to property values from the proposed project. Commenters request that impacts to property values be included in the EIS economic analysis. The majority of the property value comments express concern that the proposed project’s environmental impacts would devalue properties. Specific communities of concern in the comments are Pinal County, Superior, Queen Valley, Florence, Gold Canyon, San Carlos, Globe, and Miami. Additionally, one commenter asks, “*Are you prepared to compensate all of us for the loss in our property values because of this?*” [21076].

Respondents also request that the EIS economic analysis disclose the potential impacts to property taxes, including potential changes in property tax rates. A sample of property tax comments follows:

I’d like the property tax implications for the local taxing districts and Pinal County reviewed and projected once the mine is operational. [50]

Can you please analyze the effects the land exchange has on the taxable base of Pinal and Maricopa counties? [254]

Would there be a reduction in property taxes for the residents of Superior? [587]

Commonly associated with the property tax comments are questions related to public school funding. Respondents request that the EIS economic analysis include discussion of the positive and negative impacts to public school funding as they correlate with the proposed project's property tax impacts. One commenter states, *"I have read that in mining communities the valuation of the local school district is extremely high, thus impacting property taxes. Could you clarify this? Would the increased property tax revenue go to our local schools, and if so, could you provide an explanation of how this would be done?"* [176].

3.6.11.7 COPPER DEMAND AND USES

The economic value of copper and copper demand and uses in Arizona, the nation, and worldwide are common topics in the socioeconomic comments. Many respondents state that copper is a valuable resource used by many industries and that development of the mine would bring significant economic benefits to the region. One respondent states, *"I understand this project alone will have the capacity to produce 25% of the U.S. copper demand for the next 40 years. As we consider the increasing importance of critical resources going forward, this level of copper production will be an essential part of fueling our economic engine well into the 21st century"* [20210].

Respondents ask that the EIS include the following strategic value economic considerations in the analysis:

Study the economic impact to domestic supply chains of copper and how they will be affected by the opening of this mine. [251]

How much of the copper produced at the Resolution will be used in the U.S. vs. exported? [9626]

Analyze the strategic value of the copper to be mined to the United States and to the many industries in Arizona relying on copper for alternative energy, technology, and defense-related purposes [6100; 23723]

Develop a comprehensive list of products and technology that is dependent on copper and what might happen socially and economically, in the US, if copper were in short supply or not mined at all? [235]

Determining the benefits of copper as it relates to green energy, e.g. its use in green energy technology such as solar panels, hybrid cars, home construction, etc. [9876]

Quantify the environmental benefit of copper in a low carbon economy? [9626]

Analyze and disclose all the benefits of copper and how it is used in everyday life, particularly anything involving sustainability. [9876]

The defense industries use of copper was of interest in the comments. Commenters request that the EIS *"analyze the impact Resolution Copper's mine will have on our defense industry"* [580] and discuss how copper would be used by Arizona's defense industry and military bases. One respondent states, *"I have read recently that copper is critical to our national defense. Can the U.S. Forest Service provide more information on how copper impacts the defense industry? Additionally, how will the Resolution Copper Mine impact our national defense?"* [194].

Several other commenters request that the EIS discuss other sources of copper nationally and internationally and what the economic impact would be if those resources were developed instead of the

proposed mine. One respondent asks, “How will it affect us if the copper that Resolution could produce here is instead mined in other countries, nations that perhaps are not friendly to the USA or our goals and philosophy?” [20567].

In contrast to the potential economic benefits of copper, many commenters also express concern about market fluctuations in copper prices and demand. Respondents note that the “price of copper has declined steadily over last 20 years, and is expected to continue declining for the next 5-10 years” [86]. Commenters are also concerned that “there has been no sustained prosperity and economic rise that has stayed in the area after a mine closes or reduces due to the price of copper. How is Resolution Copper going to make sure that when the price of copper reduces, those 1,400 jobs are not affected?” [24442]. Another respondent is concerned about Resolution Copper’s copper production estimates and asks that the EIS to verify these estimates.

3.6.11.8 PUBLIC COSTS

Many respondents express concern with the short- and long-term public costs associated with the proposed project. While public cost comments cover a broad range of topics, the majority are focused on transportation costs incurred from increased mine traffic, the need for additional emergency services, the increased burden on local schools, the environmental pollution remediation costs, and the public health costs of pollution-related illnesses. Several commenters state, “The EIS should analyze the public-health impacts from air and water pollution, its potential disruption and displacement of existing economic activity, and stresses on public services and infrastructure including transportation, schools and health-care facilities” [19843; 22782; 23600].

One respondent is additionally concerned about the public cost associated with the mine’s power and water supply needs:

Will SRP customers be subsidizing RCM for their electric usage since they will be using tremendous amounts of electricity? . . . I am wondering who will be picking up the tab for all the new electrical powerlines that will be used to run the mining operations. . . . Will the expense of building new wells by Arizona Water Co. to supply RCM also be passed on to their customers? [21551]

Other respondents are concerned about the public costs associated with mine reclamation at the subsidence zone and the tailings storage facility. Public cost comments related to mine reclamation include the following:

Why should taxpayers pay to clean up corporate mining operations? [7951]

How will the site be cleaned and returned to the natural state after operations are ceased? If the company is bankrupted and dissolved, who will pay for clean up? [2145]

It is imperative that the long term effects from these proposed mining operations are fully realized. Will pollution controls be maintained 100 years from now, 1000 years from now? The reality is that Rio Tinto will be long gone, yet future Arizonans will be stuck cleaning up the mess. [22710]

3.6.11.9 TOURISM

Respondents are concerned about lost tourism revenue that could result from the proposed mine’s resource impacts. Resource areas that respondents are particularly concerned about include recreation, public access, wildlife, visual, and transportation. Respondents state that unlike mine development, sustainable economic benefit could be gained from enhancing recreation related tourism opportunities. A sample of these comments follows:

People in this area would be better served by enhancing the tourist and recreation industries. [120042]

Having Oak Flat be a model for future recreation tourism will garnish much more for the community in the long run. [11459]

In contrast, multiple respondents are interested in the positive tourism benefits that could result from the proposed project. Respondents would like to know whether the project would “bring more housing and hotels to Superior” [255], bring “new restaurants and shops and things for visitors to do in Superior” [255], or whether “an increased number of businesses and attractions in the Copper Triangle from the mine’s operations generate more tourism for our area?” [118]. Respondents also request that the EIS economic analysis include the following:

The positive economic benefits of the Resolution Copper project currently, during construction and during operations to the town of Superior and surrounding area and compare it to current tourism spending in the same area to ensure a relevant comparison of two economic drivers in the same area. [216]

Please include in the EIS the positive economic benefits of current and future mining related tourism generated by curious visitors and vendors traveling to the Superior region. Please include hospitality related spending. [19745]

3.6.11.10 SOCIAL IMPACT ASSESSMENT

Several commenters request the EIS include a Social Impact Assessment: “Social impact should be awarded the same level of attention, research, and funding as the geologic and environmental contexts at Oak Flat. A Social Impact Statement would serve to acknowledge the social context of the mine with relation to specific stakeholder communities and nations. In particular, a balanced assessment would include discussion of how the mine benefits and/or harms certain communities” [2855].

One respondent would like the Social Impact Assessment to analyze the “impact of the proposed project on affected Native American tribes and on the small communities surrounding the project area” and asks that the process “include, but not be limited to, the San Carlos Apache Tribe, the Fort McDowell Yavapai Tribe, and other affected tribes, and the communities of Superior and Queen Valley” [26240].

One commenter requests that Resolution Copper fund and conduct the Social Impact Assessment as part of the mine’s Federal permit application and the NEPA process.

3.6.11.11 SOCIOECONOMICS-RELATED RESOURCE IMPACTS

Cultural Resources

Commenters request the EIS include a detailed socioeconomic study of the impacts to cultural resources. Some respondents are concerned about the negative impacts to Native Americans that would result from the mine. One commenter states, “Whatever profits are made from this endeavor will not be equally shared with the Apache people. Whatever money or jobs that this secures for the Native Americans is only a tiny piece of the profit margins” [19577]. Other commenters would like positive benefits to be discussed, including “the potential to promote and celebrate Native American culture on the Superior Lands would be of high value to the Chamber and residents of Superior in future planning and visioning for the town” [216].

Land Use

The economic impact resulting from the loss of livestock grazing land is of concern to some respondents. One commenter states, “*Ranching in the area is also both an important historical and economic use of the tailings area lands. Disruption and loss of the tailings area is likely to have negative consequences to area grazing permittees*” [79]. Another commenter is concerned about the mine’s potential economic impacts to the struggling ranching community and asks that the EIS “*analyze the effects of the [Resolution Copper Company] Mine on the struggling ranching community in the vicinity of the mining operations and tailings sites*” [4].

Several respondents are concerned that loss of the social and environmental benefits of the land would outweigh the economic benefits the mine: “*If left untouched, the social and environmental benefits it will bring to future generations will far outlast the life of the mine before the copper is depleted and the economic benefits it will bring*” [11325]. One respondent asks that the EIS analyze the economic benefits provided by the existing ecological functions of the land exchange property, stating that the EIS should “*analyze the ecological value of all lands involved in the exchange, what time period is applicable to the ecological values based upon the anticipated date of completion by the USFS for the land exchange*” [4600; 20038; 21847]. Another commenter requests that the EIS “*document the benefits of Oak Flat (as it is now) to humans, near and far*” [26274].

One respondent is also concerned that the mine development would result in a loss of land conservation ethics among the public, and that this loss would result in increased costs: “*Identify the budget necessary to launch an advertisement campaign that promotes the beauty and outdoor opportunities provided by the Tonto National Forest in Pinal County. Then, following the campaign, convince the ‘average public’ forest user that they must still continue to obey the rules of respect for the forest regardless of the Tailings Dump*” [25110].

Public Health and Safety

Respondents would like the EIS to consider the costs to public health and safety from the proposed project. Public health and safety costs of concern include air pollution health impacts, drinking water supply contamination and water shortages, and increased need for emergency services. Several commenters suggest that Resolution Copper pay for public health and safety related economic costs.

Multiple commenters note that local and regional emergency services are not adequately equipped to handle mine-related emergency responses and day-to-day responses associated with mine-related residential and commercial development. Commenters would like the EIS analysis to “*account for required expansions in public services paid by taxpayers, such as fire departments and other emergency services*” [26240]. One commenter states, “*Consider investments in public safety capacity and emergency services. Resolution is already providing this type of support in specific communities*” [79].

Additionally, one respondent is concerned about the cost of increased civil disobedience that could result from the proposed project:

The DEIS should also assess the level of civil disobedience that could occur from these recreational and spiritual losses; for example, recurring protests in which activists chain themselves to [Resolution Copper Mine] equipment is likely, considering that many activists have said publicly that they will never stand down from this fight under any circumstance. The DEIS should assess increased demand on local and regional police forces and specialized law enforcement units with this in mind, and the costs associated with these increased demands. [21739]

Recreation Resources

Commenters ask that the EIS analyze both the positive and negative recreation economic impacts that would result from the proposed project. Commenters would like the EIS to consider the economic benefits that would result from new public access to the land exchange parcels, as well as mitigation-related recreational enhancements such as “*replacement campground, mitigations/enhancements for climbing, hiking, OHV, preservation of historic mining cultural resources (i.e. the Magma Copper smokestack*” [216].

Many respondents are concerned that the loss of recreational resources at the mine site would negatively impact the area’s economy. Specific recreational economic resources that respondents are concerned about include “*Species of Economic and Recreational Importance*” [26060], watchable wildlife, the Arizona National Scenic Trail, and rock climbing in the Oak Flat area.

Respondents also state that the economic value of recreation is more sustainable and provides more economic input to the Arizona economy than does the mining industry. A comparison of these economic values should be included in the EIS analysis:

When evaluating the socioeconomic impacts of the Resolution mine project, please consider that outdoor recreation contributes more than twice as many dollars to Arizona as all of mining does, over \$10 billion annually compared to less than \$5 billion for the entire mining industry. These figures come from the Outdoor Industry Association and the Arizona Mining Association respectively. Please also consider that recreation is sustainable and can contribute to Arizona's bottom line in perpetuity. [21501; 22847]

Additionally, one commenter states, “*Outdoor recreation is increasingly a creator of quality, sustainable jobs in Arizona, and access to such recreation both promotes economic health through job creation and commerce, but also improves the quality of life here and helps to bring more employers to the area*” [12183].

Transportation

Respondents are interested in the economic impacts resulting from increased traffic and strain on the area’s transportation infrastructure. Economic concerns include costs to employees, employers, and businesses from traffic, and costs to taxpayers from roadway maintenance and new construction.

Water Resources

Economic concerns in the comments include water resource impacts. One respondent requests that the EIS analysis “*account for the displacement of other economic activities due to water problems associated with the proposed mine*” [26240]. Several respondents inquire about the financial responsibility for water pollution impacts. Additionally, one commenter is concerned about the long-term costs associated with wastewater treatment at the mine site: “*Modern mines are commonly proposed and built that will require between \$1 and \$10 million per year to operate water treatment plants as far as 5,000 years into the future*” and “*in reality, these environmental liabilities are certain to either be paid for by taxpayers of the distant future, or simply neglected altogether*” [21793].

3.6.12 Transportation

The following section summarizes transportation topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.12-1](#).

Table 3.6.12-1. Issue and Rationale Codes Summarized in Section 3.6.12, Transportation

Comment Summary Section	Issue and Rationale Codes
3.6.12 Transportation	190 Transportation 700 Trains 710 Traffic 660 Roads

Transportation topic comments are primarily concerned about increased traffic, road closures, and impacts to existing and planned transportation infrastructure. Associated with transportation, commenters express concern with transportation impacts to air quality, noise, recreation, public access, and public safety.

3.6.12.1 TRAFFIC

Many commenters are concerned about an increase in vehicular trips on roadways. Commenters ask that the EIS analyze traffic flows, roadway deterioration, maintenance costs, roadway improvement costs, and other effects of increased traffic on people, employers, schools, and businesses. One respondent asks, *“Will traffic patterns be impacted from people living in our city and commuting to work at the mine?”* One respondent requests that the analysis include social costs and inconvenience to the public from increased traffic. Additionally, several commenters request that the analysis of transportation impacts include infrastructure impacts in the United States and beyond: *“The GPO is completely silent about the impact of transportation to the final destination of the concentrates for final processing. The Forest Service is required to analyze all potential impacts from the proposed project whether those impacts take place on public lands or not”* [602].

Several commenters request that Resolution Copper provide transportation for mine employees to and from the mine, including for those employees traveling from the White Mountain Apache and San Carlos Apache lands: *“How is Resolution Copper going to make sure that there is a transportation plan put in place for local tribal members from San Carlos to Superior?”* [22717]. Associated with these comments are requests for Resolution Copper to pay for carpooling infrastructure improvements, including improvements to park and ride facilities.

With the increased traffic, commenters also note safety concerns, including an increase in traffic-related incidents and concern about toxic chemical transport on roadways and by train. One respondent asks, *“What types of chemicals, hazardous materials, explosives, gases, fuels, etc. will be transported through Superior and other traffic corridors for the operation of this mine?”* [26240]. One respondent notes that the Arizona Department of Transportation is currently addressing safety concerns on U.S. 60: *“Another concern many of us have here in the area is the safety on the local highways with the increased commercial traffic associated with the Project. DOT has already addressed our concerns with their ongoing road projects in Superior and between Superior and Miami”* [24190].

3.6.12.2 ROAD CLOSURES

Road closures, both permanent and temporary, concern respondents. Forest Road closures are of concern for public access and recreation users. One respondent asks, *“When the mining operation starts, how long will the Forest Roads (FR) be closed? Which roads will be lost? Will FR650, FR172 and FR252 be closed at anytime of the operation? If any of these roads are closed during the operation, how long will they be closed?”* [12].

3.6.12.3 INFRASTRUCTURE

Multiple commenters express concern with the project's impact to transportation infrastructure, including roads, bridges, tunnels, and railroads. Commenters request that the EIS further analyze these infrastructure impacts:

What impact will development and operation of the project have on the freeway and rail infrastructure of the region? [586]

Will the plant line need to be double-tracked to accommodate this increased traffic? [202]

The EIS must identify potential bottlenecks resulting from increased traffic, and estimate the cost for improvements including widening and enhanced traffic controls. [26240]

One specific infrastructure concern raised in multiple comments involves subsidence impacts to U.S. 60. One respondent asks, “Ground subsidence is predicted to occur and is addressed in the GPO. What assurance is in place if the subsidence area is larger than predicted? What will happen if it “takes out” U.S. Route 60? Will the EIS address possibilities that [Resolution Copper] is wrong in their study and prediction models? Will bonds be in place to re-route the highway if this occurs?” [26629].

Several respondents note that the communities near the mine, where many workers would reside and from which they would commute, are currently struggling to meet existing transportation infrastructure needs. Respondents are concerned about the additional strain that the mine would place on the transportation infrastructure by the project. One commenter states, “Pinal County has struggled for years with efforts to build the needed transportation and other infrastructure to support the population growth in the area. Which is why Pinal County has requested that you build several miles of roadway from Skyline to H.W.Y 177, as part of your permitting process. Have you thought about employees traveling to reach the proposed location when the current roads can barely support the today’s population trying to reach their current employment/homes?” [25950].

Commenters additionally request that the EIS analyze mine impacts to planned transportation infrastructure projects in the region: “address the impacts of the proposed actions on existing planned transportation systems and corridors including, but not limited to existing roadway infrastructure” [3828]; and “please analyze the I-11 corridor impacts as part of the cumulative impacts” [11].

3.6.13 Visual Resources

The following section summarizes visual resource topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.13-1](#).

Table 3.6.13-1. Issue and Rationale Codes Summarized in Section 3.6.13, Visual Resources

Comment Summary Section	Issue and Rationale Codes
3.6.13 Visual Resources	640 Visual Resources 691 Night Sky/Light Pollution

Residents and visitors of the area “cherish the beauty of these high desert lands” [23600] and the “natural beauty of the Oak Flat area” [45470]. Commenters voice concern with the visual impact of the mine operations and impact to viewsheds around the mine area. Impacts to visual resources include changes in the landscape that would result from Oak Flat subsidence, power line construction and expansion, and dust and emissions from ore processing, vehicle transportation, and equipment emissions. The visibility

and contrast of the tailings storage facility and mine facilities are also of concern during the mine construction, operation, and reclamation phases. Commenters request a visual analysis of the various components contained in the proposed action.

Commenters are concerned that the proposed tailings storage facility would impact scenic views for Queen Valley and Superior homes, the designated scenic U.S. 60, visitors to Boyce Thompson Arboretum, and users along the Arizona National Scenic Trail. Respondents would like the EIS to discuss impacts to the U.S. 60 scenic byway and implications on the scenic byway designation. Areas of the Arizona National Scenic Trail that are mentioned specifically by commenters include Picket post Trailhead; near Barnett Camp; the ridge just north of Forest Road 293 to Whitford Canyon; near Borrow Area 5 and 6; the ridge areas between Potts and Rice Water Canyons; and high vantage points along trails in the Superstition Wilderness Area, including future trails within Superstition Foothills Preserve.

Respondents are additionally concerned about visual impacts to culturally significant geological features. One respondent asks, “*Will viewsheds, lines of sight, and spatial relationships between geologic features that are important in Apache history and culture be adversely affected?*” [26530].

The magnitude of light pollution from mine operations is also of concern for respondents. Commenters are concerned about specific populations who would be impacted by light pollution: recreational users and the elderly and homebound residents. One commenter asks,

Will residents living along the north end of town and bordering the property line be subjected to continuous noise and lights during construction and production? If so, what type of mitigation will the company put in place? Many residents in this section of town are elderly and are home throughout the day and night, so it is important that we can continue to enjoy our peaceful atmosphere. [24309]

Respondents would like to see visual analyses done at various locations, including those specifically mentioned in the comments, to understand what the impacts to the viewshed would be from the proposed project. The visual analysis should be done looking from each viewpoint and done looking outward from the tailings storage facility and other areas of the mine to demonstrate the impact to the surrounding landscape.

3.6.14 Water Resources

The following section summarizes water resource topic areas or concerns. The issue and rationale codes summarized in this section are shown in [Table 3.6.14-1](#).

Table 3.6.14-1. Issue and Rationale Codes Summarized in Section 3.6.14, Water Resources

Comment Summary Section	Issue and Rationale Codes
3.6.14 Water Resources	560 Water Resources 561 Water Supply 562 Water Quality 563 Water Quantity 564 Groundwater 565 Surface Water 566 Waste Water 567 Acid Mine Drainage 568 Groundwater recharge 569 Pit Lake 144 Groundwater Pumping

3.6.14.1 SURFACE WATER

Commenter concerns about impacts to surface water from mine operations include the following:

- Impacts to streams, springs, flow, discharge, and floodplains from landscape alteration in the subsidence and tailings storage facility areas and other areas in the mining operation vicinity. Specific surface waters of concern include Devil's Canyon (*Gáán Bik'oh* or *Ga'an Canyon*) (Figure 3.6.14.1-1), Mineral Creek, Arnett Creek, and Queen Creek.
- Impacts to surface waters and the relationship with the area's aquifers: *"Potential hydraulic connections between the aquifer and the springs and intermittent and perennial stream reaches of Devil's Canyon must be carefully analyzed in the EIS, including potential impacts to the Apache Leap Tuff aquifer, which supports the perennial reaches in middle and lower Devils Canyon (Surface Water Baseline Report, Montgomery & Assoc., May 16, 2013). The Forest Service should continue to develop baseline water quality and quantity data in these watersheds during the development of the Resolution EIS and make such continued monitoring a condition of the final Mine Plan of Operations"* [26060].
- Impacts to springs and natural water catchments that are used as important water by equestrians and hikers.
- Impacts to the area's springs: *"A thorough search for evidence of springs in the area should be conducted, and any extant springs that are found should be formally surveyed, including the documentation of rare and endemic species. The Springs Stewardship Institute database shows approximately 20 springs within 5 miles of the Oak Flat area, 130 within 10 miles, and 408 within 20 miles. It is quite possible that the effects of groundwater pumping/dewatering will reach far beyond the immediate land exchange/subsidence area, depending on hydrology. A thorough, independent analysis should be conducted with regard to the hydrology of the area, how it fits within the larger region, and impacts to regional spring resources"* [26240].



Figure 3.6.14.1-1. Upper Devil's Canyon.

3.6.14.2 GROUNDWATER

Numerous concerns were expressed about the proposed project's impact to the region's groundwater resource; many commenters state that groundwater is a vital resource in the Arizona desert and request that measures are taken to protect it from resource damage. One commenter asks, "*I also wonder how the mine will affect what little groundwater is in the area?*" [3308].

General concerns or requests expressed by respondents about groundwater include the following:

- Analyze impacts to the area's groundwater resources in the Oak Flat and tailings storage facility area from mine operations, groundwater pumping, process waste water, mine dewatering, and tailings storage. A commenter states that the "*EIS studies should comprehensively evaluate the effects of the mine and mining activities on surrounding groundwater resources. Connections to other aquifers and depletion of resources are main concerns*" [79].
- Include a description and analysis of how groundwater and surface water resources are connected and what impacts the depletion of groundwater would have on surface water resources in the region, including springs.
- Analyze groundwater depletion from mining operation dewatering and groundwater pumping activities, in particular the impact of dewatering on the Apache Leap Tuff aquifer and shallow groundwater system.
- Conduct accurate monitoring of groundwater impacts. A respondent suggests, "*Provide ongoing monitoring and measurements of aquifer depth for any areas that may be affected by mining, through the post-closure period*" [79].
- Analyze potential contamination of groundwater supplies that provide potable water sources in the region. A respondent asks, "*Will pollutants be leached into the groundwater?*" [26623].
- Report composition of the "waste" water generated from mine operations and whether this can contaminate groundwater.
- Include a plan for mitigating impacts of groundwater pumping. A commenter requests that "*sufficient mitigation be developed to address impacts of the 30 new groundwater wells*" [24962].

3.6.14.3 HYDROGEOLOGY

Commenters are concerned that the geology of the mine site and tailings storage facility location would result in infiltration of waste materials into groundwater and surface water: "*The geology of the area is such that any and all chemicals, fuels, and liquids used in the extraction of the ore and clearing of the overburden will precipitate into the groundwater system in a very short time frame, as well as leaching laterally into surface water flows*" [32133]. Another area of hydrogeological concern is geological faulting in the subsidence zone. Commenters voice concerns that faulting would result in water infiltration to mine shafts, as well as water crossing fault lines and adversely impacting water quality and quantity. One respondent has "*concerns about geologic faulting that may adversely impact water quality and quantity in Devils Canyon*" [26351]. Respondents are also concerned about the impact of water runoff and erosion in the subsidence area.

3.6.14.4 WATER QUALITY

Commenters express numerous concerns about how the mining operations (development, operations, closure, and post-closure) would impact water quality, for both groundwater and surface water, in the region. Respondents want the EIS to include information about and analysis of wastewater contaminant and chemical content and what would be done to keep these contaminants from entering the area's surface

water and groundwater resources. Commenters want the EIS to “include in the EIS an environmental analysis of the expected chemical composition of water waste from mining operations, the required chemical composition of water discharged into the environment under the Clean Water Act, and the long-term legal, economic, environmental, regulatory, and compliance-related costs of ensuring that water is compliant with CWA” [15948].

Potential mine operation water quality contaminant sources mentioned in the public comment include the following:

- Leaching and soil erosion
- Disposal of wastewater
- Mine processing chemicals
- Heavy metals, non-metal pollutants (sulfate and total dissolved solids)
- Accidental toxic spills
- Tailings storage facility
- Slurry chemicals
- Acid mine drainage
- Salt content of the CAP water
- Ponds of contaminated water
- Old Magma Mine “shaft 9” discharge water

The following commenter expresses concerns about Queen Creek and impacts to the residents of Queen Valley: “This is extremely important to the people of Queen Valley. . . . Queen Valley relies on the water of Queen Creek. The town would be severely affected by the loss or contaminated water from the tailing site. I live in Queen Valley and am very afraid that the mine will irrevocably change, if not destroy our beautiful peaceful little town” [21285]. Commenters request that the EIS consider the preparation and relationship between the total maximum daily load process and the EIS process:

The DEIS needs to discuss a timeline for development of a Total Maximum Daily Load for Queen Creek The DEIS should also discuss the situation with storm water and mine water discharges into Queen Creek. While it appears that discharges have not yet actually occurred, the fact that discharges are anticipated should necessitate the issuance of proper discharge and [Aquifer Protection Permits] permits from [Arizona Department of Environmental Quality], and should explain how such discharges could be allowed without implementation of a TMDL [total maximum daily load] and without [Resolution Copper Company] participation in a compliance schedule to help clean up the creek. [310]

Some commenters include specific questions and concerns about the management and regulation of wastewater generated by the mine operations:

Describe the methods and regulatory oversight that will be applied to monitor and mitigate the quality of mine discharge water. [79]

Likewise, describe the methods and regulatory oversight that will be applied to monitor and mitigate the quality of tailings discharge water. [79]

It is critical to know the amount and composition of the ‘waste’ water that the mine will generate during development and operations to insure there will not be a negative impact to the underlying aquifer, surface water supplies, air quality and public health. [14595]

The GPO describes using the groundwater from mine dewatering for mixing with tailings. This water is contaminated and the EIS should evaluate the appropriateness of Resolution's plan to simply mix this water with tailings and dispose of it without treatment. This would seem to be a violation of federal and state water quality rules as well as rules governing industrial discharges. [24610]

Some commenters express a trust that Resolution Copper would “do their best” [267; 26472] to ensure that water quality would not be compromised and that “they are going one step farther and establishing an independent monitoring of the water that will be discharged and eventually the air too, when construction starts, which will be monitored by the interested public” [267; 26472]. In addition, a commenter states that he/she is “satisfied that there will be appropriate State regulatory monitoring of water quality related to the Resolution Copper Project. However, it is our understanding that the State’s authority to cancel permits or stop the operation of facilities at short notice is limited and largely untested in Arizona. Therefore, we ask that the proponent commit to certain mitigation measures in the EIS that will address this deficiency in laws or regulations” [79].

Commenters express concern about the potential for water contamination along the Arizona National Scenic Trail. One commenter states, “Windblown contaminants are a major concern to [Arizona Trail] users. The GPO addresses this issue. However, it is more of a reactive solution rather than a proactive solution. How will [Arizona Trail] users be assured that any water they collect for drinking along the trail or allow their equine or pets to consume will be safe?” [26629].

Specific water quality concerns brought forward by commenters regarding the tailings storage facility include concerns about how the facility would be managed to control stormwater, seepage, and leaching of contaminants into surface water and groundwater. Commenters also question the practice of two tailings streams and the efficacy of this strategy to reduce acid mine drainage. Other specific comments regarding tailings and water quality include the following:

Several existing natural springs exist in the area to be covered by the tailings pile; it seems that the seepage going right into a spring would prove toxic to the water aquifers. [19607]

Is there a chance the slurry water will seep into the groundwater? When we get the monsoons, will some of the tailings wash away, travel down washes from the summer floods, and create a bigger mess as contaminates in the tailings might flow down with the flood waters? [19597]

Likewise, describe the methods and regulatory oversight that will be applied to monitor and mitigate the quality of tailings discharge water. [79]

Provide information as applicable to the possibility of toxic water or tailings actually passing thru Whitlow Dam and onto private property; identify the impact on drinking water in town wells and privately owned wells, and identify the impact on wild life & plant life that could come in contact with contaminated water. [25110]

[Resolution Copper Mine’s] current proposal does not include a liner under the tailings impoundment. The DEIS should closely examine the validity and case history of this practice. Given the acid drainage potential as well as the current plan to use aqueous tailings, detailed study of contamination migration to groundwater must occur. [21793]

Our point is we must require Resolution Copper Mining LLC to put liners on the bottom of the tailings ponds so no chemicals can leach into the Queen Creek watershed. [3965]

Acid mine drainage and the potential to contaminate groundwater and surface water is brought forward as a primary concern by many commenters. Respondents express concern that acid mine drainage generated at the mineral processing facility, tailings storage facility, underground mine, and pit lake would enter

surface water and groundwater, including Queen Creek, Arnett Creek, and the Gila River via stormwater runoff and seepage. Comments include questions about how the EIS would analyze and provide mitigations for acid mine drainage and impacts to water resources. Following are comments related to acid mine drainage concerns:

All waste rock to be left on the surface should be tested for its potential to develop acid rock drainage and/or neutral drainage. [26240]

The EIS must address infiltration of contaminated water from the tailings, into underlying groundwater and must independently evaluate methods that could be implemented to preclude such infiltration. [24610]

Acid mine drainage will be problematic at the TSF (or any alternative tailing location) as runoff water and water collected from the under drains will likely be acidic and laden with heavy metals. While the plan of operations notes methods of [Potentially Acid Generating] and [Not Potentially Acid Generating] separation and tailings deposition that will help to minimize this threat, acid drainage is still expected, and post-closure water treatment under the current plan is expected to be a significant expense after closure. Here, the likely danger lies with the possibility of the tailings contaminating regional groundwater and/or surface water supplies, whether due to (among other things) (a) Resolution Copper's decision to store the tailings at an unlined site where direct transfer to the groundwater can occur; (b) a cessation or failure of pumping facilities; or (c) a moderate to catastrophic failure of the dams or diversion structures at the TSF. Any one of these events could result in a tremendous amount of acidic, toxic water simply discharging into the ground and/or into the Queen Creek drainage, and eventually downstream to the Gila River. [24280]

The formation of a pit lake at the subsidence zone is concern among respondents. Commenters are primarily concerned about the impact of pit lake formation on the hydrologic system and water quality. One commenter states,

The DEIS should include independent hydrologic assessments regarding the formation of a lake over time within the subsidence crater. This analysis should include evaporation rates during and after formation, and the impacts of a possible groundwater cone of depression associated with that perpetual evaporation. This analysis should also include pit lake chemistry and evapoconcentration over time, and it should quantify the duration of long term pit lake water treatment obligations, if any are possible. [21793]

Respondents include questions and concerns about water quality monitoring during operation and post-closure. Waste quality monitoring comments include the following:

I am concerned about the ways in which water quality will be monitored during operations and post closure. [4079]

What parameters will be implemented to prevent damage to the Devil's Canyon riparian habitats? How will [Resolution Copper] prevent contamination of Devil's Canyon from its operations on and below Oak Flat? Can [Resolution Copper] guarantee that their proposals are 100% fail safe? [26629]

Who will monitor the water coming out of Oak Flat for contaminants linked to [Resolution Copper Company's] industrial operation? Will [Resolution Copper Company] cover all costs of monitoring, filtering, and purifying that effluent? The EIS should disclose (and the public deserves to know) exactly what contaminants may be flowing into groundwater. There is no room for [Resolution Copper Company] to plead that its chemicals are a proprietary blend which they cannot divulge. [26274]

3.6.14.5 WATER SUPPLY

Impacts to community water supply, in terms of both water quality and water quantity, are of concern to the respondents. Water supply concerns arise from historical groundwater pumping impacts to water supply and from the water quantity needs and proposed water sources included in the mine GPO. One commenter states, *“Already, Resolution Copper’s dewatering of underground mines and pumping of water has lowered Queen Valley’s groundwater levels and has put our wells and water supply at risk”* [25813]. Another respondent states, *“The EIS should discuss local drinking water resources for Superior and any other nearby areas. Significant infrastructure areas, such as the East Plant Site, West Plant Site, Tailings Storage Facility, etc., should be discussed in terms of how they will each impact local drinking water supply- whether by surface water impacts or groundwater impacts”* [26498].

Respondents are concerned that the proposed project’s use of groundwater and CAP water could threaten drinking water supply for many communities, including Queen Valley, Superior, San Tan Valley, San Carlos and the Apache Reservation. One commenter asks, *“The underground dewatering plan is designed to pump water from an aquifer deep below the earth. Will this dewatering project affect San Carlos’ drinking water?”* [22095]. Commenters also express concern about water quality impacts to drinking water. One commenter states, *“Pollution of the public’s water is a serious possibility”* [20315]. Respondents would like the EIS to address the potential sources of water contamination to water supplies, including from the tailings storage facility and wastewater discharge.

Several commenters suggest that Resolution Copper provide backup community water systems and pay for new wells where aquifer drawdown or contamination occurs. One commenter asks, *“Will the mine/Resolution Copper re-drill wells in the San Tan Valley area if their pumping lowers our water table?”* [128]. A few other commenters request that clean drinking water supplies be provided for livestock ponds and recreational users in the vicinity of the mine. One commenter states, *“RC should be required to install a potable water station near the tailings storage area along the [Arizona Trail]”* [26629].

Given the prolonged drought and future climate change impacts to water resources, respondents would like to see water conserved for public drinking water supplies and ecological uses, rather than for the proposed mine. One respondent states, *“We live in a desert. Which means that water is precious and scarce. The more water we pollute with mines like the one proposed, the less it will be available to support people, wildlife, and agriculture within the state”* [21]. Another respondent requests that the EIS analyze other beneficial uses of the water, stating, *“The amount and availability of water required for mine operations on a long-term basis should be described as to its sufficiency and related effects on regional water supplies that could be applied to other beneficial uses”* [79].

Commenters are also concerned about the impact of the proposed project on water availability for future growth: *“With demands on Colorado River water in excess of current water supply, will there be enough water to meet the demands of Resolution Copper as well as sustain a population growth in the local communities?”* [19597].

3.6.14.6 WATER QUANTITY

There are four main questions that arise from the water quantity comments:

1. What is the proposed water demand of the mine?
2. Is there sufficient water supply to meet the anticipated demand without negatively impacting other resources?
3. Would Resolution Copper be required to monitor impacts to water supply sources?
4. Where would future water come from if the proposed water supply sources are not adequate?

Respondents are concerned about the anticipated water demands of the proposed project, including demand estimates and proposed water sources:

The anticipated water demands of the Resolution Copper mine project will be substantial, impacting surface and groundwater supplies at Oak Flat and throughout the region, as well as current and future available water supplies for the State of Arizona. Until the GPO is clarified and the full water demands and water sources for the mine are fully revealed and the impacts fully disclosed through unbiased modeling and scientific study, the TNF is unable to consider (or fairly disclose) the potential environmental effects of the mine as required by NEPA, 26 C.F.R. § 288.8 and applicable law. [24280]

Water rights are another water quantity concern for commenters. Respondents would like the EIS to verify Resolution Copper's water rights as it relates to the anticipated water demand needs for the project. One respondent requests, "Please determine the amount of water that will be required for development and operations of the mine as well as a demonstration of a sustainable, legal water right to a sufficient supply of water" [95]. Another commenter states, "The question of water rights is also a serious matter that does not appear to be completely resolved. I have not seen anything indicating that sufficient water is available. I am among many, including my neighbors, who have grave concerns, especially in how this project could impact our water resources" [269]. Respondents would also like the EIS to address the indirect impacts to property values that would result from water supply impacts.

The use of groundwater pumping and CAP water to meet water demands is a concern for respondents: "The EIS should identify direct, indirect, and cumulative impacts to surface water flow, water supply wells, wetlands, springs and seeps, vegetation, wildlife, and other groundwater-dependent resources as a result of groundwater pumping associated with the proposed project. Describe and graphically depict post-closure groundwater elevation recovery" [26498]. With regard to the use of CAP water, commenters note, "In the GPO, Resolution Copper fails to show the location of CAP recovery well field on its maps and figures in relation to the groundwater savings/recharge facility or facilities where Resolution Copper has its LTSC's [Long-Term Storage Credits]. It is also unclear where all of the LTSC's to be recovered under this proposal are actually located" [24280].

Respondents would like the GPO to be revised to include this information and for the EIS to further analyze the availability of CAP banked credits. One commenter states,

RCM will be drawing from multiple water sources, including Central Arizona Project (CAP) water. This consumption affects all users of CAP water source, including the farming community where I live in Marana, Pima County, which is dependent on CAP water for crop irrigation. Marana is 90 miles away from the proposed RCM mining project, yet it will be negatively impacted by this mine. The GPO indicates that the mine will be heavily reliant (62%) on banked CAP water. How is it possible that RCM has been allowed to purchase and bank CAP water for this project, prior to the land exchange? [22782]

An additional water demand concern noted by a few commenters is water usage in power generation. One commenter states,

RCM's power demands will likely be in the hundreds of megawatts. Thermoelectric power generation in the US, on average, accounts for roughly 40% of the nation's total consumptive water use. RCM's power generation – if using grid power or on-site solar thermal generation (especially wet cooled solar thermal generation) – will therefore be a major element of the mine's overall water consumption matrix, the estimations for which must be included in the DEIS in addition to direct water consumption from mining operations. [26240]

Respondents would like the EIS to “clearly state any shortages in water resources and how much additional water will be needed to complete mine life of mine operations. The EIS should discuss the potential water sources that will be explored to make up any such deficit” [26498].

3.7 Summary of Public Comment – NEPA Process

This section provides a summary of public comment regarding the NEPA process. Respondents comment on the NEPA process, specifically, the public involvement process, purpose and need, GPO, best available science, cumulative impacts, connected actions, other laws and regulations, tribal consultation, cooperating agencies, and the no action alternative. NEPA process comments also focus on the range of alternatives and mitigation to be considered in the EIS analysis. The issue and rationale codes summarized in this chapter are shown in [Table 3.7-1](#). This section includes the following topics:

- [public involvement process](#)
- [purpose and need](#)
- [GPO content and data gaps](#)
- [best available science](#)
- [cumulative impacts](#)
- [connected actions](#)
- [others laws and regulations](#)
- [tribal consultation](#)
- [cooperating agencies](#)
- [no action alternative](#)
- [alternatives](#)
- [mitigation](#)

Table 3.7-1. Issue and Rationale Codes Summarized in Section 3.7, Summary of Public Comment – NEPA Process

Comment Summary Section	Issue and Rationale Codes
3.7 NEPA Process	110 NEPA Process
	111 Public Involvement/Meetings
	112 Best Available Science
	115 Baseline EA
	113 Alternatives
	132 Land Exchange Legislation
	161 Apache Leap Special Management Area
	506 Persons or Groups
	520 NEPA Process
	522 Connected Actions
	521 Mitigation
	533 Comment Process
	534 Scoping Meetings
	535 Other Permits/Regulations
	536 Mining Withdrawal Area
	537 Alternatives
	539 Cumulative Impacts
	585 Tribal Consultation
	780 Cooperating Agencies
	210 Laws and Regulations

3.7.1 NEPA Process General

Respondents are generally supportive of the NEPA process; however, many are concerned about the time frame of the process and further delays in moving the mine project forward. One commenter states, *“I encourage you to look for ways to streamline the NEPA process so Arizona can quickly enjoy the economic benefits that are certain to occur once the mine is allowed to begin construction and operations”* [99]. Commenters encourage a prompt review that includes communication among stakeholders to *“first identify the social and environmental challenges and then to decide how to address the issues in order to move forward with the development of the mine”* [11771].

For the general EIS process, respondents request that documents be *“user-friendly”* [26611] with technical information explained in ways that the general public would be able to comprehend. Commenters also request that communication among stakeholders and the public continue to occur and that the process be transparent.

With regard to the scope of the EIS analysis, respondents are divided in their views. One commenter states, the EIS *“should emphasize those issues that are important, as identified by the agencies and the scoping process, and should spend less time and money on issues that are unimportant, or do not vary significantly between alternatives”* [20425]. In contrast, another comment states, *“Considering the importance of such lands, every aspect of any changes must be explored. And please, err on the side of caution.”* Another commenter provides a preliminary list of topic areas to include in the EIS analysis, including *“project purpose and need, alternatives and mitigation, water resources, geochemistry, air quality, climate change, vegetation and wildlife, mine reclamation, postclosure management, and cumulative impacts, among others”* [26498].

Balancing project impacts in the decision-making process is also of concern to respondents. A comment submitted by multiple respondents asks, *“How can the U.S. Forest Service work in the best interests of everyone to balance the land impacts to the affected Indian tribes with the opportunity to bring a positive economy and quality of life to an area of the State in need of a more promising tomorrow?”* [193].

3.7.2 Public Involvement Process

Public involvement process comments express concern with the length of the scoping comment period, the number of public meetings and their locations, involvement of the local tribes, and public transparency. Commenters state that the initial scoping period of 60 days was not long enough. Many commenters request a scoping period minimum of 120 days and request additional public meetings for affected communities in the Tucson and Phoenix areas.² These areas represent a large portion of affected stakeholders, and meetings in these areas would increase public awareness. One commenter states, *“This current time frame is much too short and should be expanded over a longer period to enable attendance and participation by all interested parties”* and *“additional public open house meetings should be scheduled and held in Phoenix and Tucson to facilitate attendance not only by interested parties in eastern towns but also by interested parties in larger, central cities”* [1403].

Many commenters state that the local tribes have not been included in the planning process. Commenters would like more topic areas explored about the affected tribes and the various cultural resources impacted

² During the public scoping meetings, numerous individuals and several organizations requested an extension of the public scoping period, as well as additional public scoping meetings. The TNF forest supervisor decided to accommodate these requests by extending the public scoping period from 60 to 120 days, through July 18, 2016, and holding one additional public scoping meeting on June 9, 2016, in San Tan, Arizona.

by the proposed mining project. Commenters also suggest that public meetings for the EIS be held on the San Carlos Reservation.

Commenters request opportunities to provide additional public comment and input into the NEPA alternatives development process, in particular regarding alternative locations for the tailings storage facility. One commenter states, *“Since different designs have different characteristics and tradeoffs, the public deserves to know which design options are available, and what the pros and cons are for each one, before commenting on the DEIS”* [21793].

Commenters are concerned about a potential lack of transparency between Resolution Copper and the community. Commenters want *“true and accurate information”* [26557]. Commenters are also concerned about the lack of information made publically available for review regarding the tailings storage facility. Commenters would like to have more mining experts (not affiliated with Resolution Copper) available to answer questions at future public meetings. Commenters would like to see more public service announcements or information regarding the project.

3.7.3 Purpose and Need

Development of the purpose and need statement in the EIS is mentioned a few times in the comments. Respondents note the technical requirements for developing a purpose and need statement: *“the NEPA analysis must include a clear concise statement of the underlying purpose and need for the proposed action, consistent with implementing regulations for NEPA (see 40 CFR 1502.13)”* [22847]. Commenters also note project-specific purpose and need concerns, including one respondent stating that *“the Forest Service should address the Congressional mandate for the land exchange and consider how EIS alternatives analysis will be affected by the mine General Plan of Operations”* [26498]. Respondent concerns with the purpose and need statement include connected actions and the land exchange legislation. One commenter states, *“Regardless of the Agency’s views of its obligations under both normal mining laws and the mining laws as altered by the NDAA, the Forest Service must not inappropriately narrow the need and purpose for this action”* [26240]. Additionally, commenters note that the purpose and need statement should reflect the *“broader public interest and need”* [22847] for the proposed project.

3.7.4 General Plan of Operations Content and Data Gaps

Concern with the content of the GPO and potential data gaps is raised by multiple respondents. According to commenters, the GPO contains conflicting data and pertinent information on the proposed project is missing from the document. Inconsistencies in the GPO include a lack of prediction for future mining projects progress, obtaining data from inaccurate and out-of-date testing methods, and a bias by Resolution Copper when interpreting its own data.

Many commenters state that public comment on the GPO is premature. One commenter summarizes: *“Valuable information is missing, including but not limited to information about water sources, water uses and impacts, the ultimate location and viability of the tailings locations at the currently proposed Tailings Site Facility vs. other alternatives and many other material matters. Until the GPO is more complete, TNF should hold off on public scoping since the scoping conducted using an incomplete GPO violates the disclosure and transparency requirements of NEPA”* [24280]. Referencing updated GPO pages, tables, and figures provided to the Forest Service by Resolution Copper in mid-January 2016 that have not yet been made publicly available, one commenter states, *“It is problematic that the public scoping comment period has begun without the Forest Service’s release of all of the necessary materials upon which scoping comments should be based”* [1403]. Respondents request that prior to moving

forward with the EIS analysis, the GPO be revised and additional public comment opportunities be provided.

The following is a summary of potential deficiencies in the GPO and commenter-proposed GPO revisions.

3.7.4.1 GENERAL MINE OPERATIONS

- Hire independent experts to review conflicting data presented in the GPO.
- Clarify the conflicting proposed estimates for the life of the mine and update the analysis accordingly.
- Further detail the content of ore products and ore transportation methods between mine facilities.
- Further discuss the proposed mining methods, facilities, and chemicals used in ore extraction and processing.
- Further describe the mine's transportation needs, including those for employees and materials.
- Provide references to substantiate the proposed subsidence estimates.
- Detail power demand and additional power facilities that are needed to support all components of the mine.
- Develop alternative proposals and include analysis of these prior to EIS development.

3.7.4.2 SLURRY PIPELINES

- Describe the maintenance and replacement schedules for the pipeline infrastructure.
- Describe the construction methods and durability of the pipeline infrastructure.
- Provide the chemical contents of the slurry.

3.7.4.3 TAILINGS STORAGE FACILITY

- The GPO lacks “*waste rock characterization and/or adequate explanation of how this material will be disposed so that there is no potential for acid rock drainage*” [22366, 24260].
- Detail the methods for separating “*scavenger*” tailings from “*clean*” tailings.
- Include geochemical testing at the proposed tailings storage facility in the GPO.
- Further detail the maximum credible earthquake use in the tailings storage facility design.
- Further detail tailings storage facility downstream design as opposed to upstream design.
- Further discuss alternative tailings storage facility designs and locations.

3.7.4.4 MINE RECLAMATION

- Further discuss mine reclamation maintenance tasks.
- Address inconsistencies in the “East Plant Site Closure and Reclamation” section of the GPO.
- Detail a reclamation plan for the subsidence zone, including further detail of the legally binding elements of the “Subsidence Management Plan.”
- Further disclose post-closure monitoring and maintenance tasks, “*including the length of time the seepage collection system, water monitoring wells, collection trenches and pump-back system will be maintained*” [26060].

3.7.4.5 CULTURAL RESOURCES

- The GPO “*neglects and ignores cultural resources not defined as historic properties*” [24610].
- Require the GPO to “*provide recognition, consideration, and plans for avoiding and reducing significant impacts to the many important cultural resources documented and either listed on or provisionally determined to be eligible for listing on the National Register of Historic Places in 2015 and early 2016*” [24610].
- The GPO neglects “*the Archaeological Resources Protection Act, American Indian Religious Freedom Act, the E.O. 13007 on Sacred Sites Protection, etc.*” [24610].
- The GPO does not identify mitigation measures that the mine would use for cultural resources. The commenter requests that the GPO be revised “*to provide recognition, consideration, and plans for avoiding and reducing significant impacts to the many important cultural resources documented and either listed on or provisionally determined to be eligible for listing on the National Register of Historic Places in 2015 and early 2016*” [24610].
- Correct the GPO to reflect the role of the Arizona State Historic Preservation Office in the management of cultural resources.
- The GPO does not address the role of Tribal Historic Preservation Officers.
- The GPO “*incorrectly and without legal or factual basis, asserts*” [24610] that a Memorandum of Agreement, signed by all consulting parties, “*will stipulate all conditions of cultural resources treatment, including the incorporation of the Historic Properties Treatment Plan and the appropriate final curation of all cultural resources-related reports, data, and materials*” [24610]. As the commenter states, “*Neither PRCM nor the U.S Forest Service have the authority to dictate that all parties sign any such agreement. In fact, this is unlikely and this statement is misleading and disrespectful as well as incorrect and apparently duplicitous. The statement also perpetuates the unfounded and totally inappropriate implication that only historic properties will be addressed in treatment planning and other methods for effects and impacts reductions. All cultural resources, not simply historic properties, require consideration and inclusion in treatment plans. Again, the Draft EIS and revised [GPO] must correct this and other egregious, disrespectful, unprofessional, and harmful errors*” [24610].

3.7.4.6 SOCIOECONOMICS

- Discuss the methodology used for the development of financial sureties.
- The job predictions in the GPO should be reviewed. One commenter states, “*Back in 2005 RCM stated they would employ 400 in permanent positions. Without changing the footprint of the mine that number has really blossomed*” [21551].
- The GPO does not take into account more conservative employment scenarios that are presented in other socioeconomic analyses.
- Conduct an independent socioeconomic study to verify the economic predictions contained in the GPO.

3.7.4.7 WATER RESOURCES

- Disclose total water demands in a format easily understood by the public.
- Rectify conflicting water supply and use data presented in the GPO.
- Provide dewatering estimates.
- One commenter states, “*The GPO does not present adequate hydrogeologic characterization to indicate that segmentation would limit or prevent the expansion of dewatering*” [26240].

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- The commenter continues, “*The GPO does not present adequate hydrogeologic characterization of any geologic formations between the shallow aquifers and deep bedrock to justify claims of no or little effect*” [26240].
 - As the review of CAP Non-Indian Agriculture water allocations has not been completed, it is premature to include this as a water supply source in the GPO.
 - Disclose the purpose of the Queen Valley pumping station.
 - Disclose the location of CAP recovery wells long-term storage credits in the GPO.
 - Address the GPO’s identification of springs, compared with previous reports.
 - The proposed water demand estimates in the GPO do not adequately take into account prolonged drought, climate change, and water allocations for CAP water.
 - Update the geochemical evaluation to current ADEQ standards.

3.7.4.8 OTHER RESOURCES

- Discuss artificial lighting.
- Expand the “Wildlife Management Plan” in Appendix X of the GPO.
- Describe methodologies for analyzing seismic and geologic hazards to all mine facilities.
- Discuss the potential for “*air blast*” [21748; 24174] and impacts to employee health and safety.
- Detail alternatives and mitigations for climate change impacts.

3.7.5 Best Available Science

Commenters are concerned about the overall baseline assessment and use of best available science in the analysis of the proposed project. Commenters state that more research needs to be considered using different test methodologies than contained in the GPO for the affected resources in the EIS analysis. One commenter requests,

At a minimum, the Draft EIS must fully analyze the current baseline conditions for all potentially affected resources. These include, but are not limited to: (1) surface and groundwater quantity, quality, flow, and hydrological conditions; (2) wildlife; (3) recreation and public uses; (4) air quality; (5) vegetation/plants; and (6) cultural/religious/historical values. This analysis should include the impacts on private, state trust lands, and all public lands in the region. [21501]

Commenters state that more deep monitoring wells need to be installed “*with clearly specified water quality goals*” [26410] for groundwater geochemistry. Commenters suggest that new hydrologic studies in the Oak Flat area be conducted due to dewatering concerns. Commenters also recommend monitoring the “*formation of a lake over time within the subsidence crater*” [21793].

Respondents express concern about the lack of accurate data and testing procedures for prediction of acid mine drainage that could occur from the proposed mine operations. Commenters suggest specific alternate data collection and testing methods that would provide more accurate information for analysis in the EIS. One commenter states,

The EIS process is grounded in having accurate data. The EPA and SWCA Consultants are unable to effectively review the pollution risk and overall environmental risk of the Resolution Project if the AMD prediction tests are insufficient. Overall, there are three potential issues associated with Resolution’s choice of procedure for AMD prediction testing: 1) The industry-

recommended procedure is not up-to-date with published research 2) New research has come out since Resolution started Baseline Testing in 2008 3) The guideline is loosely defined such that Resolution is not mandated to use more up-to-date procedures. Research into the modernity of the baseline geochemical testing revealed that Resolution's procedure is not in line with current scientific and industry procedures. [3855]

Commenters also suggest development of cross section maps of the area's groundwater, and request that the EIS analysis include historic and present groundwater levels, and compare them with future predictions. Commenters also recommend that an explanation of the methodology used in the modeling parameters for groundwater levels be included in the EIS, and that the modeling include additional surface waters present.

Commenters recommend completing additional independent fauna and flora surveys to add to the EIS analysis of biological resources. Commenters suggest assessing the project's risks to wildlife populations and examining alternatives to save populations of affected species.

Additionally, commenters note that archaeological surveys were conducted more than 10 years ago and need to be reevaluated. Resurveying various areas may be necessary to make sure the baseline data are up to date. Commenters suggest the Forest Service *"assess and quantify the loss of sacred sites at Oak Flat using the best archaeological and anecdotal data available"* [20414].

3.7.6 Cumulative Impacts

The EIS cumulative impact analysis is of concern for respondents. One respondent notes that under NEPA requirements, the EIS must review the *"past, present, and reasonably foreseeable future actions"* [24280] in the cumulative effects analysis. Additionally, *"all other mining projects and non-mining activities in the project area which may contribute to cumulative impacts should also be assessed and considered"* [26498]. One respondent provides the following questions for consideration during development of the cumulative impact analysis:

- *How will cumulative impacts be defined?*
- *Will they have a geographical limit?*
- *Who will be consulted, and in what form, regarding cumulative impacts?* [26631]

Cumulative impact topic areas mentioned multiple times in the comments include water resources, socioeconomics, climate change, and land use. Resource-specific cumulative impact topics are discussed in the associated resource sections in [Section 3.6](#). Commenters also express concern with the impacts of *"legacy facilities"* and *"facilities currently under development"* at the West Plant Site and East Plant Site [24280] and request that these facilities be factored into the EIS impact analysis.

3.7.7 Connected Actions

The public is concerned about the EIS analysis of connected actions. Commenters note that the land exchange legislation recognizes the proposed mine's connected actions, and several respondents quote the legislation:

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. [22847]

Respondents state that these actions would not be occurring without the proposed mine project and therefore are connected actions to the proposed action under NEPA and should be analyzed as one single EIS. Specific connected actions mentioned in the comments include the following:

- existing MARRCO corridor special use permit,
- proposed new transmission lines and power substations,
- amendments to the “Tonto National Forest Land and Resource Management Plan,”
- Apache Leap Special Management Area, and
- tailings storage facility “Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Plan of Operations Environmental Assessment” (Baseline EA).

With regard to the existing MARRCO corridor (Figure 3.7.7-1) special use permit, one respondent requests that the EIS analyze *“whether a permit will need to be granted, or updated, under this proposed plan or whether the Forest Service now feels that the railroad corridor is exempt from a special use permit and now will be permitted under 1872 Mining Law rules”* [26240].

It is not clear to the public how the proposed power facilities would be integrated into the EIS. Commenters are concerned because the GPO devotes a section to the *“provision of power for the project”* [21501; 22847] but the Forest Service has yet to detail the decisions to be made regarding these associated power facilities.

Respondents request that the EIS consider *“amendments to the Tonto National Forest Land and Resource Management Plan”* [19586] in the scope of decision and explain the requirements for specific project elements to obtain special use permits and rights-of-way for use of public lands. A few commenters also mention the Apache Leap Special Management Area and its role in the EIS process.

Commenters are concerned about the Forest Service decision to allow a separate Baseline EA. One commenter states, *“These are connected actions and should be considered together in the same environmental impact statement. There can be no mine without a tailings site and there would be no tailings site absent the Resolution mine project itself”* [21501].



Figure 3.7.7-1. MARRCO corridor railroad tracks.

3.7.8 Other Laws and Regulations

The impact of other laws and regulations on the EIS development process and the decision-making process are of interest to the respondents. Commenters request that the EIS “*undertake a fair and comprehensive ‘hard look’ at all of the direct, indirect and cumulative impacts stemming from the land exchange and the mine project*” [24280] under all applicable laws and regulations. Additionally, commenters request that the EIS detail the effects of the project’s implementation on Forest Service obligations under these laws. Specific laws, regulations, and plans mentioned in the comments include the following:

- Federal, General Resources: Mining Law of 1872; ESA; MBTA and EO 13186, “Responsibilities of Federal Agencies to Protect Migratory Birds;” Clean Water Act (CWA); Clean Air Act; Resource Conservation and Recovery Act; EO 13653, “Preparing the United States for the Impacts of Climate Change;” and Public Land Order 1229 for the Oak Flat Picnic and Campground Withdrawal Area.
- Federal, Cultural Resources: National Historic Preservation Act (NHPA); American Indian Religious Freedom Act (AIRFA); Native American Graves Protection and Repatriation Act (NAGPRA); EO 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations;” EO 13007, “Indian Sacred Sites;” and various treaties with Native American tribes.
- Federal, Forest Service Specific: FLPMA; “Tonto National Forest Land and Resource Management Plan;” and the Apache Leap Special Management Area.
- State, General Resources: Arizona mining laws and regulations; ADEQ water quality standards; and Arizona’s SWAP, including SGCN and SERI.

The TNF’s obligations under the FLPMA regulations are mentioned in several comments. Respondents request that decisions regarding the land exchange appraisal follow all applicable FLPMA regulations. Additionally, one commenter asks the EIS to explain the following: “*How will congressional strategic mineral legislation be considered in the decision making process pertaining to this project?*” [26464].

3.7.8.1 LAND EXCHANGE LEGISLATION

The effect of the land exchange legislation on the NEPA process concerns many respondents. Commenters note that the public was not made fully aware of the impact of the legislation and therefore was not able to fully comment on the proposed action during the scoping process. Several respondents request that the TNF “*further clarify the implications of Section 3003 of the 2015 National Defense Authorization Act prior to moving forward with the NEPA process, so the public can adequately review and comment and fully participate in the process.*” Commenters are concerned that the legislation “*would circumvent the proper public process mandated under the National Environmental Policy Act (NEPA) for prior analysis of any major federal action on public land.*” Additionally, respondents are concerned about the EIS process of appeal and objections, given the land exchange legislation. Commenters request that the TNF “*make it explicitly clear in the Draft EIS and on websites for the project what rights the people retain regarding the NEPA.*”

3.7.8.2 CULTURAL RESOURCES LAWS, REGULATIONS, AND POLICIES

Many commenters identify laws, regulations, and policies that protect cultural resources and, in particular, cultural resources that are important to Native Americans, such as the AIRFA, NHPA, and NAGPRA.

Commenters state that the mine's impact to the Oak Flat area would violate the AIRFA by preventing the San Carlos Apache Tribe from being able to access the area to perform religious ceremonies:

This proposed mining operation violates the spirit and the letter of the law of the American Indian Religious Freedom Act, which was enacted to return basic civil liberties, and to protect and preserve the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts, and Native Hawaiians. These rights include, but are not limited to, access to sacred sites, freedom to worship through ceremonial and traditional rights, and use and possession of objects considered sacred. The impacts from the mining operation on local American Indians need to be analyzed, quantified and mitigated. This is also a violation of the civil rights of the American Indians who view this site as sacred. [6]

The focus of comments regarding the NRHP is the mine's potential impact on the Oak Flat area, which was recently listed in the NRHP. Commenters both provide information on the area's NRHP status and request that the Forest Service appropriately analyze the mine's potential impact to the area and its listing status. Examples of questions that commenters request be analyzed in the EIS include the following:

Which of the four types of NRHP significance will be adversely affected by land privatization and subsequent mining-related activities in the District? What types of adverse effects will occur to the natural and cultural resources that contribute to the District's eligibility? What types of mitigation will be required for the loss of natural and cultural values that contribute to the District's NRHP eligibility under each of the four criteria? Which of the seven aspects of integrity will be adversely affected by privatization of the land and subsequent mining-related activities in the District? What types of adverse effects will occur to those aspects of integrity that characterize the District in its current state? How will adverse effects to the District's current integrity be mitigated? Has the entire Area of Potential Effect (including the outermost limits of the subsidence zone) been surveyed for Apache archaeological and cultural sites? If currently-unknown Apache archaeological and cultural sites are identified during future surveys and consultations, will they be evaluated under the NRHP eligibility criteria and added to the District? [26240]

Several commenters refer to the importance of protecting burial sites and mitigating for any impacts for human burials that are discovered: *"Years ago, my great, great grandfather remains were removed to another cemetery for the purpose to make room for another project. My question here is: Are you all taking into account the possibility of removing bodies buried in that sacred grounds in oak flats. I think the indigenous people of that area should be given the same respect" [22380].*

In addition to NEPA, NHPA, NAGPRA, and NRHP requirements for cultural resources, one commenter requests that the "United Nations Declaration on the Rights of Indigenous Peoples" be considered in the NEPA process.

3.7.8.3 PUBLIC HEALTH AND SAFETY LAWS AND REGULATIONS

Respondents ask how the existing Federal, State, and local laws and regulations would protect human health and how the Resolution Copper Mine would meet the requirements under these regulations. One commenter notes that there are sufficient existing regulations in place to ensure safe mining operations, stating, *"The United States has developed a number of regulatory agencies that oversee mine development and extraction. In accordance with federal guidelines, both the state of Arizona and Pinal County also employ regulatory agencies to direct these activities. This oversight is unparalleled worldwide, and provides for one of the safest, most environmentally sound locations for mineral extraction in the world" [101; 11771].*

3.7.9 Tribal Consultation

Because of the cultural resource concerns surrounding the project, multiple respondents are specifically concerned about the tribal consultation process. One commenter asks, “*Is Resolution going to reach out to Native American Tribes and work with them on this project?*” [22878]. Another commenter states,

I am interested in how this mining project will interact with and engage with the San Carlos Apache Nation. Facilitating a productive dialogue is critical to ensure that consideration and accommodations are given to the Nation's claims and interests over the area of Oak Flat. I urge the U.S. Forest Service to study the Nation's claims and interests and to create a channel of communication between the Nation and Resolution Copper to find some common ground. I recommend that a third party be brought in to assist with the communication between the company and the Nation. [20804]

A few commenters state that it is important for the Forest Service to consult with all tribes in the Inter Tribal Association of Arizona. Several commenters identify concerns that Forest Service consultation with tribal governments should discuss data recovery plans, mitigation strategies, and Oak Flat.

Other commenters are interested in the TNF’s obligation for tribal consultation under Section 106 of the NHPA, under the AIRFA, and under other applicable laws. Several respondents have questions regarding how government-to-government consultation with affected tribes pursuant to Section 106 of the NHPA and other Federal regulations would proceed throughout the EIS process.

Several of the commenters discuss the need for early and frequent communication with the potentially affected tribes. One commenter notes, “*It is important that formal government-to-government consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the EIS*” [26498]. Additionally, another commenter suggests that the EIS process include consultation with “*tribal elders, medicine men, storytellers, singers, dancers, artists, food gatherers, and other holders of traditional knowledge*” [24280]. Commenters also urge the TNF to “*create a channel of communication between the [San Carlos Apache] Nation and Resolution Copper to find some common ground*” [20804].

Respondents state that consultation efforts are needed to develop appropriate cultural resource avoidance and mitigation measures:

The tribes and tribal representatives have unanimously recommended (a) total avoidance by the mining operations of these probable historic properties (bona fide cultural resources) and, if avoidance is not elected, (b) that Tonto National Forest pursue government-to-government consultations with each tribe to determine exact boundaries of the historic properties and to resolve adverse effects through management, protection, preservation, and other treatments. [24610]

Aside from official Section 106 Consultation between the Forest Service and tribal governments, one commenter requests that Resolution Copper

communicate in a considerate and careful manner with the San Carlos Apache tribe and other tribes in Arizona. An understanding of tribal culture and customs is important in these communications to maintain a positive and productive relationship. Thus it is important that Resolution Copper consider in the area of cultural resources, the establishment of a Native American Affairs department that handles all these issues and concerns of tribes. Such a commitment would go a long way with Arizona tribes and could be incorporated into the EIS document as a mitigation measure. [25253]

3.7.10 Cooperating Agencies

Several commenters provide recommendations for cooperating agencies and suggest that the TNF should consult with the following agencies during the EIS development process: the U.S. Geological Survey, AGFD, and USFWS. These agencies were suggested for their technical expertise in geology, hydrology, and wildlife. Additionally, one commenter, Pinal County, requests to be a cooperating agency during the EIS process.

3.7.11 No Action Alternative

A thorough consideration of the no action alternative is important to many respondents. One commenter states, *“I urge you to include rejection of the project entirely as a serious option, when considering all possible consequences of proceeding with it as currently proposed”* [15305].

With regard to the decision-making process, respondents also note that the land exchange legislation limits the TNF’s scope of authority to consider a no action alternative. Commenters are concerned that *“no matter how much damage to the environment the EIS predicts, the land exchange allowing construction of the [Resolution Copper Mine] will proceed”* [24748].

3.7.12 Alternatives

The topic of alternatives development is a common concern for respondents. Many respondents indicate generally that *“the Forest Service must provide a thorough analysis of all reasonable alternatives”* [21501], whereas others request that specific alternatives be considered. The following is a summary of comments that focus on alternatives. The summary is organized by Proposed Action, Resource Topics, and NEPA Process alternative suggestions.

3.7.12.1 PROPOSED ACTION

Energy Sources

- Use alternative and renewable energy sources, including on-site power generation, solar thermal power generation, and hybrid heavy machinery.

Mining Methodology

- Use traditional mining methods, including less mechanized forms of mining.
- Investigate alternatives that would result in minimal surface disturbance.
- Use alternative mining methods to reduce the volume of tailings produced.

Subsidence Zone

- Investigate *“alternatives to the block cave technique that do not cause subsidence and would instead leave the Oak Flat area intact for future generations”* [21501], including cut and fill.
- Investigate the feasibility of backfilling the subsidence zone with tailings.
- Evaluate the feasibility of reclamation of the subsidence zone.

MARRCO Corridor

- Investigate alternatives to use of the MARRCO corridor.

Slurry Pipelines

- Use subsurface pipeline construction.
- Use alternatives to the water-intensive slurry pipeline design.
- Use alternatives for containing pipeline spills.

West Plant Site / Mineral Processing

- Instead of mining the Oak Flat parcel, use the property at the location of the West Plant Site for the mine and rebuild the railroad from the Magma Junction to Superior.

Loadout Facility

- Investigate alternatives to the loadout facility, including alternative locations such as the West Plant Site.

Waste Rock Utilization

- Use tailings as backfill at the mine site.
- Use alternative disposal methods, including co-disposal and mill processing for the intermediate and development waste rock.
- Use tailings in road construction.

Tailings Storage Facility Location

- Investigate alternative tailings storage facility locations, including the
 - “Arizona State Trust Land parcel in Superstition Vistas” [79], and
 - “BLM and State land at the base of the mountains just West of Gonzales Pass and South of US Highway 60” [21145].
- Transport mine tailings by rail to a safer alternative tailings storage facility location.
- Use existing and future mine pits for disposal.
- Use private land for disposal.
- Use brownfield site for disposal.

Tailings Storage Facility

- Construct the tailings storage facility using the safer downstream construction design, rather than upstream construction design presented in the GPO.
- Consider alternatives to the aqueous tailings design, including filter/dry stack tailings.
- Evaluate “*filtered*” and “*paste*” tailings storage facility designs.
- Include underdrains to desaturate tailings at the tailings storage facility impoundment.
- Line the tailings storage facility and potentially acid-generating material storage impoundments.
- Investigate alternative, long-lasting liner materials.
- Use alternative methods of toxin removal and recovery of additional rare metals and minerals from the tailings.

Mine Reclamation

- Employ “*Holistic Resource Management*” [314] in mine reclamation.

Land Exchange

- Vacate the land exchange.
- Exchange the land with the Native American tribes.
- Use the land for recreation and tourism purposes.
- Limit mine operations to private lands and existing rights-of-way.
- Consider alternative parcels for the land exchange.

3.7.12.2 RESOURCE TOPICS

Air Quality

- Backfill the mine site with tailings to reduce toxic dust pollution.

Biological Resources

- Use alternatives that avoid, minimize, and mitigate for impacts to wildlife from fencing and non-lethal harassment.

Climate Change

- Use alternative and renewable energy sources.

Cultural Resources

- Practice total avoidance of historic properties and cultural resources.
- One commenter states, “*The Federal Government must assure that the full range of treatment options and alternatives is considered to avoid and reduce harm to cultural resources*” [24610].
- Design alternatives to avoid impacts to Oak Flat in order for the Forest Service to comply with EO 13007, “Indian Sacred Sites.”

Land Use

- Support alternative industries that would allow for land conservation.
- Find alternatives to the use of public lands.
- Consider alternative and/or additional parcels of land with high conservation value.

Noise and Vibrations

- Investigate alternatives to reduce noise pollution.

Public Health and Safety

- Use alternative mining methods to reduce risks to employee health and safety.

Recreation and Public Access

- Develop alternative public access and recreation roads to replace closed roads and to bypass the mine and trailing sites. One commenter requests the following: “*Please look at alternative roads and trails that can be used to bypass and get around the mine and the tailings site*” [23659].
 - Specific road access routes are proposed for Apache Leap, Upper Devil’s Canyon, Lower Devil’s Canyon, Lower Devil’s Canyon to Hackberry Creek, Northern Devil’s Canyon, Bear Tank Canyon, and Hewitt Station [see comment submittals 267, 1354, 15141, 17509, 26472, and 18402 for further details].

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- Develop alternative routes for the Arizona National Scenic Trail.
 - Develop alternatives for replacement of the Oak Flat campground.
 - Find an alternative that would not result in a loss of climbing access.
 - Use alternatives that would result in fewer impacts to climbing resources.
 - Work with local climbing organizations to develop other climbing mitigation measures.

Socioeconomics

- Analyze the economic losses resulting from the no action alternative.
- Invest corporate profits in conservation-oriented mining methods.
- Analyze non-mining alternatives for improving economic conditions of the area.
- Sell the copper mineral resource through the government bid process.
- Conduct an independent economic study of alternative mining methods. Multiple commenters state, *“It is insufficient to simply accept Resolution’s claim that the block caving technique is the only economically viable mining method for this project.”*

Visual Resources

- Investigate alternative mine operating facility locations to screen from key viewpoints.
- Investigate alternatives to reduce light pollution.

Water Resources

- Use alternative water supply sources, including purchase of long-term storage credits, reclaimed water, effluent from municipal waste water systems, and treated brackish groundwater.
- Use alternative low-water usage mine designs, including eliminating the pipeline slurry and using dry stack tailings storage.
- Obtain water from outside sources or construct a desalination plant to use ocean water.
- Develop aquifer recharge alternatives.
- Treat mine wastewater for local discharge at the mine site (subsidence zone).
- Use an alternative that would not require wastewater and runoff treatment in perpetuity; specifically, the mine would achieve neutral drainage chemistry within 10 years of cessation of mineral production.

3.7.12.3 NEPA PROCESS

Process Alternatives

- Disclose, for public comment, the pros and cons of each available design option prior to publishing the DEIS.
- Give due consideration to the no action alternative.
- Reject the GPO.

Alternatives to Mining

- Invest in solar instead of the proposed mine.

Alternative Copper Sources

- Recycle used copper.
- Recycle materials (including electronics) and waste for its copper content.
- Use carbon nanotubes and other non-copper alternatives.
- Increase production at existing copper mines.
- Melt down pennies for copper.

3.7.13 Mitigation

The inclusion of mitigation measures in the EIS document is a common topic among the respondents. Commenters state that mitigation measures are needed to avoid and minimize the proposed project's impacts. Respondents provide numerous mitigation measure proposals for the various components of the proposed project. The following comment best exemplifies the respondents' views toward mitigation measures in the EIS:

Identify and describe appropriate mitigation measures associated with the project, specifying which ones would be committed to by the mine operator and/or required by the Forest Service or other federal, state, or local agency. The EIS should address how each measure would specifically mitigate the targeted impact. The Forest Service should provide substantial detail on the means of implementing each mitigation measure. The document should identify who would be responsible for implementation, determining effectiveness, and enforcement. For some impacts, there may be several appropriate and effective measures. Conversely, some measures may turn out to be less effective than anticipated; therefore, implementation and effectiveness monitoring should be conducted and contingency measures should be considered and discussed. We recommend that for each impact area, the EIS describe the specific mitigation implementation thresholds, any mitigation implementation and effectiveness monitoring deemed necessary, and the criteria by which success would be determined once mitigation is fully implemented. Furthermore, for some mitigation measures, it may be necessary to describe the contingency planning and adaptive management options in place in the event that mitigation is found to be less than fully successful. [26498]

Following is a summary of the mitigation measure comments organized by Proposed Action, Resource Topics, and NEPA Process.

3.7.13.1 PROPOSED ACTION

General Mine Operations

- In the event of a mine closure, require a new permit prior to reopening the mine.

Subsidence Zone

- Implement mitigation measures to limit the extent of the subsidence zone.
- Identify critical levels of subsidence impacts and the management process for a cessation of mining operations once impact thresholds are met.

Slurry Pipelines

- Pay a rental fee to the Forest Service for pipeline right-of-way.
- Develop spill prevention and response plans.

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- Develop a monitoring and mitigation plan for pipeline breaks.
 - Monitor for pipeline slurry water leaks.
 - Include measures to protect pipelines from vandalism.
 - Investigate double-lining, pipeline sleeve, and secondary containment measures.
 - Use overhead construction at trail crossings.
 - Describe liability for pipeline leaks and resource impacts.

Mineral Processing

- Mitigate visual, noise, and air quality impacts to the surrounding communities.

Tailings Storage Facility

- Reduce the tailings volumes.
- Implement time limits on tailings storage at the proposed site.
- Development of a “*Tailings Risk Management Plan*” [22874].
- Follow the recommendations set forth by the Mount Polley expert panel.
- Cap the tailings pile to contain tailings dust.
- Require the use of a liner.
- Implement a mitigation plan for acid mine drainage containment and reclamation.
- Identify alternative energy sources for the tailings storage facility in the event of an electrical outage.
- Develop a mitigation plan for a tailings storage facility dam breach.
- Construct a secondary backup containment facility.
- Implement a cease operations plan in the event of a tailings dam failure.
- Require an environmental damage assessment in the event of a tailings dam release.

Mine Reclamation

- Require complete restoration of the project area.
- Implement restoration in phases.
- Mitigate for previous mining in the immediate area of the proposed project.
- One commenter states, “*Reclaim tailings with vegetation and topographical contouring similar to the surrounding landscape*” [79].
- Restore the tailings storage facility with a “*minimum of 15 feet of top soil to ensure vegetation re-growth*” [26629].
- Require an adequate bond amount for mine reclamation.
- One commenter states, “*Create and fund a community environmental monitoring program*” [79].

Land Exchange

- Include additional lands in the exchange as compensatory mitigation:
 - Additional land exchange proposals include lands along the San Pedro River owned by BHP Billiton and preserve lands identified in the “Superstition Area Land Plan.”
- Provide compensatory mitigation in the form of equalization payments that would be used for improved management of the Lower San Pedro and Verde Rivers.
- Provide monetary compensation for the lost tax revenues from the exchanged lands.
- Discuss deed restrictions, easements, or rights-of-way on lands exchanged for mitigation purposes.
- Designate the exchanged lands within the Appleton-Whittell Research Ranch of the National Audubon Society as part of the Las Cienegas National Conservation Area.

3.7.13.2 RESOURCE TOPICS

Air Quality

- Control particulate air emissions.
- Implement diesel particulate matter-specific mitigation measures.
- Revegetate disturbed ground.
- Minimize travel on dirt roads.
- Reevaluate the GPO dust abatement strategy and implement additional mitigation measures as needed.
- Identify monitoring thresholds for fugitive dust pollution.
- Implement enforcement strategies.
- One commenter states, “*Disclose operation plans to minimize/restrict air emissions and fugitive dust*” [22847].

Biological Resources

- Identify compensatory mitigation for impacts to wildlife resources and habitats.
- Implement impact avoidance and minimization measures for special status species.
- Develop a mitigation plan for habitat replacement.
- Describe maintenance requirements and monitoring plans for biological resources mitigations.
- Describe wildlife mitigation enforcement actions.
- Follow guidance from the AGFD and USFWS regarding avoidance, minimization, and mitigation measures for wildlife.
- Relocate all saguaros, other plant life, and wildlife impacted at the tailings storage facility, at Resolution Copper’s expense.
- Describe parameters for the safe removal of wildlife.
- Describe avoidance, minimization, and mitigation measures for non-jurisdictional wetlands and riparian habitats impacted by the proposal.
- Prevent damage and or contamination to Devil’s Canyon riparian habitats.

-
- Install “*various rain collection seeps and catchments to help with the loss of critical habitat*” [26629].
 - Implement a wildlife management plan for stormwater ponds, including wildlife exclusion fencing.
 - Prevent the spread of invasive species through mitigation actions such as the treatment of invasive plants prior to construction activity, the cleaning of equipment to prevent the spread of invasive plants, and reclamation with the use of weed-free native Sonoran Desert seeds.

Climate Change

- Implement water-conserving mining techniques.
- Use conveyors for material transport.
- Use hybrid machinery.
- Use renewable energy sources.
- Use ride sharing and other forms of employee commute trip reduction.
- Use high-efficiency diesel particulate filters on equipment.
- Commit to the use of new low carbon emission technologies as they become available.

Cultural Resources

Several commenters state that there are no mitigation options for the proposed project regarding cultural and heritage resources. One commenter notes,

The last two serving San Carlos Apache Tribal Chairpersons have testified before Congress opposing the Land Exchange and the Resolution Copper Mining Projects, saying that, given the scope and methods of the mining project proposed by Resolution Copper there are no mitigations that can save the sacred nature and resources of the Chich'il Bildagoteel (Oak Flat), Bikoh or Crown Dancers Canyon (Devil's Canyon), and Gan Diszin. [26530]

Respondents who list cultural resource mitigation measures suggest the following:

- Allow for professional peer review of mitigation plans.
- Allow for Native American communities review of mitigation plans.
- Apply mitigation standards across all land ownership jurisdictions.
- Mitigate for impacts to all NRHP-eligible sites.
- Monitor sites “*for human remains and previously-unidentified buried features during post-mitigation construction activities*” [26240].
- Tailor impact avoidance and mitigation to the “*values associated with cultural resources and to the concerns of individual tribes, tribal representatives, and others who value cultural resources threatened*” [24610] by the proposed project.
- Identify the feasibility of and methods for monitoring for cultural resources within the subsidence zone.
- Identify funds for a new Apache cultural center.
- Use a new Apache cultural center to house cultural resources found at the proposed mine site.
- Identify funds to document San Carlos Apache history.

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- Identify funds or a program to document San Carlos Apache traditional arts and crafts.
 - Identify funds or a program to preserve songs and language.
 - Identify funds for publishing a San Carlos Apache clanship book.
 - Allow the San Carlos Apache to determine mitigation measures for impacts to their cultural resources.
 - Allow continued access to Oak Flat for tribal members to gather acorns and medicine plants.
 - Improve access to sites for this purpose.
 - Establish new sites, including newly planted acorn trees on the San Carlos Apache Reservation.
 - Establish a Native American Affairs department within Resolution Copper to address cultural resource concerns.
 - Refurbish the Magma Copper Company smelter smoke stack for preservation purposes.
 - Install interpretive signage at Barnett Camp.
 - One commenter states, “*Promote mining heritage and preserve historic mining cultural resources and infrastructure*” [106].

Geology

- Implement erosion control measures.
- Test all waste rock left on the surface for acid mine drainage potential.
- Implement methods for reducing the toxicity of soils.

Land Use

- Develop mitigation measures for continued land management maintenance of the 7B lands and Bureau of Land Management (BLM) lands to the south at San Manuel.
- Offset wildlife impacts through the transfer of lands to conservation ownership.

Noise and Vibrations

- Use sound barriers or other noise-dampening technology to mitigate heavy equipment noise.
- Maintain equipment regularly to reduce noise from heavy machinery operation.
- Establish procedures for reporting noise complaints, including
 - providing a phone number for the public to report noise complaints, and
 - posting the phone number at various locations.
- Develop noise limits and a fine structure for noise violations.

Public Health and Safety

- Monitor public health and employee health throughout the life of the mine, including defining monitoring protocols.
- Provide employees with personal protective equipment specific to deep shaft mining hazards.
- Identify mitigation measures to prevent air blast.
- Identify hazard containment areas downstream of the tailings storage facility, including
 - preventing public access to hazardous sites,

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- implementing a hazard warning system;
 - identifying costs to construct barriers in hazard areas to prohibit off-road usage and reduce toxic dust, and
 - providing a Forest Service employee to patrol sites.
 - Identify plans and costs for preventing toxic harm to public uses of the TNF.
 - Provide signage at all TNF entrance roads warning of hazardous conditions.
 - Test stormwater runoff for toxins to prevent recreational exposure through running washes.
 - Invest in public safety programs, including drug and alcohol abuse prevention programs for tribal members.
 - Fund additional local and regional emergency services.

Recreation and Public Access

- Maintain road access to public lands.
- Mitigate for closed roads with alternative access routes.
- Mitigate for trail impacts with alternative trail route construction and trail maintenance commitments.
- Mitigate for the loss of climbing resources at a ratio greater than 1:1.
- Mitigate impacts through enhancement of other climbing and OHV areas.
- Provide interpretive signage on the Arizona National Scenic Trail to promote trail user understanding of the project.
- Mitigate for the loss of the Oak Flat campground with a new campground and picnic area, including
 - building a campground at the Top of the World site, and
 - investigating the use of Resolution Copper's property south of U.S. 60 for campground development.
- Develop a family-oriented park in San Carlos.
- Continue support to *“local and regional recreation groups and comprehensive recreation planning”* [79].
- Develop trail maintenance agreements, construct trail improvements, and install interpretive signage.
- Have Resolution Copper continue to work with local climbing organizations to develop climbing mitigation measures.

Socioeconomics

- Commit to hiring locally and using local suppliers and services.
- Develop a tribal technical training center to train members for positions at the proposed mine.
- Financially support public schools, workforce training, scholarships, and youth-life skills programs.
- One commenter states, *“Promote and financially support economic diversification of local communities”* [79].

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- Establish and contribute financially to a community foundation for local initiatives and projects.
 - Build a mining museum to boost the local economy.
 - Partner with the local tribal communities to open and maintain a tribal landfill.
 - Compensate property owners for “*damage to the community’s water, air quality, and property values*” [72].
 - Pay royalties on mining profits to tribal governments and the U.S. Government.
 - Compensate for the loss of the Oak Flat site through payment of \$1 billion to the U.S. Government and \$1 billion to the Apache Tribe.
 - One commenter states, “*Maintain ongoing communication with affected communities*” [79].

Transportation

- Describe traffic mitigation measures.
- Provide company-sponsored transportation and carpooling programs.
- Pay for improved park and ride facilities.

Visual Resources

- Screen mine facilities, including the tailings storage facility, from key viewpoints.
- Use light shields to mitigate light pollution and maintain night sky views.
- Use alternative lighting sources, including light-emitting diode (LED) lighting.

Water Resources

- Design facilities (culverts, dams, roads, diversions, etc.) to 1,000-year flood specifications.
- Mitigate sediment discharge to surface waters during construction.
- Restrict water usage at the mine.
- Implement water conservation measures for “*maximum water recovery and recirculation*” [19576].
- Develop a contingency plan for drought conditions or an inadequate water supply from the CAP.
- Implement mitigation to sustain the San Pedro River.
- Install potable water stations along the Arizona National Scenic Trail and areas used by sports people.
- Monitor groundwater and surface water quality and publicly disclose the results quarterly.
- Monitor water quality of community water supplies.
- Develop a mitigation plan for drinking water contamination.
- Pay for backup community water supply systems.
- Describe remedial actions for water contamination.
- Monitor hydrologic connectivity of impacted groundwater and surface water.
- Monitor groundwater pumping withdrawals.
- Reduce upstream pumping if shallow groundwater is detected.

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- Detail “*specific test equipment, allowable limits, frequency of testing, and how land & home owners will obtain timely and accurate reports*” [25110] for groundwater monitoring.
 - Monitor groundwater geochemistry with clearly specified water quality goals; specify remedial actions if goals are not met.
 - Require zero discharge of wastewater to surface water and groundwater during all phases of the project.
 - Monitor wastewater discharge.
 - Clarify “*interim shutdown*” mitigation measures relative to water discharge.
 - Develop a stormwater pollution prevention plan.
 - Require wastewater treatment to meet applicable regulatory standards.
 - Collect and remove leachate prior to wastewater discharge from the tailings storage facility.
 - Implement provisions for immediate shutdown in the event of any water quality violations or a breach in the tailings storage facility.
 - Develop a risk management and mitigation plan to address hydrologic impact uncertainties.

3.7.13.3 NEPA PROCESS

Oversight, Enforcement, Laws, and Regulations

- Implement monitoring and develop remedial strategies for actions exceeding monitoring thresholds.
- Identify the Forest Service budget for monitoring and litigation.
- One commenter asks, “*Will Forest assign one or more employees to oversee, monitor, be the Forest go-to person? Will s/he-they be full-time, on-site a specified number of hours per week, located in Globe, Mesa, or Phoenix District? If not, why not?*” [23754].
- Define the requirements for public reporting of monitoring and remedial actions.
- Describe the ongoing mitigation oversight and enforcement actions processes.
- Require strict oversight of monitoring and mitigation by the State of Arizona.
- Implement mitigation measures consistent with the goals and objectives of the “Pinal County Comprehensive Plan” and “Pinal County Open Space and Trails Master Plan.”

CHAPTER 4

Internal Scoping Summary



4.0 CHAPTER 4 – INTERNAL SCOPING SUMMARY

4.1 Chapter Organization

This chapter contains details of the specific internal scoping efforts that were conducted and lists the concerns identified during internal scoping. The concerns, presented in [Section 4.3](#) of this chapter, are generally organized by proposed action element (e.g., tailings, reclamation) or resource topic (e.g., air quality, biological resources, water resources), with a separate section dealing specifically with NEPA process topics of alternatives and mitigation.

4.2 Internal Scoping Process

Internal scoping is the process of conducting discussions among the ID team members working on the NEPA process to identify topic areas and concerns related to the project. ID team members include Forest Service resource specialists and planners representing anticipated topics of analysis in the NEPA process, managers, and TNF line officers; the ID team is supported by resource specialists and planners from SWCA. Internal scoping is informed by the review of available baseline data for the project, by the details contained in the proposed GPO, and by the professional knowledge and judgment of the ID team, including the ID team's specific knowledge of topic areas and concerns of importance to the TNF and the Forest Service.

4.2.1 Internal Scoping Meetings

Internal concerns were identified through meetings or conference calls between TNF ID team members and SWCA resource specialists. [Table 4.2.1-1](#) lists the internal scoping meetings and attendees.

The discussion in the meetings and on conference calls involved an overview of resource conditions, specific concerns of the Forest Service specialist, availability of data to evaluate the project effects on those concerns, and any field trips that might occur to better inform the specialists. Seventeen meetings were held over a 6-week period from mid-July to the end of August 2016.

Several field trips involving TNF and SWCA resource specialists were also conducted, specifically for biology and hydrogeology resources. As part of the hydrogeology field trips and meetings in July 2016, Resolution Copper was invited to participate in order to present an overview of baseline data collection, but was not present during discussions of concerns. Specialists associated with the U.S. Geological Survey and the San Carlos Apache Tribe also were invited to participate alongside the TNF and SWCA specialists.

Table 4.2.1-1. Internal Scoping Meetings

Date	Resource	Forest Service Attendees	Consultant Attendees	Method
6/22/2016	Biology	Mark Taylor, Mark Nelson, John Scaggs	Eleanor Gladding, Jeff Johnson, Chris Garrett, Charles Coyle, Donna Morey	In-person meeting
7/12/2016 and 7/13/2016	Hydrogeology	Greg Olsen, Roger Congdon, Mark Nelson	Chris Garrett, DeAnne Rietz, Mike Henderson, Joe Frank, Mark Williamson, Charles Coyle, Chris Horyza, Donna Morey	Site visit and in-person meeting
7/15/2016	Public Health and Safety	Clarence Coffey	Jonathan Rigg, Chris Horyza	Phone call
7/20/2016	Biology	Mark Taylor	Jeff Johnson, Eleanor Gladding	Site visit

Table 4.2.1-1. Internal Scoping Meetings (Continued)

Date	Resource	Forest Service Attendees	Consultant Attendees	Method
7/21/2016	Fire Management	Jack Mavin	Chris Horyza	Phone call
7/21/2016	Noise	Christine Crawford	Nancy Ashton, Chris Horyza	Phone call
7/22/2016	Mining/Engineering	Peter Werner	Mike Henderson, Troy Meyer	Phone call
7/27/2016	Minerals	Judd Sampson, Alex Mankin	Laurie Brandt, Chris Horyza	Phone call
7/27/2016	Range	Chandler Mundy	Jenny Addy	In-person meeting
8/20/2016	Socioeconomics	Allison Borchers	Doug Jeavons, Michael Verdone, Jonathan Rigg, Chris Horyza, Charles Coyle, Donna Morey	Phone call
8/17/2016	Cultural	Kristina Hill	Suzanne Griset, Adrienne Tremblay, Chris Horyza	Phone call
8/21/2016	Lands	Rebecca Hoffman	Steve Rinella	Phone call
8/22/2016	Soils	Greg Olsen	Mandy Williams, Chris Garrett, Chris Horyza, Donna Morey	Phone call
8/24/2016	Air Quality	Ron Sherron	Bruce MacDonald, Brad Sohm, Chris Garrett, Chris Horyza, Donna Morey	In-person meeting
8/24/2016	Ecology and Climate Change	Ryan Nicholas	Bruce MacDonald, Brad Sohm, Chris Garrett, Chris Horyza, Donna Morey	In-Person meeting
8/25/2016	Recreation and Visual	Kimber Jones	Jill Grams, Ryan Rausch, Chris Horyza, Donna Morey	In-person meeting
8/30/2016	Reclamation	Mark Taylor	Mandy Williams, Donna Morey	Phone call
8/30/2016	Transportation	Chris Crawford	Nancy Ashton, Chris Horyza, Zaid Hussein	Phone call

4.3 Concerns Raised in Internal Scoping

The following concerns were raised by the ID team and SWCA resource specialists during the process of internal scoping. Concerns are generally phrased as questions and have been grouped into both general categories and specific areas of concern. [Table 4.3-1](#) shows the overall internal scoping concern categories.

Table 4.3-1. General Internal Scoping Concerns Identified

General Category	Specific Topic Area or Concern
Mine Proposal	Tailings
	Water Source
	Reclamation
Land Exchange	General

Table 4.3-1. General Internal Scoping Concerns Identified (Continued)

General Category	Specific Topic Area or Concern
Resource Topic	Air Quality
	Biological Resource
	Climate Change
	Cultural Resources
	Environmental Justice
	Geology and Minerals
	Fuels and Fire Management
	Noise
	Public Health and Safety
	Range Management
	Recreation and Public Access
	Socioeconomics
	Transportation
	Visual Resources
	Water Resources
NEPA Process	Alternatives
	Mitigation

4.3.1 Mine Proposal – Tailings

- Would the tailings impoundment be designed to meet current standards? What is the most current and acceptable technology for tailings dam construction?
- Should the tailings embankment be constructed to the same level of quality and engineering as a water storage reservoir of similar size?
- What would be the effects of managing the high-pyrite cleaner tailings in the same facility as the scavenger tailings? Should the cleaner tailings be managed in a geomembrane-lined facility?
- What would be the potential long-term, post-closure liabilities and management issues of the project on Federal lands?
- What would happen if the project changes hands?
- What would happen if the Federal government inherits portions of the project on Federal lands as a result of bankruptcy or abandonment by the company?
- What would be the potential for failure of the tailings dam, and what would be the downstream effects of such a failure?
- What would be the risk to downgradient residents?
- What is the potential for asbestiform minerals to be present in the ore deposit and therefore in the tailings storage facility?
- What is the potential for nitrate residue from explosives use within the mine to affect water quality both in situ within the mine and within the tailings storage facility?

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- What is the potential for radioactive minerals to be present in the ore deposit, and what would be the potential for technologically enhanced naturally occurring radioactive materials to occur within the mineral processing or tailings storage facilities?
 - Which processing chemicals would be used at the West Plant Site, and how would those affect water quality within the tailings storage facility and in groundwater?

4.3.2 Mine Proposal – Water Source

- What additional water would be required to produce the energy that would be supplied to the mine and used over the life of the project?
- How much water would be used for the project and from what sources? What would be the effects of that water use?
- How reliable and consistent would the long-term water sources be for the mine, and how susceptible would they be to drought or shortage?
- How do the indirect socioeconomic effects impact water supply (i.e., population increase, housing, commercial development)?
- Would the proposed project water supply affect municipal water supplies in the area (i.e., Town of Superior, Arizona Water Company)?
- Would the proposed project water supply affect watershed function, riparian vegetation, riparian habitat, wildlife, range, or recreation?

4.3.3 Mine Proposal – Reclamation

- What would be the reclamation success criteria for revegetation efforts (both the time frames and vegetation cover)? Would these goals incorporate data from reference sites? How would potential reference sites be identified?
- How would existing and future disturbances—such as grazing, recreational use, and OHV activity—impact reclamation efforts, monitoring of success criteria, and selection of reference sites?
- How has reclamation succeeded at analog sites in the vicinity, with similar types of mining disturbance, soils, climate, vegetation communities, and reclamation techniques? What have been the rates of reclamation success at these sites?
- What methodology, metrics, and time frames (longevity and frequency) would be used when conducting reclamation success monitoring?
- How would biodiversity be affected by project disturbance and subsequent reclamation, and how would biodiversity be monitored long term?
- What is the composition of waste materials, and how would they be stored and managed (i.e., on-site landfills, mine tire disposal)? Would they migrate off-site? What are the potential effects on resources from these waste materials?
- What is the likelihood of successful reclamation using the techniques proposed in the GPO reclamation plan?
- Which adaptive management techniques and contingencies would be implemented if initial reclamation efforts do not meet proposed success criteria?
- What is the potential for weed establishment on salvaged soil, disturbed areas, and reclaimed sites, and how will noxious and invasive species be mitigated?

4.3.4 Land Exchange – General

- Would any existing third-party use authorizations (such as patented and unpatented mining claims, rights-of-way, easements, etc.) on the Selected or Offered Lands be abrogated or altered by conveyance of the lands proposed for exchange?
- If conditions or encumbrances on the Offered Lands are determined by the Forest Service or the BLM to make any portions of these lands unacceptable for public acquisition (for example, because of the presence of hazardous materials or other contamination or degradation), how would these situations be resolved? Could portions of the parcels be removed from consideration for exchange, or would Resolution Copper be obligated to remediate all sites to the satisfaction of the government prior to conveyance?
- How would each of the parcels that are conveyed to the Federal government be managed by the respective agencies (Forest Service, BLM)? Would this require amendment to the Tonto and/or Coronado forest plans or, in the case of the BLM, to the respective resource management plans? Similarly, would any area-specific land use plans or special use designations, such as Areas of Critical Environmental Concern, require amendment as a result of the exchange?

4.3.5 Resource Topics

4.3.5.1 AIR QUALITY

- Does the project comply with state implementation plans, and does it meet Pinal County air permitting requirements?
- How would the project affect air quality–related values of nitrogen deposition and visibility related to Class I airsheds?
- Would the project be in compliance for criteria pollutant emission and impacts?
- How would the emissions of HAPs from the tailings pile and mine operations be characterized and controlled?
- What would be the impacts on human and ecological health from those emissions and deposition?
- How would the project affect regional goals associated with existing nonattainment or maintenance areas for criteria pollutants?
- What emissions controls, mitigation measures, and source emissions monitoring would be employed, including during construction and operation?
- What air quality monitoring would take place during construction and operation?

4.3.5.2 BIOLOGICAL RESOURCES

- What effects could development of the mine—especially groundwater dewatering and/or reduced surface water runoff—have on the flow regime in Devil’s Canyon and the sensitive species present there, particularly on riparian vegetation (Arizona alder, willows, cottonwood, sycamore, etc.) and riparian obligate wildlife species?
- What would be the potential impacts to Forest Service sensitive species, including ocelot, Arizona hedgehog cactus, lowland leopard frog, Mexican garter snake, yellow-billed cuckoo, southwestern willow flycatcher, others?
- How would the mine and its ancillary facilities—including the tailings storage facilities, various roads, power lines, and pipelines, and development within the MARRCO corridor—affect known wildlife corridors?

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- What effects could development of the Resolution Copper Mine and related facilities have on bats, including cave myotis, Townsend's big-eared bat, and California leaf-nosed bat?
 - What effects could localized changes in air quality, including increased airborne dust/particulates and dust deposition as a result of mining-related traffic, have on both flora and fauna in the area?
 - How could increases in noise and traffic affect wildlife presence/absence and behavior, including mating, nesting, foraging, etc.?
 - What effects could the mine and mine-related facilities have on the presence and the future propagation of invasive species, both plant and animal?

4.3.5.3 CLIMATE CHANGE

- How would the project contribute to climate change with respect to greenhouse gas emissions?
- How would the project contribute to climate change through loss of carbon sequestration capacity from currently undeveloped NFS lands?
- Would biological carbon sequestration be enhanced through the land exchange process?
- How would the project affect environmental resources that are being impacted by climate change? Specifically, how would the project contribute to the spread of invasive species, and how would climate change affect the potential for invasive species to occur in the project area in the future?
- How is climate change affecting the design of the proposed action and alternatives? Specifically, how are the surface water and groundwater resources expected to change, and what design options would be employed to address those changes?
- What would be the level of GHG emissions from energy production that supports the project, including from any energy production alternatives?
- How would the transportation of concentrate to the smelter, smelting, transportation of finished products, and use of finished products be included in the analysis of GHG emissions that contribute to climate change?
- How would climate change affect surface water and groundwater resources available for the mine water supply, and how would these changes affect local community water supplies?

4.3.5.4 CULTURAL RESOURCES

- How many and what types of historic properties (archaeological sites or historic buildings/structures) will be leaving Federal administration within the Oak Flat Parcel as a result of the land exchange? Of these, how many and what types of historic properties are listed in or eligible for listing in the NRHP?
- How many and what types of historic properties are within the facility footprints as presented in the GPO? Of these, how many and what types of historic properties are listed in or eligible for listing in the NRHP?
- How would the mining construction and operations affect (i.e., through disturbance to or loss of) the historic properties within the GPO facility footprints? What types of ground disturbance would occur at historic property locations? Would all historic properties within the GPO footprint be equally affected?
- Would there be visual impacts to historic properties from the tailings storage facility and other mining facilities?

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- What impacts would occur to the *Chi'chil Bildagoteel* (Oak Flat) Historic District Traditional Cultural Property as a result of the land exchange and/or the GPO? How would those impacts affect the qualities that make it eligible for the NRHP?
 - Are there other resources of traditional and cultural significance to Native American peoples such as plants, animals, or mineral resources within the project area, and what changes would occur to those resources as result of the mining operations?
 - What is the extent of cumulative impacts of the proposed project, given the amount of previous and future mining that has occurred and is expected to occur in the vicinity of the proposed project?

4.3.5.5 ENVIRONMENTAL JUSTICE

- Would any stages of mine development be likely to result in environmental justice issues (i.e., disproportionate adverse effects on poor and/or minority communities)?

4.3.5.6 GEOLOGY AND MINERALS

- Are the mineral claims contiguous and consistent with the land status for the exchanged lands?
- How is mining law relevant to the potential impacts to the Oak Flat Mineral Withdrawal area?
- Are there active mining claims in the tailings area that would be impacted by the proposed operation, and if so, what are the ramifications?
- Are there any slivers of “residual” Federal lands, easements, or Federal reservations of mineral rights in the Oak Flat area?
- How does the structural geology control the expected subsidence?
- What would be the timing (speed, duration, time to equilibrium) of expected subsidence impacts?
- What would be the ultimate extent of the subsidence zone?
- Is the area estimated to be affected by subsidence entirely within the boundaries of the land being conveyed to Resolution Copper through the land exchange, and if not, what are the ramifications of subsidence to management of State or private lands?
- How does structural geology (i.e., faults, impermeable geologic layers) control groundwater movement, and how would geologic controls affect dewatering of the Apache Leap Tuff aquifer?
- Would the mining result in the reactivation or opening of existing fractures or faults, and what would be the resulting effect on groundwater flow?
- Would dewatering or groundwater pumping cause subsidence effects, at the East Plant Site, or along the MARRCO corridor?

Soils

- Would in situ soils be removed from the tailings storage facility prior to construction, and how would their treatment affect stability of the tailings dam?
- How would soils be salvaged and stockpiled for later reclamation needs? From where would soils be salvaged, and where would stockpiled soils be stored? What volume of soils would be salvaged and stored? How would soils be treated during stockpiling?
- Is the volume of soil available for salvage sufficient to accomplish planned reclamation, and is this soil material of sufficient quality (both physically and geochemically) to support native vegetation growth?

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- What would be the long-term stability of soils following reclamation?
 - What is the potential for salvaged soils, after long-term storage, to support revegetation efforts?
 - What is the potential for stored, disturbed, and reclaimed soils to support invasive and noxious species, and how would soils be managed and treated to minimize the spread of these organisms?
 - How would soils be affected within the subsidence area? Can soils in this zone be salvaged in advance to avoid complete net loss of productivity?
 - Is there current soil contamination on the West Plant Site or from other historic mining activities in the area, and if so, how could project disturbance potentially mobilize those contaminants through stormwater or the air to affect the public or the environment?
 - Would potentially contaminated soils on the West Plant Site or other areas of previous disturbance be used for reclamation or construction purposes?
 - What material was used for the railroad bed along the MARRCO corridor (i.e., recycled slag, waste rock), and what are the potential effects from disturbance of that material during construction?
 - What materials have previously been hauled along the MARRCO corridor, did transport potentially leave residual contamination through spills or dust deposition, and what would be the potential effects from disturbance of that material?
 - How would the project affect sediment delivery to downstream surface waters?
 - What would be the loss to soil productivity, soil development, and ecological function as a result of the disturbance from the tailings facility, the subsidence zone, other proposed temporary/permanent disturbances and infrastructure, and areas downgradient from the project?

4.3.5.7 FUELS AND FIRE MANAGEMENT

- How would the forest plan need to be amended to address mine development/closure/post-closure and reclamation with regard to fire management?
- Specifically, how would fire be managed within the future subsidence zone (presumably through a confinement/containment strategy)?
- Potential vegetation die-off within the subsidence zone may increase fuel buildup, which in turn may increase the intensity of wildland fires originating from within or entering this zone. How would this increased risk be managed?

4.3.5.8 NOISE

- What would be the potential noise-related impacts of the project, not only long term over the operational life of the mine, but also during construction phases when it is conceivable that noise impacts may be of shorter duration but more intense? The impact analysis would need to assess not only the mine site (East Plant site) and the processing facilities (West Plant site), but also all other related facilities, including the proposed tailings storage facility, the MARRCO corridor and loadout facility, and additional roads, power lines, pipelines, storage areas, etc.
- How would mine-related transportation—such as ore and/or equipment haul trucks and increased vehicular traffic from workers and other personnel traveling to and from the mine—affect residents and others in terms of increased noise levels?
- How will increased noise levels, both short and long term, be evaluated for how they may affect “sensitive receptors” such as hospitals, schools, geriatric care facilities, etc.?

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- Compared with noise effects on humans, noise can result in measurably greater adverse effects on wildlife (including birds and fish), both with respect to the long-term presence/absence of species and their behavior. Knowing that these effects can vary greatly, depending on species, how will potential noise impacts on wildlife be analyzed in the EIS?

4.3.5.9 PUBLIC HEALTH AND SAFETY

- What would be the potential impacts to public health and safety from pollutants emitted into the air from mining activities, including those emitted as a result of disturbance to historic mine tailings facilities (e.g., around the West Plant site)?
- Members of the public have expressed a belief that the Superior area has a significantly higher rate of cancer than in Arizona generally, and attribute this to current or historic mining activities. Are there authoritative medical reports or other credible sources that demonstrate this, and if so, how could development of the project contribute to cancer rates in the Superior area?
- How could increases in mine-related vehicular traffic affect public health and safety, not only in terms of potential accidents but also as a result of increased exhaust emissions?
- What would be the risks to the public—and to mine employees—of possible exposure to hazardous materials used and transported during mining operations?
- What would be the risks to public health and safety from the ground subsidence that is anticipated to occur at the East Plant site?
- How could increases in noise, both directly as a result of mine operations and from increased traffic, potentially affect public health and safety?

4.3.5.10 RANGE MANAGEMENT

- How would mine development alter the three existing allotments (Devil's Canyon Allotment, Mill Site Allotment, and Superior Allotment) within the boundaries of proposed mine facilities?
- How could potential alternative locations for any of the mine facilities (e.g., power lines, pipelines, tailings storage facility) affect grazing?
- What are the current range management prescriptions for the lands proposed to be conveyed to Federal ownership as a result of the land exchange? What range improvements exist on these lands? Would any changes to grazing occur as a result of the project?

4.3.5.11 RECREATION AND PUBLIC ACCESS

- How could mine development and operation affect the following recreational values in the Superior area: access; remoteness; naturalness; facilities and site management; social encounters; expectations for personal experience; and visitor management?
- What would be the potential for people displaced from recreational opportunities in the area as a result of the project to find comparable opportunities elsewhere? Specifically, what are the likely cumulative effects on recreational opportunities in this part of Arizona under each of the alternatives?
- What would be the foreseeable impacts (e.g., noise, visuals) to users of the Arizona National Scenic Trail?
- Expectations for access and recreational use of lands in the vicinity of the mine—including the Apache Leap Special Management Area and the proposed tailings storage facility site—are likely to be very different for different stakeholder groups; in particular, Indian tribes and recreationists such as rock climbers and mountain biking enthusiasts may have widely divergent views of

desirable conditions and management standards for these lands. What kinds of creative solutions can be explored during the EIS process to best accommodate all interested parties?

- Which NFS roads would be decommissioned, reconstructed, or restricted from public access?
- Which new roads would be constructed, and would they be open to the public during mine operations?
- How would road access, particularly to NFS roads, change during operation and after closure?

4.3.5.12 SOCIOECONOMICS

- What would be the socioeconomic burden and economics of long-term liabilities in the event that the Federal government inherits the site due to bankruptcy or abandonment?
- Where would future mine workers likely reside, and how could this affect local economies?
- Would local infrastructure (e.g., roads, schools) need to be improved as a result of an influx of workers to the Superior area, and if so, how would this be paid for?
- What would be the foreseeable “multiplier effects” on local and regional economies as a result of mine development and operation, that is, how would goods and services provided to Resolution Copper and its workers affect economic conditions and general quality of life in the Superior area and beyond?
- How would the mine affect property values, property taxes, and tax revenues on both the local and State level?
- It is a well-established fact that most long-term mining operations, over time, experience spikes and downturns in mineral commodity prices (the so-called “boom and bust” cycles). How susceptible would the Resolution Copper operation be to periods of depressed prices? Does the panel caving technique allow for a short-term cessation of mining and temporary closure (so-called “interim management”), and if so what would be the economic implications of short-term closure to the town of Superior and to the region?
- How would economic and social impacts be likely to vary during different phases of mine life (construction, operation, closure/reclamation, and post-closure)?
- Would lands coming into Federal ownership because of the land exchange result in higher management costs to the Forest Service and the BLM?
- Would there be benefits of increased economic activity, and conversely would there be a loss in values such as natural recreational settings, quietness, solitude, undeveloped scenery, and tribal/ceremonial/historical uses of Oak Flat and other areas?

4.3.5.13 TRANSPORTATION

- What would be the changes in traffic on U.S. 60 and State Routes 79, 177, 88, and 24 from deliveries of materials, movement of concentrate, and employee commuting, both during construction and during operation?
- What would be the effect on local traffic within the town of Superior?
- How would subsidence affect road infrastructure, including the Magma Mine Road, other NFS roads, and public highways?
- What would be the effect of train traffic within neighborhoods along the MARRCO corridor, from transportation of filtered concentrate from the filter plant?

4.3.5.14 VISUAL RESOURCES

- Landscape changes in form, line, texture, and color as a result of mining and mining-related activities may constitute direct, indirect, cumulative, and both short- and long-term adverse visual impacts. What would be the foreseeable impacts to scenic resources as a result of development and operation of the project, including the proposed tailings storage facility, roads, pipelines, power lines, conveyers, etc.?
- What present or reasonably foreseeable future projects in the area are likely to contribute to cumulative impacts to scenic resources, and how would the project add to these cumulative effects?

4.3.5.15 WATER RESOURCES

Groundwater

- What is the overall water budget for the basin, and how would the proposed project alter that budget?
- What is the existing groundwater quality within the area to be mined?
- How would the project affect movement or migration of existing groundwater?
- How would the remaining in situ rock react to inundation upon closure of the mine, and would there be an acid-rock drainage issue that would develop within the underground mine itself?
- How would rock type affect in situ buffering capacity?
- What would be the long-term effects on groundwater quality from seepage from the unlined tailings storage facility, including potential changes over time in tailings geochemistry?
- Would a pit lake develop within the subsidence zone? If so, what would be the expected water quality, and what effect would the presence of the pit lake have on regional groundwater flow and water budgets?
- If a pit lake forms in the subsidence zone, would it be beneficial or harmful to migratory waterfowl and local animals?
- If a pit lake forms in the subsidence zone, would it be a terminal sink or would water discharge from it, potentially affecting surrounding groundwater and surface water quality?
- What would be the potential effect on existing groundwater wells in Superior in terms of water quantity as a result of mine dewatering?
- What would be the potential effect on existing groundwater wells along the MARRCO corridor where groundwater is expected to be extracted?
- What would be the potential effect on existing groundwater wells in Superior, Queen Valley, and other residential areas from potential contamination, or from the migration of poor-quality water?
- What is the water quality of the mine water currently being removed, and what would be its potential effect on downstream users during operations?
- What is the ultimate source and destination of groundwater in the deep aquifer, and what receptors would potentially be affected at long distances by capturing this groundwater during mine dewatering?
- What springs occur in the project area, and how would those springs be affected by the proposed project?

-
- Is the geology underlying the proposed tailings storage facility demonstrated to be impermeable, and if not, how would this affect fate and transport of potential contaminants?
 - What long-term effects would result from process reagents or daughter products as they move throughout the system, including transport to groundwater, recycling or reclaimed water, or exposure by air, including changes due to reaction with ambient groundwater, aquifer materials, or tailings?

Surface Water

- What is the likely source of water to Devil's Canyon, and how would Devil's Canyon be affected by the proposed project, specifically by changes resulting from subsidence and from dewatering?
- What is the likely source of water to upper Queen Creek, and how would upper Queen Creek be affected by the proposed mining itself, the expected subsidence, and mine dewatering?
- How would stormwater be managed on the tailings storage facility, and what would be the effects on surface water quality from tailings facility runoff?
- How would the subsidence crater affect the watershed contributing to upper Queen Creek, Devil's Canyon, and Mineral Creek, and how much would surface water flows be diminished from the effective removal of part of the watershed?
- How would the tailings impoundment affect surface water flows in Queen Creek, and how much would surface water flows be diminished from the effective removal of part of the watershed?
- Is the existing vegetation on Oak Flat supported by groundwater, and would it be affected by groundwater loss from subsidence or dewatering?
- How has the overall watershed been affected by the presence of a historic mining district, including: existing elevated metal concentrations in surface water runoff; existing elevated metal concentrations in groundwater; existing contamination in soils, including from air deposition from smelter operations or movement of tailings; and the presence of historic slag or tailings sites?
- What would be the potential for efflorescent salt deposits to occur at the tailings storage facility? What would be the potential for transport of those salts in stormwater runoff, and what would be the effect on downstream waters?

4.3.6 NEPA Process

4.3.6.1 ALTERNATIVES

- The following alternatives should be considered, potentially using the multiple accounts analysis methodology as appropriate:
 - Lined tailings facility for all tailings
 - Separate management of cleaner tailings, including in a lined facility
 - Centerline or downstream constructed tailings dam
 - Alternative tailings disposal sites
 - Alternative disposal technologies
 - Use of dry-stack tailings, as proposed for the Rosemont Copper Mine
- Alternative reclamation methods should be considered, potentially including:
 - Geomorphic reclamation concepts (i.e., landforming) that better mimic the natural environment

-
- Stormwater and reclamation designs for the tailings storage facility that minimize both the risk and the long-term maintenance burden on the Forest Service
 - Alternative mining methods that would reduce subsidence effects should be considered
 - Alternative reclamation techniques, such as soil cover, type/methods of planting or seeding, soil salvage and storage, stormwater mitigation, earthwork, weed management, soil additives (e.g., mulch, biomass, or fertilizer), etc., should be considered if they would increase the likelihood of success
 - Alternative techniques that promote water conservation (i.e., reducing surface area, covering areas of water storage, changes in wetted tailings approach)?

4.3.6.2 MITIGATION

- Could the effects of subsidence be mitigated?
- What contingency plans would be in place if subsidence does not occur as predicted or modeled, and could any actions be taken at that time to halt subsidence effects once they start?
- What methods would be applied to mitigate wind and water erosion from reclaimed soils and the tailings storage facility?
- What methods would be applied to mitigate loss of soil physical, biological, and chemical function?
- What methods would be used to mitigate or prevent impacts to surface waters from increased or decreased sediment load?
- How could the risk of fire initiated by mine-related equipment use be minimized?
- How could Forest fire teams and municipal resources in the area, and available equipment, best be managed to respond to future fire events?
- Could the eventual loss of Oak Flat Campground due to subsidence, whether partial or total, be compensated for by establishment of another camping area nearby?
- What mitigation measures could be proposed to reduce visual impacts from the mine and all related facilities? The analysis should consider potential changes in engineering/design (e.g., possible configurations or locations for the tailings storage facility); potential alternative locations of linear facilities such as roads and power lines; possible painting or staining of high-contrast features; and possible concurrent reclamation, such as recontouring and/or revegetation of surface disturbances.
- Could potential effects to Queen Creek be mitigated through water source replacement or other methods?
- Could potential effects on Devil's Canyon be mitigated through water source replacement or other methods?

CHAPTER 5

Cooperating Agency and Tribal Scoping Summary



5.0 CHAPTER 5 – COOPERATING AGENCY AND TRIBAL SCOPING SUMMARY

5.1 Chapter Organization

This chapter is divided into two sections: cooperating agency scoping summary and tribal scoping comment summary. The cooperating agency scoping summary summarizes the cooperating agency scoping process and cooperating agency scoping comments. Public scoping comments submitted by tribes and tribal-affiliated organizations are summarized in the tribal scoping comment summary section.

5.2 Cooperating Agency Scoping Summary

5.2.1 Participating Cooperating Agencies

The Forest Service, lead agency for the EIS, invited 12 agencies to participate in the NEPA process as cooperating agencies. Ten agencies accepted the invitation to participate, one is pending, and one declined (Arizona State Historic Preservation Officer) (Table 5.2.1-1). Cooperating agencies are those agencies with special expertise on environmental issues or with jurisdiction by law as defined by 40 CFR 1508.25 and 40 CFR 1508.15. The roles of cooperating agencies during the NEPA process are governed by CEQ implementing regulations (40 CFR 1501.6 and 1508.5) and Forest Service regulations and policies. The objective of cooperating agency relationships is to engage in a working partnership to

- gain early and consistent involvement of partners,
- address intergovernmental issues,
- avoid duplication of effort,
- enhance local credibility of the NEPA review process, and
- build relationships of trust and cooperation.

Scoping of cooperating agencies allows the Forest Service to identify the intergovernmental topics and concerns that should be considered by the ID team for analysis in the EIS. Scoping was conducted with cooperating agencies through a cooperating agency kick-off meeting and during the public scoping comment period.

Table 5.2.1-1. Cooperating Agencies EIS Participation

Agency	Status
Arizona Department of Environmental Quality	Accepted
Arizona Department of Water Resources	Accepted
Arizona Game and Fish Department	Accepted
Arizona State Historic Preservation Officer	Declined
Arizona State Land Department	Accepted
Arizona State Mine Inspector	Accepted
Bureau of Land Management	Accepted
Pinal County Air Quality Control Division	Accepted
U.S. Army Corps of Engineers	Accepted
U.S. Environment Protection Agency	Accepted
U.S. Fish and Wildlife Service	Accepted
U.S. Geological Survey	Pending

5.2.2 Cooperating Agency Meetings

A cooperating agency kick-off meeting was held on November 22, 2016, at the TNF Supervisor's office. Meeting attendees included TNF project managers, cooperating agency representatives, Resolution Copper representatives, and staff from the third-party consultant, SWCA (see [Table 5.2.2-1](#)). The meeting included a presentation on the proposed GPO by Resolution Copper, a project status update presentation by the TNF EIS project manager, an overview of the lead and cooperating agency responsibilities, discussion of the cooperating agencies' Memorandum of Understanding development, and a resource topics workshop session. [Section 5.2.4](#) discusses the preliminary cooperating agency scoping topic areas or concerns that were identified during the resource topics workshop session.

Table 5.2.2-1. Cooperating Agency Kick-Off Meeting Attendees

Agency	Attendees
Tonto National Forest	Mark Nelson, Mary Rasmussen
Arizona Department of Environmental Quality	Brian Parkey, David Haag
Arizona Department of Water Resources	Clint Chandler
Arizona Game and Fish Department	Natalie Robb, Jay Cook, Joyce Francis
Arizona State Land Department	Keenan Murray, Joe Dixon, Bob Harding
Bureau of Land Management	Michael Werner, Tamra Emmett, Nancy Favour
Pinal County Air Quality Control Division	Kale Walch, Mike Sundblom
U.S. Army Corps of Engineers	Michael Langley
U.S. Fish and Wildlife Service	Mike Martinez, Kathy Robertson
Resolution Copper	Michael Langley, Tara Kitcheyan, Jacques Tshisens, Dave Richins, Heather Gluski, Vicky Peacey
SWCA	Chris Horyza, Charles Coyle, Donna Morey

5.2.3 Cooperating Agency Public Scoping Comment Submittal

During the 120-day public scoping period for the Resolution Copper Project and Land Exchange EIS, from March 18 to July 18, 2016, four cooperating agencies delivered scoping comment submittals to the TNF. The following is a general content summary of the cooperating agency public comment submittals. [Section 5.2.4](#) provides a detailed discussion of the topic areas or concerns raised by cooperating agencies during public scoping.

5.2.3.1 ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

The ADEQ Air Quality Division submitted comments on existing air quality in the project area and potential air quality impacts associated with the project. ADEQ provided regulatory information regarding NAAQS for particulate matter and provided several mitigation measures to reduce disturbance of particulate matter during construction. Copies of the applicable Arizona Administrative Codes were attached to the submittal.

5.2.3.2 ARIZONA GAME AND FISH DEPARTMENT

The AGFD comment submittal requests that the AGFD be actively engaged as a cooperating agency during the NEPA process, that the analysis consider the Arizona's SWAP, and that data made available

by AGFD be used during the EIS analysis. Additionally, the AGFD comment submittal focused on the following NEPA process, mine proposal, and resource topic areas:

- range of alternatives;
- mitigation;
- mine reclamation;
- water impacts as they relate to wildlife;
- recreation; and
- wildlife, including SGCN and SERI.

AGFD included lists of special status species, AGFD SERI potentially occurring the project area, and special status and uncommon species within 5 miles of the project area as an appendix to the comment submittal. AGFD also included information regarding a recommended hydrologic analysis of wildlife and wildlife habitat for the project.

5.2.3.3 PINAL COUNTY

The Pinal County comment submittal, sent by the County Manager, expressed concerns about project impacts to Pinal County resources and land use plans. The comment submittal specifically highlighted the following areas of concern:

- floodplains and other drainage issues,
- Arizona National Scenic Trail,
- existing and planned trails,
- “Pinal County Open Space and Trails Master Plan,” and
- “Pinal County Comprehensive Plan.”

Additionally, Pinal County included as an attachment to its comment submittal the Pinal County Board of Supervisors Resolution No. 031313-RCC, *A resolution of the Pinal County Board of Supervisors urging the United States Senate and House of Representatives to recognize Resolution Copper Company for its investments and efforts to develop a new copper mine and exchange the local, state and national economies.*

5.2.3.4 U.S. ENVIRONMENTAL PROTECTION AGENCY

The EPA delivered an extensive, detailed comment submittal on the project, the GPO, and land exchange documents. The comment submittal identified significant areas of concern and recommended analysis items to include in the EIS. Topic areas discussed in detail in the EPA submittal included the following:

- project purpose and need,
- alternatives and mitigation,
- water resources,
- geochemistry,
- air quality,
- climate change,
- vegetation and wildlife,
- mine facilities,
- mine reclamation and post-closure management, and
- cumulative impacts.

5.2.4 Concerns Raised in Cooperating Agency Scoping

The following topics areas or concerns were raised by the cooperating agencies during the cooperating agency kick-off meeting and in the four public scoping comment submittals described above. Discrete comments identified at the meeting and in the submittals are generally phrased as questions and have been grouped into general and specific topic areas or concerns. [Table 5.2.4-1](#) shows the agency scoping topic areas that are discussed in this section.

Table 5.2.4-1. Agency Scoping Topic Area

General Category	Specific Topic Area or Concern
Proposed Action	Land Exchange
	Water Source
	Slurry Pipelines
	Tailings Storage Facility
	Mine Reclamation
Resource Topic	Air Quality
	Biological Resources
	Climate Change
	Cultural Resources
	Environmental Justice
	Geology and Minerals (including subsidence)
	Land Use
	Recreation
	Water Resources
NEPA Process	General
	Purpose and Need
	Cumulative Impacts
	Alternatives
	Mitigation

5.2.4.1 PROPOSED ACTION

Land Exchange

- What elements of the land exchange will be analyzed in the EIS?
- What are the baseline conditions of the offered lands and are there potential concerns associated with the offered lands?
- What is the Forest Service's discretion over land valuations?

Water Source

- Is there sufficient water supply for implementing the GPO? Are there enough water rights for the GPO? What are the water shortages, and how much additional water will be required over the life of the mine?
- How will water "banking" be analyzed and described in the EIS analysis?

-
- How would the proposed recovery wells impact future development on Arizona State Trust land?
 - How would the project affect the water rights of other users? How would issuing the mineral extraction permit impact other water users?

Slurry Pipelines

- What are the environmental impacts associated with each pipeline?
- What are the potential impacts of a pipeline leak? What surface water bodies could be impacted from a pipeline leak? What are the pipeline primary and secondary containment measures?

Tailings Storage Facility

- What was the overall siting process for the tailings storage facility? What efforts were taken, past and present, to locate the tailings storage facility elsewhere, including at the open pit at Pinto Valley Mine or on Arizona State Land Department lands?
- How would the tailings storage facility be designed to contain waste rock and ensure against leaching and release of contaminants?
- What is the expected lifetime of the tailings storage facility?
- What are the potential public health and safety threats posed by the tailings storage facility?
- What are the advantages and disadvantages of lining the tailings storage facility?

Mine Reclamation

- What are the management plans for mine reclamation, closure, and post-closure?
- What is the acreage of the proposed mine reclamation? What areas would be targeted for reclamation? To what degree would the targeted areas be reclaimed? Against what standard would reclamation success be measured?
- What is the reclamation timeline? Would reclamation of mine areas occur concurrently?
- What maintenance actions are required during reclamation? What are the means for ensuring that maintenance occurs?
- What are the commitments and responsibilities of Resolution Copper and agencies during closure and post-closure?
- How would seepages from the tailings storage facility be prevented or captured over the closure and post-closure periods?
- What are the reclamation and closure plans for the waste rock areas? What are the differences in effectiveness of various waste rock cap/cover systems in preventing water infiltration?
- How would a growth media be used to reduce infiltration of water and revegetate disturbed areas? To what standards would the growth media be designed? What is the proposed growth media cover effectiveness?
- Would native plants be used in revegetation? Would additional measures be needed to ensure revegetation of the project site? How will revegetation be enforced and monitored?
- What are the reclamation bonding requirements of the project and project alternatives? Would the Forest Service be able to modify the bonds during the life of the mine? What measures do the Forest Service and State regulators have in place to ensure availability of funds for reclamation and closure activities?

-
- What are the projected costs of reclamation and closure activities? What are the long-term funding mechanisms? How would the Forest Service ensure that the funding mechanisms are responsive to changes in mine conditions over time?
 - What are the post-closure, long-term management activities? What are the projected costs for long-term management? What are the financial assurances associated with long-term management? Would a trust fund be established for long-term management, and what would be the terms of the trust fund?

5.2.4.2 RESOURCE TOPICS

Air Quality

- What are the air emissions associated with the project? What air pollution would result from the mill, concentrator, and mine vents?
- What are the project impacts to the NAAQS and PSD increments in the project area? What are the HAPs associated with project?
- What are the ozone concerns associated with the East Plant Site and West Plant Site? How would the project impact the recommended non-attainment ozone area in the Queen Valley area?
- What are the likely particulate matter air pollution impacts?
- How would the project impact visibility in the Class I Airshed?
- How will air dispersion modeling be incorporated into the analysis?
- What air quality permits would be required for the project?

Biological Resources

- What habitats exist in the project area for fish, wildlife, and sensitive status species? How will biological inventories be conducted?
- What are the likely species and habitat impacts?
- How would the project impact migratory birds and important avian habitat in the project area?
- What hydrologic analysis for impacts to wildlife and wildlife habitat will be conducted for the EIS?
- What are the likely surface water quality impacts to wildlife?
- What are the impacts to riparian perennial streams and their associated special status fish species and native fish species?
- How would open water at the tailings storage facility and storage ponds impact birds and mammals?
- What would be the potential for the introduction or spread of invasive species or pathogens?
- How would the project comply with the requirements of the ESA? Are there ESA concerns associated with the land exchange parcels? Will a BA be prepared?
- With regard to Devil's Canyon and the yellow-billed cuckoo, how does the USFWS regulate take of ESA species under Section 7 where the Forest Service does not have jurisdiction?
- What are the impacts to the Sonoran desert tortoise? What are the Forest Service's obligations under the Candidate Conservation Agreement for the Sonoran desert tortoise?

-
- What are the impacts to State Trust wildlife resources from the project alternatives? What are the impacts to SGCN and SERI?
 - How is the project impacted by the Arizona SWAP? How does the project impact the conservation policies contained in the SWAP?

Climate Change

- What direct and indirect GHG emissions are associated with the project and alternatives?
- How would climate change affect the project area?
- How would the project impact climate change impacts?

Cultural Resources

- How will the Forest Service engage in government-to-government consultation with affected Native American tribes?

Environmental Justice

- What minority and low-income populations would be potentially affected by the project and project alternatives? Would the project result in a disproportionate adverse effect on an environmental justice population?

Geology and Minerals (including Subsidence)

- What geochemical testing procedures will be used, and how do they comply with applicable standards? What is the waste rock characterization and acid-generating potential?
- What would be the subsidence depth and area? How would the depth and area of subsidence be affected by dewatering?
- What are the subsidence impacts to the U.S. 60 transportation corridor?
- What earthquake design parameters were used in designing the tailings storage facility?

Land Use

- What are the impacts to the planned open space identified in the “Pinal County Open Space and Trails Master Plan”?
- How would the land exchange comply with Forest Service management plans? Would the land exchange impact existing deed restrictions, easements, or rights-of-way? Would the land exchange impact existing uses, including livestock grazing and recreation on the exchange lands or surrounding lands?
- What nearby special management areas, including natural conservation areas or wilderness area, would be impacted by the land exchange?
- How would the BLM incorporate the offered private lands within the San Pedro Riparian National Conservation Area into current National Conservation Area plans?

Recreation

- How would the project impact SERI, hunting and angling opportunities, hunt-permit revenue, and recreational outdoor tourism?
- What are the impacts to existing and planned recreational trails?
- What are the project impacts to the Arizona National Scenic Trail?

-
- How would the tailings storage facility impact the Legends of Superior hiking trails?
 - What are the impacts to the “Pinal County Open Space and Trails Master Plan” in and around the town of Superior and the MARRCO corridor?
 - Is there case law or other reason to require that Resolution Copper provide public access through Oak Flat?

Water Resources

- What are the baseline hydrologic conditions of the project area?
- What Federal and State water resource permits and standards apply to the project?
- What are the direct, indirect, and cumulative water quality impacts to surface and groundwater?
- What are the impacts of dewatering on groundwater and surface water resources?
- How would the project impact local drinking water resources, including water supply and quality?
- How would subsidence impact surface water flows and groundwater?
- What hydrologic models will be used in the EIS analysis? What models will be used to predict future groundwater levels, and will they include future surface water/precipitation infiltration from the subsidence zone?
- What is the potential for surface water runoff? What are the impacts to floodplains, drainage patterns, and stormwater flows?
- What are the potential project discharges, seepage, temporary ponding, diversions, and groundwater pumping associated with the project?
- What are the project impacts to jurisdictional waters?
- If there are impacts to jurisdictional waters, what would be the CWA Section 404/401 permitting requirements? If a 404 permit is required, who would conduct the 404 (B)(1) alternatives analysis and how would this analysis relate to the EIS? What involvement would the ADEQ have in 404/401 permitting?
- What non-jurisdictional wetlands or riparian areas are located in the project area? What is the baseline quality of these waters, and how might they be impacted by the project?
- What is the potential for contamination of surface waters derived from precipitation? What is the fate and transport of such waters? What are the associated wildlife impacts?
- What is the potential for seepage and surface water or groundwater contamination from the subsidence zone, tailings storage facility, and open-water ponds?
- What environmental contaminants would be present in open water at the tailings storage facility and storage ponds?

5.2.4.3 NEPA PROCESS

General

- What Federal, State, and local permits are required for the project?

Purpose and Need

- How does the Congressional mandate for the land exchange impact the project purpose and need?

Cumulative Impacts

- What are the other ongoing, planned, and reasonably foreseeable projects in the study area, including mining and non-mining activities?
- What are the potential cumulative impacts on the affected environment and “at risk” resources?
- What are the cumulative impacts to State Trust wildlife resources?
- What are the cumulative water quality impacts to wildlife resources in Queen Creek and Arnett Creek?

Alternatives

- How is the alternatives analysis impacted by the Congressional mandate for the land exchange?
- How will a reasonable range of alternatives be developed?
- What is the Forest Service’s authority for alternatives development under the Mining Law, Forest Service management plans, and other relevant statutes?
- What are the tailings storage facility alternative locations?
- What are the alternative tailings storage facility design options, including “filtered” and “paste” designs?

Mitigation

- What mitigation would be required for impacts to State Trust wildlife resources?
- How will impacts to riparian areas of critical environmental importance be mitigated?
- What are the mitigation measures for minimizing impacts to special status species and designated habitats?
- How would mine reclamation residual impacts to wildlife resources and habitat be mitigated?
- How will the EIS incorporate the mitigation measures proposed in the “Wildlife Management Plan” for stormwater catchment basins and process water ponds?
- What are the proposed mitigation measures for impacts to migratory birds?
- Will an avian conservation plan be developed to mitigate for impacts to avian resources at the proposed tailings storage facility location?
- How would impacts to the Sonoran desert tortoise be mitigated?
- Would wetland or riparian habitat mitigation be required? What are the long-term monitoring requirements and contingency plans for the mitigation areas?
- What mitigation measures would be prescribed to prevent hazardous spills, standing water, and air pollutants which many create a hazard to wildlife?
- What mitigation measures would be used for vegetation reestablished during mine reclamation?
- How would surface and groundwater be monitored? What are the proposed frequencies, screening intervals, and parameters for water monitoring? What are the proposed mitigation measures to prevent contamination of water and sediment?
- How would impacts to jurisdictional and non-jurisdictional water be mitigated?

-
- How would accidental releases of hazardous materials at all mine facilities be mitigated? What measures would be included in the spill prevention control and countermeasures plan and the petroleum-contaminated soil management plan?
 - How would air quality be monitored? What mitigation would be proposed to minimize air pollution, including particulate matter, ozone, and HAPs, throughout the life of the mine?
 - What mitigation measures would be in place to reduce project GHG emissions? What mitigation measures would be implemented to improve environmental resilience to climate change impacts?
 - How would impacts to cultural resources, including culturally significant sites, be avoided or mitigated?
 - How would impacts to recreation resources, including the Arizona National Scenic Trail, be mitigated?
 - Would proposed mitigation be consistent with the Goals and Objectives of the “Pinal County Comprehensive Plan” and the “Pinal County Open Space and Trails Master Plan”?
 - How would cumulative impacts be mitigated? Who are the responsible parties for implementing and enforcing cumulative impact mitigation actions?
 - What measures would be taken to mitigate impacts to environmental justice populations?
 - How would land exchange impacts be mitigated?
 - Would the EIS analysis address the effectiveness of proposed mitigation measures?
 - Who are the responsible parties for implementation, effectiveness, and enforcement of the proposed mitigation measures?
 - What are the mitigation contingency plans and adaptive management options?

5.3 Tribal Scoping Comment Submittal Summary

The following section summarizes the topic areas or concerns contained in the four tribal affiliated public comment submittals delivered to the TNF during the public scoping comment period. The Forest Service is conducting tribal consultation for the proposed action with the State Historic Preservation Officer and the affected tribes pursuant to Section 106 of the NHPA. The government-to-government tribal consultation, required by the NHPA, is private and represents the primary consultation and coordination process between the tribal governments and the Forest Service. This tribal scoping comment summary presents the public comment submitted by tribes and affiliated parties and does not represent the government-to-government consultation process.

Four comment submittals were delivered to the TNF during the scoping period on behalf of two tribes, the San Carlos Apache Tribe and White Mountain Apache Tribe, and one tribal organization, the Inter Tribal Association of Arizona (ITAA). The San Carlos Apache Tribe and ITAA comment submittals indicate that the comments delivered during the public scoping period do not represent the full scope of comments on the proposed action; rather, the comments submitted are limited to a few key topic areas or concerns. These respondents state that the full record of tribal comments on the proposed action should include all previous comments and forthcoming comments submitted during the EIS process and during tribal consultation. Additionally, these respondents express support and agreement with comments contained in the Arizona Mining Reform Coalition (Comment Submittal 24260). Bracketed numbers following italicized direct quotes represent the associated comment submittal identification number.

5.3.1 Tribal Public Scoping Comment Submittals

The following is a general content summary of the tribal public scoping comment submittals. [Section 5.3.2](#) contains a detailed discussion of the topic areas or concerns raised by tribal entities during public scoping.

5.3.1.1 SAN CARLOS APACHE TRIBE

The San Carlos Apache Tribe submitted one comment submittal during the public scoping period. Areas of concern to the San Carlos Apache Tribe include the following:

- Proposed Action. Land exchange and evaluation and appraisal of the land exchange, mine design and facilities locations, energy requirements, hazardous materials and solid waste, mining health and safety, irreversible ground subsidence, and reclamation and bonding.
- Resource Impacts. Air quality, biological resources, cultural resources, environmental justice, geological resources, GHG emissions, land use and access, public health and safety, recreation, social and economic values, transportation, visual resources, and water resources.
- NEPA Process. Deficiencies in the GPO, amendments to the TNF's Land and Resource Management Plan, Apache Leap Special Management Area, rights-of-way, additional government permitting, unavoidable adverse environmental effects, irreversible and irretrievable commitment of resources, cumulative impacts, and alternatives and mitigations.

One of the primary concerns discussed in the comment submittal is the analysis of cultural resource impacts and the development of alternatives and mitigations. The San Carlos Apache Tribe expresses concern with the characterization of cultural resources in the GPO and requests that the analysis expand upon the presence of cultural resources and impacts to those resources. With regard to the NEPA process and alternatives and mitigations, the San Carlos Apache Tribal letter states,

The tribes and tribal representatives have unanimously recommend (a) total avoidance by the mining operations of these probable historic properties (bona fide cultural resources) and, if avoidance is not elected, (b) that Tonto National Forest pursue government-to-government consultations with each tribe to determine exact boundaries of the historic properties and to resolve adverse effects through management, protection, preservation, and other treatments.
[24610]

Another prominent concern in the comment submittal is impacts to water resources. The effects of acid mine drainage and water usage on surface water and groundwater resources in the region is of concern to the Tribe.

5.3.1.2 WHITE MOUNTAIN APACHE TRIBE

The White Mountain Apache Tribe delivered one comment submittal during the public scoping period. The White Mountain Apache Tribal comment submittal discusses the Apache people's historical and current cultural and spiritual connections with the Oak Flat region and requests that the Forest Service use the current NEPA process to “*institutionalize their fiduciary duties and American Indian trust responsibilities*” [217] to protect the cultural resources in the Oak Flat region.

5.3.1.3 INTER TRIBAL ASSOCIATION OF ARIZONA

The ITAA delivered on behalf of 21 ITAA members two comment submittals during the public scoping period. The first submittal contains a request for an extension of the 60-day public comment period.³ The second submittal contains a detailed discussion of ITAA concerns with the land exchange and mine operations' impacts to cultural resources and tribal members. The comment submittal highlights the following areas of concern:

- tribal interests in Oak Flat as a “culturally and historically significant place” [24280];
- direct, indirect, and cumulative resource impacts to the Oak Flat region, including impacts from the proposed mine’s water usage and contamination and pollution concerns;
- government-to-government consultation; and
- compliance with executive orders, laws, and regulations pertaining to cultural resources and Native American tribes.

The ITAA comment submittal includes two attachments. The first attachment is a table created by ITAA to show the estimation of the proposed mine’s water usage based on the figures included in the GPO. The second attachment is a figure created by ITAA depicting the mine’s estimated water demand and Arizona water supply sources.

5.3.2 Concerns Raised in Tribal Scoping Comment Submittals

The following topic areas or concerns were raised in the tribal scoping comment submittals. The discrete comments, as identified in the submittals, are generally phrased as questions and have been grouped into general and specific topic areas or concerns. [Table 5.3.2-1](#) shows the tribal scoping topic areas that are discussed in this section.

Table 5.3.2-1. Tribal Scoping Topic Areas

General Category	Specific Topic Area or Concern
Proposed Action	General
	Land Exchange
	Groundwater Pumping
	Subsidence Zone
	Slurry Pipelines
	Tailings Storage Facility
	Mine Reclamation

³ During the public scoping meetings, numerous individuals and several organizations requested an extension of the public scoping period, as well as additional public scoping meetings. The TNF forest supervisor decided to accommodate these requests by extending the public scoping period from 60 to 120 days, through July 18, 2016, and holding one additional public scoping meeting on June 9, 2016, in San Tan, Arizona.

Table 5.3.2-1. Tribal Scoping Topic Areas (Continued)

General Category	Specific Topic Area or Concern
Resource Topic	Air Quality
	Biological Resources
	Climate Change
	Cultural Resources
	Geology
	Noise and Light Pollution
	Public Health and Safety
	Visual Resources
	Water Resources
NEPA Process	Public Involvement
	General Plan of Operations Content and Data Gaps
	Cumulative Impacts
	Connected Action
	Tribal Consultation
	Other Laws and Regulations
	Alternatives
	Mitigation

5.3.2.1 PROPOSED ACTION

General

- To what extent would the project cause “*disturbance through roads, traffic, lighting, noise, haze and the construction of man made structures*” [24280].

Land Exchange

- What are the direct, indirect, and cumulative effects of the land exchange?
- What are the adverse impacts to the environments of Oak Flat, Devil’s Canyon (*Gáán Bik’oh* or *Ga’an* Canyon), and Mineral Creek from the proposed land exchange?
- What impact will the land exchange have on the Oak Flat’s listing as a Traditional Cultural Property under the NHPA?

Groundwater Pumping

- How much groundwater will be used for the mine? What is the reliability of groundwater supply predictions?
- What are the effects of groundwater pumping over the life of the mine?
- What are the long-term watershed impacts of groundwater pumping?
- What are the impacts to shallow and bedrock aquifers?
- How will groundwater pumping impact the MARRCO corridor?
- How will water usage at the West Plant Site and East Plant Site impact groundwater aquifers?

Subsidence Zone

- How would the proposed project impact the physical features of Oak Flat, including above- and belowground features?
- What is the effectiveness of the proposed use of “*groundwater from the mine dewatering for mixing with the tailings*” [24610]? Does this proposal comply with applicable laws and regulations?
- What is the effectiveness of the proposed plan for managing potentially acid-generating rock at the mine site?

Slurry Pipelines

- What are the potential contamination risks associated with the slurry pipelines, including spills, leaks, and impacts of weather events at wash crossings?

Tailings Storage Facility

- What is the effectiveness of the proposed “*encapsulation*” plan for potentially acid-generating rock at the tailings storage facility?
- Will infiltration at the tailings storage facility contaminate groundwater?

Mine Reclamation

- Is full reclamation of the subsidence zone feasible?

5.3.2.2 AIR QUALITY

- What air emissions are associated with the proposed project?
- What impact would the project have on regional air quality standards? What impacts would the project have to visibility in the Superstition Wilderness Class I airshed?
- Would particulate matter increase over background levels?
- What are the impacts of fugitive dust from the proposed project?
- What impact would air quality have to various resources, including public and employee health, viewsheds, plants and animals, recreation, and property values?

5.3.2.3 BIOLOGICAL RESOURCES

- What are the direct, indirect, and cumulative impacts to biological resources, including impacts to biological resources at Oak Flat, Devil’s Canyon, Queen Creek, Mineral Creek, and the tailings storage facility location?
- What are the impacts to ESA-listed threatened and endangered species?
- How would the proposed project impact migratory birds under the MBTA?
- What are the impacts to native biological resources?
- What are the impacts to native biotic communities? Will the mine exacerbate existing urban pollution impacts in the biotic communities?
- One commenter states, “*In preparing the biological assessments and evaluations required by NEPA, the TNF should insure that the EIS contains historical data from multiple sources, including Tribal traditional ecological knowledge*” [24280].

5.3.2.4 CLIMATE CHANGE

- How will drought impact water supply, including the CAP and Colorado River water supplies?

5.3.2.5 CULTURAL RESOURCES

- What cultural resources would be impacted by the proposed project?
- How will tribal values associated with cultural resources be considered and assessed?
- To what extent would the proposed project “adversely impact the religious and cultural integrity of the Oak Flat as both a holy and religious place and as a place of continued cultural traditional, archeological and historic importance to certain ITAA Member Tribes” [24280].
- How will the proposed project’s impacts to other resources affect cultural resources?
 - “The destruction of Oak Flat’s water supply, its plants and animals, ancient oak trees, medicinal plants, air quality and capability for quiet enjoyment (among other things), coupled with the eventual destruction and collapse of the surface of each at the heart of Oak Flat, would destroy spiritual and physical access to this special place forever. The 1.5 billion tons of tailings dumped by the mine on approximately 4,400 acres of Tonto National Forest Service land would also destroy or damage springs and other important sites that have been identified by Tribal experts. Finally, the mine project will also damage or destroy countless archeological sites (many unidentified) at Oak Flat and throughout the region” [24280].

5.3.2.6 GEOLOGY

- What are the seismicity and geologic hazards for all mine facilities, including pipelines and MARRCO corridor and East Plant Site infrastructure?
- Will a subsidence zone worst-case scenario be evaluated in the EIS?

5.3.2.7 LIGHT AND NOISE POLLUTION

- What are the impacts to “surrounding communities and ecosystems” [24280] from the mine’s light and noise pollution?
- How will ambient noise levels be measured? Current noise “contributions from Resolution Copper’s pre-mining activities” should not be included in ambient noise level measurements [24280].

5.3.2.8 PUBLIC HEALTH AND SAFETY

- What are the potential contamination risks associated with the West Plant Site and loadout facility?

5.3.2.9 VISUAL RESOURCES

- What are the visual impacts associated with the project?

5.3.2.10 WATER RESOURCES

- What are the threats to water quality?
- What are the direct, indirect, and cumulative effects on Oak Flat, the surrounding region, and Arizona’s water resources?
- What are the effects on other water users, including “Indian Tribes, municipalities and farms, as well as entities like Central Arizona Groundwater Replenishment District (CAGRD)” [24280]?
- How would the proposed action impact “current and future available water supplies” [24280]?

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- How would the proposed action impact CAP water resources?
 - What CAP water, in liquid form, would be available for the project under different shortage scenarios? What is the timing and likelihood of different shortage scenarios?
 - What are the project's surface water impacts to springs in Devil's Canyon, Queen Creek, and Mineral Creek?
 - To what extent would the proposed project *"deplete water supplies and harm or destroy the streams, springs, seeps and other water features that are needed to preserve Oak Flat and support its animals and plants"* [24280]?
 - How would mine dewatering at the East Plant Site impact the Queen Creek drainage and groundwater well levels in Queen Valley?
 - What is the potential for contamination impacts to the Queen Creek drainage?
 - What are the acid mine drainage water quality concerns associated with the mine site (subsidence zone) and the tailings storage facility?
 - Will acid mine drainage impact surface or groundwater quality?
 - What are the acid mine drainage contamination risks associated with unlined tailings site, *"cessation or failure of pumping facilities,"* or *"moderate to catastrophic failure of the dams or diversions structures at the TSF"* [24280]?
 - What are the acid mine drainage impacts associated with the formation of pit lakes? *"The TNF should require an independent hydrologic assessments regarding the formation of pit lakes over time within the subsidence crater(s)"* [24280].

5.3.2.11 NEPA PROCESS

Public Involvement

- One commenter states, *"Until the GPO is more complete, the TNF should hold off on public scoping since the scoping conducting using an incomplete GPO violates the disclosure and transparency requirements of NEPA"* [24280].

General Plan of Operations Content and Data Gaps

- The GPO *"neglects and ignores cultural resources not defined as historic properties"* [24610].
- Require the GPO to *"provide recognition, consideration, and plans for avoiding and reducing significant impacts to the many important cultural resources documented and either listed on or provisionally determined to be eligible for listing on the National Register of Historic Places in 2015 and early 2016"* [24610].
- The GPO neglects *"the Archaeological Resources Protection Act, American Indian Religious Freedom Act, the E.O. 13007 on Sacred Sites Protection, etc."* [24610].
- The GPO does not identify mitigation measures that the mine would use for cultural resources. The commenter requests that the GPO be revised *"to provide recognition, consideration, and plans for avoiding and reducing significant impacts to the many important cultural resources documented and either listed on or provisionally determined to be eligible for listing on the National Register of Historic Places in 2015 and early 2016"* [24610].
- Correct the GPO to reflect the role of the Arizona State Historic Preservation Officer in the management of cultural resources.
- The GPO does not address the role of Tribal Historic Preservation Officers.

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- The GPO “*incorrectly and without legal or factual basis, asserts*” [24610] that a Memorandum of Agreement, signed by all consulting parties, “*will stipulate all conditions of cultural resources treatment, including the incorporation of the Historic Properties Treatment Plan and the appropriate final curation of all cultural resources-related reports, data, and materials*” [24610]. As the commenter states, “*Neither PRCM nor the U.S Forest Service have the authority to dictate that all parties sign any such agreement. In fact, this is unlikely and this statement is misleading and disrespectful as well as incorrect and apparently duplicitous. The statement also perpetuates the unfounded and totally inappropriate implication that only historic properties will be addressed in treatment planning and other methods for effects and impacts reductions. All cultural resources, not simply historic properties, require consideration and inclusion in treatment plans. Again, the Draft EIS and revised [GPO] must correct this and other egregious, disrespectful, unprofessional, and harmful errors*” [24610].
 - Will the GPO be revised to reflect currently available information on cultural resources in the project area, including the resources documented and assessed in the “Ethnographic and Ethnohistoric Study of the Superior Area, Arizona”?
 - Will avoidance and minimization measures for adverse effects to cultural resources be included in a revised GPO?
 - What is the accuracy and reliability of the subsidence zone predictions contained in the GPO? What is the degree of uncertainty in the GPO predictions?
 - The GPO presents two numbers for the life of the mine: 40 years and 45 years. What is the anticipated life of the mine?
 - What is the total water demand over the life of the mine? What are the water supplies for the anticipated water demand?
 - Does the GPO contain estimates for potable water demands?
 - How do water reuse measures, including use of reclaimed water, factor into water supply estimates?
 - How will discrepancies in water demand and identified water supply be addressed in the GPO?
 - As the review of CAP Non-Indian Agriculture water allocations has not been completed, it is premature to include this as a water supply source in the GPO.
 - What is the location of the long-term storage credits (LTSCs)? What is the location of the CAP recovery well field in relation to the LTSCs and groundwater savings/recharge facilities? What is the “*extent of the spatial and hydrologic disconnect between where water is recharged (that is, where the LTCs are located) and where it is recovered*” [24280]? How does this disconnect impact the “*CAP recovery well field and its cone(s) of depression on the groundwater supplies of the area and nearby wells*”?
 - What is the purpose of the Queen Valley pumping station?
 - What are the long-term water needs of the mine post-closure? Specifically, what are the long-term water needs associated with the East Plant Site and the tailings storage facility.
 - “*TNF should not proceed forward to conduct its “single” EIS on the mine and exchange under NEPA and Section 3003 until the GPO is clarified and the water issues have been disclosed, and independently modeled and studied – perhaps by the U.S. geological Survey or another unbiased qualified agency or organization*” [24280].
 - “*The GPO has very little to say about artificial lighting, including nighttime lighting*” [24280].

Cumulative Impacts

- One commenter states, “*The Federal Government must assure that the range of likely and reasonable foreseeable [Proposed Resolution Copper Mine] effects and impacts to cultural resources and resource values be identified, considered, and addressed*” [24610].
- Would impacts to cultural resources from the proposed action be an irreversible and irretrievable commitment of resources?
- How will “*legacy facilities*” and “*facilities currently under development*” at the West Plant Site and East Plant Site be factored into the EIS impact analysis [24280]?

Connected Action

- Previous tribal objections to the tailings storage facility Baseline EA and Finding of No Significant Impact should be included as part of the project record.

Tribal Consultation

- The TNF should consult with ITAA member tribes during the Section 106 process. Consultation should include “*appropriate consultation with Tribal elders, medicine men, storytellers, singers, dancers, artists, food gatherers, and other holders of traditional knowledge*” [24280].

Other Laws and Regulations

- One commenter states, “*The TNF must undertake a fair and comprehensive ‘hard look’ at all of the direct, indirect and cumulative impacts stemming from the land exchange and the mine project under NEPA, the NHPA, ESA, Clean water Act (CWA), Clean Air Act (CAA) and other applicable laws*” [24280].
- What are the direct, indirect, and cumulative “*effects of lifting the 760 acre Oak Flat withdrawal (PLO 1229)*” [24280]?
- How will the Forest Service execute its requirements for cultural resource protection and tribal consultation under the following laws:
 - NHPA;
 - NEPA;
 - AIRFA;
 - Archaeological Resources Protection Act;
 - NAGPRA;
 - EO 12898, “Federal Actions to Address Environmental Justice in Minority and Low-Income Populations;”
 - EO 13007, “Indian Sacred Sites;” and
 - EO 13175, “Consultation and Coordination with Indian Tribal Governments”?
- One commenter states, “*The TNF should consider the United Nations Declaration on the Rights of Indigenous Peoples (Declaration) as part of the NEPA process*” [24280].

Alternatives

- One commenter states, “*The Federal Government must assure that the full range of treatment options and alternatives is considered to avoid and reduce harm to cultural resources*” [24610].
- What alternatives will be considered for Oak Flat that would meet the requirements of EO 13007, “Indian Sacred Sites,” specifically including the requirements to “*(1) accommodate access to and*

ceremonial use of Indian sacred sites by Indian religious practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites” [24610].

- What are alternative water supply sources for the project? What impacts are associated with alternative water sources?
- What are alternative mine designs that would “*limit the water needs and impacts of the project*” [24280]? Alternative suggestions include alternatives to block cave mining, slurry pipeline system, dry stacked tailings, strategic groundwater recharge, and water conservation measures.
- What are the alternatives to “*avoid, minimize, or mitigate (if possible) for the treat of contamination that this project presents*” [24280]?
- What are alternatives to light and noise pollution?
- What are the “*alternatives to save populations of all affected species*” [24280]?
- What alternatives will be considered to avoid or minimize impacts to biotic communities?

Mitigation

- What are the avoidance and minimization measures for adverse effects on cultural resources?
- Allow for professional peer review of mitigation plans.
- Allow for Native American communities’ review of mitigation plans.
- Apply mitigation standards across all land ownership jurisdictions.
- Mitigate for impacts to all NRHP-eligible sites.
- Monitor sites “*for human remains and previously-unidentified buried features during post-mitigation construction activities*” [26240].
- Tailor impact avoidance and mitigation to the “*values associated with cultural resources and to the concerns of individual tribes, tribal representatives, and others who value cultural resources threatened*” [24610] by the proposed project.
- Identify the feasibility of and methods for monitoring for cultural resources within the subsidence zone.
- Identify funds for a new Apache cultural center.
- Use a new Apache cultural center to house cultural resources found at the proposed mine site.
- Identify funds to document San Carlos Apache history.
- Identify funds or a program to document San Carlos Apache traditional arts and crafts.
- Identify funds or a program to preserve songs and language.
- Identify funds for publishing a San Carlos Apache clanship book.
- Allow the San Carlos Apache to determine mitigation measures for impacts to their cultural resources.
- Allow continued access to Oak Flat for tribal members to gather acorns and medicine plants.
- Improve access to sites for this purpose.
- Establish new sites, including newly planted acorn trees on the San Carlos Apache Reservation.
- Establish a Native American Affairs department within Resolution Copper to address cultural resource concerns.

-
- What monitoring and mitigations measures will be implemented to ensure compliance with the CWA and Safe Drinking Water Act?
 - What mitigation, monitoring, and remedial actions will be in place to protect against contamination at the tailings storage facility, including protections from acid mine drainage and groundwater contamination?
 - Will a tailings storage facility liner or cap be required prevent infiltration and protect groundwater quality?
 - How will groundwater levels be monitored?
 - What mitigations will be in place to “*protect workers and the town of Superior from noise*” [24280]?
 - How can light and noise pollution impacts be mitigated?
 - What mitigation measures will be implemented to minimize impacts to biological resources, including biotic communities?

APPENDICES



APPENDIX A

Stakeholder Analysis Summary

**Resolution Copper Project and Land Exchange EIS
Stakeholder Analysis Summary**

March 17, 2016

Prepared by: Jill Grams and Dr. Martha Rozelle

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- B. Observations and Recommendation Based on Stakeholder Assessment

Overview

Between January 27 and March 17, 2016, Dr. Martha Rozelle of The Rozelle Group and Jill Grams of SWCA Environmental Consultants (SWCA) conducted interviews with persons or groups with potential interest in the Resolution Copper and Land Exchange Project Environmental Impact Statement (EIS). The purpose of the interviews was to gather input and assess the level of concern and interest to aid in development of the Public Involvement Plan for the EIS.

Twenty-two interviews or brief conversations were conducted with 28 stakeholders representing a range of interests and or groups (see interview list on final page). Attempts were made with other organizations, but were unsuccessful due to scheduling conflicts. The interviews were designed to last about 1 hour and generally followed the attached interview guide (Appendix A). Nine of the interviews were conducted in person, and 13 were conducted by telephone.

This report summarizes the key themes and comments expressed during the interviews. Comments are not attributed to any one person interviewed. The summary is intended to be a compilation of comments received during the interview time. Appendix B of this report includes a memorandum prepared by Dr. Rozelle that outlines her overall observations and recommendations regarding the public involvement program for the EIS process.

Stakeholder History, Involvement, and Familiarity with the Project

Nearly all of stakeholders interviewed indicated that they were familiar with the proposed project and believe that the people in their groups and organizations are generally familiar with the project. Some stakeholders interviewed initially confused the proposed Resolution Copper project with other mining proposals in the region.

Stakeholders reported a variety of ways in which they have been involved and learned about the project, including the following:

- Eight of the stakeholders interviewed reported involvement with the Community Working Group (CWG) that was set up by Resolution Copper to provide a forum for community engagement and education about the proposed project. Many of these stakeholders have been members of the CWG for several years and are very knowledgeable about the proposed project. The CWG includes several organizations that represent a variety of interests in the proposed project. Some stakeholders reported that Resolution Copper has been very transparent and has provided a vast amount of information about the project in response to questions from the CWG. Other stakeholders report that the CWG is primarily a venue for Resolution Copper to “sell” its project to the community and that they do not trust that the information provided by the company has been always accurate. The CWG has hosted multiple National Environmental Policy Act (NEPA) training sessions for members to become educated about the NEPA process and learn about how they can be involved.
- Some of the stakeholders interviewed reported involvement with the Recreation Users Group (a subcommittee of the CWG) that was set up by Resolution Copper to put together a coordinated plan to address impacted recreation resources in the mining area and planning for recreation projects around the Superior area. These stakeholders are working together, in cooperation with Resolution Copper, to come up with solutions to recreation issues. They plan to present these proposals to the Tonto National Forest for discussion. Some of these groups are not

necessarily in support of the mine, but they are willing to work with the company to come up with solutions.

- Some interviewed stakeholders represent the statewide and local businesses community and have an interest in the area's economic health. They see the mine as being important to the region's economy and job situation. They want to mine to occur, but with adequate regulations to protect the area's natural environment, which is also important to the area's economy.
- Stakeholders representing the mining industry have a thorough knowledge of the proposed project and have been involved since the land exchange legislation proposals. They have lobbied in support of the Resolution Copper project for many years.
- Some stakeholders interviewed represent specific user groups whose interests could be directly affected by the proposed project. These groups are generally opposed to the proposed project and have a history of involvement that has been ongoing for several years, starting with the land exchange legislation proposals in 2004.
- Other stakeholders representing user groups have a history of involvement that includes working directly with Resolution Copper to collaborate on recreation user agreements and do not express direct opposition to the project.
- Stakeholders representing local and national environmental organizations that are opposed to the proposed project have been involved for several years, starting with the land exchange legislation proposals in 2004. They are knowledgeable about the proposed project and the NEPA process. Some within these organizations are primarily opposed to the block cave mining technique, as proposed, and may be less opposed to alternative techniques.
- Some stakeholders interviewed are involved directly with Resolution Copper through development of recreation access partnerships, project funding, providing scientific support and land management activities on exchange lands, and providing mining operation support services.

Public Outreach Recommendations

Many of the people interviewed provided recommendations about the best ways to get information about the proposed project and NEPA process out to members of the public. A summary of the recommendations is provided below:

- Many organizations interviewed stated that they have a variety of ways (e.g., websites, email, social media) to communicate with their members and will keep them informed with information that is provided by the U.S. Forest Service (Forest Service). They recognize that the Forest Service will need help getting information out to the public, and they are willing to help however they can. This will work best if the Forest Service provides them with a lot of information.
- Place advertisements in local newspapers (*Silver Belt* and *Copper Country*) and regional and statewide newspapers. This is the best way to reach people in local areas. A lot of older people in Superior do not use computers and rely on the newspaper. Print advertisements in newspapers are good.
- Winter visitors may not use the Internet. They need to be contacted in different ways.

- Send direct mailings to Queen Valley residents (Resolution Copper should have mailing list). Direct mailings are a very effective way to reach people. Many people around here do not read the newspaper, so that is how we typically inform people in this area.
- Conduct meetings when winter visitors are present. Seventy percent of Queen Valley residents leave around the beginning of April and return in the winter.
- Use Resolution Copper outreach resources. They have a useful Facebook and Twitter presence. They also have produced many mailings and should have a thorough mailing list of interested parties.
- Post flyers posted at key locations (Superior, Queen Valley [fire station, store, golf course, sanitary district, RV Park], Globe).
- Advertise in the Queen Valley newsletter, which is published from November through April.
- Advertise on the Superior Chamber of Commerce website. Keep the local chambers involved; they will get information out to people.
- Advertise on social media (e.g., Facebook, Twitter). “Push ads” on social media are effective.
- Communicate via email.
- Inform and involve local, county (Pinal County), and state governments. They, in turn, will help inform their constituents. Inform the federal delegation, the governor’s office, and all media lists.
- Set up information booths at local festivals (Apache Leap Festival in Superior, Mining Rock Festival in Miami).
- Word of mouth is effective in small towns.
- If you want to get broad participation and turnout, you need to provide fairly long lead times for publicity and give the public enough time to respond by providing a longer comment period—at least 90 days, but maybe up to 120 days.
- The Tonto National Forest paper of record is the *Arizona Capital Times*. This is not available in print version, and the digital version is expensive. This is a paper that the general public does not read and should be changed.
- The Forest Service should put up all documents related to this project on a website available to the public for download. This was very helpful in Rosemont EIS process. If all documentation is put on the Internet, it will go a long way toward keeping an open process for the public.
- Provide an update meeting at least 2 times per year throughout the project.

Scoping Meeting Recommendations

During the interviews, stakeholders provided recommendations about how to conduct the scoping meetings. A summary of the recommendations is provided below:

Trust

- There is a mistrust of Resolution Copper, the federal government, and the Forest Service in this area. The scoping meetings should be facilitated by an independent third-party facilitator.

People will be more likely to attend the meetings and say what they think. There has to be a good moderator at the meeting who can help manage the meeting process.

- Some distrust of the Forest Service was expressed. This included descriptions of attending meetings with the Forest Service where Forest Service employees stated opposition to the project. Scott Woods, who is now retired, expressed opposition at meetings, and someone in a Forest Service uniform spoke out against the project at a public meeting at the high school. There is distrust of the Forest Service in this area that goes back decades. The ranching communities have had a lot of distrust of the Forest Service. This is getting better with advisory committees, etc. They are starting to work together.
- Rio Tinto has been helping run most of the Tonto open house meetings for this project. They are heavily involved and answer all of the public's questions. This is poor practice, and they should not be at the meetings. There needs to be some in depth understanding and expertise among Forest Service and SWCA personnel in attendance of the meetings to answer questions so you do not have to rely on Rio Tinto. The recent Forest Service Queen Valley meeting could have been better executed. There was not adequate Forest Service staff in attendance to answer questions.
- The Forest Service meetings, so far, have been good. The Forest Service shows transparency and is listening to our concerns.
- The current public knowledge has been fueled by rumors and misinformation.
- The Forest Service did a good job at its scoping meeting for the forest land planning project. The breakout sessions were good because it allowed people a chance to have their voice heard and provide solutions, with this information recorded by officials during the sessions.

Design / Process

- Provide a presentation to help people understand the proposal and the NEPA process.
- Provide a forum for questions and answers. Many people have grown accustomed to Resolution Copper taking questions at their meetings and will expect this format.
- Provide a mix of written and public speaking options for submitting comments.
- Holding a public hearing is very important part of the whole process, and it is recommended.
- Provide opportunity for oral comments, especially with tribal interest, as tribal members may be more comfortable expressing themselves orally. There was a problem at the Northern Arizona Proposed Mineral Withdrawal EIS scoping meeting: Havasupai Tribal members who attended were unhappy that BLM would not take any oral comments. They held a ceremony in the middle of the meeting.
- Use a court reporter to record unlimited time for verbal scoping comments.
- Provide an open house format as some people do not want to speak in front of a group. Include open house stations that show the social, biological, hydrological, geological, and NEPA information.
- Open houses are not that helpful. People in Queen Valley do not like open houses with information stations. They would rather be given a presentation and have a question and answer session. Recognize that this is a retirement community, and people need to be able to sit

down. They cannot stand for long periods of time and move throughout a room to get their information and questions answered.

- It was suggested to expand the time span of the meetings by holding the open house earlier in the day for a few hours and then follow up with the presentation in the early evening hours.
- Many people that are interested in the cultural issues do not know anything about the mining technique and other parts of the Mine Plan of Operations (MPO); provide adequate information for a complete understanding.
- Information should be available on a website for people to review at their leisure. There is a tremendous amount of information that needs to be made available to the public.
- Provide adequate information about the exchange lands.
- People need to know that the scoping process is their opportunity to talk about and recommend what additional lands are offered for project mitigation. It is really important to give the public this knowledge and opportunity.
- Try to get encourage people to get up and speak. We have not been able to show our support effectively. Some local businesses are suppliers to the casino and feel they have to walk a fine line in expressing their support.
- The Rosemont scoping meetings were a serious mess; do not let that happen again. The Rosemont EIS has been a complete mess, and people will think that this is another Rosemont. It was classic EIS with perfunctory Public Involvement that was not adequate. The EIS document was written in a way to make sure to dismiss concerns, and the Public Involvement was ignored. You have to make this process better.
- We just developed a scale model of the project in cooperation with Maricopa Audubon. We are going to provide a presentation of this to the Forest Service. It presents what is in the MPO in detail. The Forest Service should use it at the scoping meetings.

Timing / Attendance / Locations

- Queen Valley residents are concerned and will come to the meetings. Expect 50 to 100 people to attend in Queen Valley. The Queen Valley meeting will be more challenging than the Superior meeting.
- It is important to get something going before the end of March in Queen Valley, as most residents leave by April 1. Most of the meetings held here by Resolution Copper have been during times when winter residents are absent. Later in the year could be good alternative times for meetings. People start coming back in the middle of November, usually leave for Christmas, and return in January. Around December 1 and January and February are good meeting times.
- We hope that the meetings will be held soon. The EIS needs to be completed as soon as possible. The MPO was submitted in 2013.
- The need for early meetings in Queen Valley should not be an excuse to start scoping before you are ready.
- Expect the mining opposition to attend all meetings in large numbers.
- Meeting attendance numbers could be low because community members have attended multiple meetings hosted by Resolution Copper and feel they already know enough about

the proposed project. Generally, people in support of the project see no reason to come to the meetings.

- The proposed scoping meeting locations appear adequate.
- The Tonto National Forest should consider having a meeting in Tucson (maybe Catalina) because the two major exchange parcels are closer to this area. Do not overlook the land exchange portion of this project; it could get overshadowed by the mining component.

Future Stakeholder Involvement

All stakeholders interviewed expressed interest in future involvement in the EIS process. A summary of their general answers to this question included the following:

- Most stakeholders interviewed offered to promote involvement of their particular group in the process by forwarding emails and information to their membership lists. They offered assistance in helping disseminate information about the project to their members, neighbors, and communities.
- Most stakeholders want to be consulted and involved in every aspect of the EIS process. They expressed interest in being at the table with the government during proposal development to discuss the biological and ecological impacts from proposals. They expressed interest in working on development of proposals that protected the environment. Some stakeholders expressed a desire to be involved in the alternatives development process.
- Some stakeholders are unsure about the opportunities for involvement in the NEPA process.
- Several stakeholders expressed interest and willingness, as experts in several resource issues, to provide information and data to the team in the EIS process. They also stated they have the ability to connect the Forest Service with local subject matter experts. In particular, some stakeholders have a wealth of information regarding the exchange lands that they will offer to the EIS team.
- One stakeholder offered use of their organization's citizen scientist program, which could be available to help gather data for the project.
- Some stakeholders stated that they are the experts on recreation resources in the area and that they are willing to help provide as much information as possible.
- Some stakeholders offered to take interested persons out to see the project area to better understand what is happening with regard to the mining proposal. Others offered to host information forums and provide updates to the business community.
- Some stakeholders have been very cautious about getting involved because of all of the political sensitivities, but they fully support the Forest Service having a thorough process.
- Some stakeholders expressed interest in providing expertise to enhance the goals associated with creating quality wildlife habitat, engaging community members, and providing K-12 education guidance. They would like to assist in finding solutions to concerns by finding space in the "above and beyond regulatory framework," which could provide a different outcome for stakeholders who have concerns.

Interests, Concerns, and Questions about the Project

During the interviews, stakeholders expressed interests, concerns, and questions about the project. This information will be used to inform the development of information presented in scoping materials, the project website, frequently asked questions, and talking points. A summary list of issues and concerns includes:

Recreation

- Impacts to recreation areas and climbing areas.
- Impact to the Arizona National Scenic Trail and trail gateway communities.
- Impacts to off-highway vehicle (OHV) available miles and opportunities.
- Retention of public access opportunities around the mine site is important. The proposal needs to include an equitable replacement of recreation opportunities to make up for the loss of Oak Flat Campground. There is a place for this in the vicinity, and it needs to be done. There is a potential site near Globe. Resolution Copper has private land that could also work for a new campground, but there could be a listed cactus there. There is a potential area between Superior and Top of the World that has a workable road and is close to hiking and camping that could be a bigger and nicer area. It also provides access to other OHV motorized areas, hiking, mountain biking, and climbing opportunities.
- Concern about loss of recreation in the tailings location. In February 2016, more than 70 forest users were witnessed on the trails in this area during a 3-hour period. This tailings pile will cover up 28 miles of those trails. This is the most heavily used area east of Phoenix on the Tonto National Forest.
- Retention of trails for horseback riding and mitigation for trail miles lost through construction of replacement trails. Be careful how this is approached to not increase conflicts between horse and mountain bike trail users.

Water

- Water quality and quantity issues surrounding the mining operation are important, including water quantity and interruption of groundwater and water supplies into Devil's Canyon (important birding area).
- Water quality impacts to the area water sources.
- Groundwater pumping and understanding of the area hydrology is unknown. There is uncertainty about the fault line that separates the area aquifers. When Resolution Copper started dewatering to drill the shafts, a lot of the wells in the area and Queen Creek dried up.
- Groundwater pumping and the impact to the area's long-term water supply.
- Water supply was critical to the very beginnings of Queen Valley and remains so.
- Concern about the lack of understanding of what is underground in the mine site. This is illustrated by the problems with drilling the #10 shaft. Resolution Copper hit an underground river when drilling at 6,300 feet that produced 180 degree water at 500 gallons per minute. They had no idea what was going on underground.

- Concern about acid rock drainage from the tailings facility and that impact on water. When you add water and oxygen to sulfide, you get sulfuric acid.
- Impacts to water supplies from groundwater pumping; this will consume as much water as a population of 150,000 people on a daily basis. This water comes out of our aquifer; this is our drinking water supply.

Mining Operations and Technique

- Ground subsidence from block cave mining technique.
- Include alternative mining techniques that do not cause subsidence, such as cut and fill technique.
- Mine safety for workers.
- In a block cave mine, you cannot put a mine on “stand by” and start and stop like you can in a cut and fill operation. What happens when copper prices tumble? Do they walk away or operate at a loss?
- When the cut and fill mining techniques was used in Superior in the past on an ore body of 20 to 30 percent, tailings were put back underground. This new ore body is only 1 percent copper. People are worried that this technique could become common over all of Arizona. Resolution Copper is using the excuse that they cannot make enough money by using this less destructive method.

Cultural Resources

- Concern that Oak Flat is a sacred site to the San Carlos Apache Tribe and needs to be protected.
- Concern that Oak Flat is not a sacred place—only recently has it been used for ceremonies. There are tribal members who say it is not sacred.
- Concern that the tribal opposition is being funded by outside sources to say that Oak Flat is sacred.
- Concern that San Carlos Apache Tribal Council may not accurately represent the views of tribal members.

Tailings Facility

- The reason the Queen Valley community is here is the abundant supply of water. There are springs behind the dam; this water goes into the canals that move the water to our pond, which waters the golf course. This water is critical to our community. People have moved here for the golfing and the recreational opportunities. Our major concern is that where the tailings pile is proposed is 3.4 miles upstream of Queen Valley. It would cover 12 square miles of the watershed that feeds the water and springs of Queen Valley. It would contain 1.3 billion tons of tailings. The acid rock drainage that will occur will impact the springs that feed our canals. This will impact our irrigation water, groundwater, and drinking water.
- Tailings facility location and the potential to contaminate Queen Valley’s water supply.
- The tailings design does not include a liner, and this is a concern. Resolution Copper is saying it does not need a liner before the company knows whether that is true.

- Air quality impacts from the tailings dust.
- The tailings location is a concern, and the EIS needs look at alternative tailings locations.
- Tailings location: the proposed location is the “best of the worst” of the sites put forward for review of the CWG. Everyone agrees that the current proposed tailings location is the “best of the worst” locations that were presented as options. We started out with seven locations, and many were dropped for various reasons. The Pinto Mine site is the best location. So much energy has gone into this tailings site, for a site that will not work. This site is very unpopular.
- The State Trust land is a better location for tailings; you need to try to get this option back on the table.
- The Arizona State Trust land parcel is a better spot.
- Visual analysis of the proposed tailings area is needed.
- Loss of OHV use in the proposed tailings location.
- Resolution Copper came to Queen Valley and told everyone that the tailings pile comment period for the Environmental Assessment (EA) was only for looking at an alternative site and that they did not need to worry about it. Because of this, people did not comment.
- An original tailings plan was to dig a tunnel and put the tailings into Pinto Valley. BHP (who also owned Resolution Copper) owned this mine at the time. They sold the mine a year ago, thus removing it from an option for tailings. This project would not be nearly as bad if the tailings went to Pinto Valley because it is not sitting on anyone’s water supply. The current proposal has the tailings located on Forest Service lands to save Resolution Copper money.
- The tailings area is in the Audubon Superior Christmas bird count area. No particular bird species jump out, mostly upland birds and mostly degraded desert grassland type.
- The area proposed for tailings has huge unregulated recreational use, and it is not safe. The OHV use is very chaotic.

Air Quality

- The dust coming off the tailing pile and the impact on air quality is a problem. The prevalent wind is from the east, and the dust will be blown directly into Queen Valley and Gold Canyon. Down at the mine tailings at Green Valley, they have had a terrible problem with the dust coming off of the tailings pile. The Resolution Copper mine has a similar design, and we will have similar problems.

Mitigation

- You need to offer mitigation lands for the tailings impact that are not “like for like;” these mitigation lands need to have substantial resource value. Consider adding lands in the San Pedro.
- Design mitigation that is most effective, in large blocks of land, with biology and ecology as priorities.
- What is the plan for short- and long-term reclamation? Are there plans for creating wildlife habitat? What types of habitat will they create? What type and for what species?

- Resolution Copper can go above and beyond the compliance process to help with the expected environmental impacts.

NEPA Process

- Removing mining protections around Oak Flat sets a precedent of taking away protected lands that have been previously withdrawn from the mining law.
- Long-term monitoring of mining operation after permitting is complete. Who is responsible, and what will be required?
- Land exchange legislation vs. the NEPA process: how is this going to work?
- In the Rosemont EIS, the public came up with a huge list of issues that need to be addressed. The list was then made much smaller. There was a lot of lumping of issues instead of splitting. You should not take a huge array and spectrum of issues and boil them down to a small list; this gives the public involvement process and issues less credibility.
- The legislation states that there can only be one EIS with no time frame; this gives the Forest Service the opportunity to be very robust from the beginning.
- Misinformation and lack of accurate facts about the project are put forth by the opposition.
- The Forest Service has the incorrect bias that they cannot use a truly viable no action alternative. The Forest Service should develop a thorough no action alternative. This is necessary for a good baseline measure.
- There is a lot of misinformation out there; the Forest Service needs to provide facts to the public.
- People are concerned that this process be done fairly. There is a group camping on Oak Flat for a year, and this is not fair. I would not be able to do that. People think that the Forest Service might not be acting fairly.

Health and Safety

- Health impacts to the local communities.
- Concern about the plan for the rainwater that falls on the tailings to be caught in diversion dams and pumped back the mining operation. One inch of water falling on this 12 square miles equals 200 million gallons of water. That is a lot of toxic water sitting behind a diversion dam upstream of our community. Rio Tinto has a poor environmental record, and they have been fined at other mines. In 2015, the Sanmarco Mine in Brazil had a tailings pile collapse that resulted in 8 dead and 20 missing; that was a smaller tailings area than what they are planning to put above Queen Valley.

Socioeconomics

- The economic importance of this project is statewide, but it is also very important to the copper triangle and smaller towns and Pinal County. We want to make sure that the EIS includes an analysis of the economic benefits of the project to Pinal County and local communities.
- The proposal is important to the statewide and national mining industry and development technology opportunities.

- The highly technical jobs will not be available to the local workforce. The increase in technology reduces the mining workforce.
- The EIS needs to include a complete socioeconomic analysis of the proposal. It is doubtful that this mine will generate 61 billion in profits.
- Concern about local property values; Queen Valley has homes that are valued from \$500,000 to \$70,000. People are concerned about property values going down. Queen Valley will become like Hayden, Winkelman, and Kearney.
- This is a mining town, and we understand that projects come and go. We know that it is not guaranteed. We view it as something that can keep our kids staying here with high-quality technical jobs. The jobs and the economic pieces are very important to people in this region.
- Concern that the Town of Superior Mayor and City Council may not accurately represent the views of the town citizens.
- Property taxes to Pinal County from the mining operations (and the entire system that would exist as a result of the mine) would lead to substantially increased revenue. This helps us meet the need to make sure our education system is properly resourced. Schools are struggling in smaller towns without a substantial tax base. You get property tax benefits from the business, and the employees are also paying these taxes.
- Rio Tinto has operated here and completed restoration of the old Magma Mine and has shown that it can operate responsibly. We understand that tourism is also important to our economy and want to make sure that this project is done in an environmentally responsible way that does not damage other factors.
- NEPA is the gold standard; we expect that the economic needs will be balanced with the environmental needs of the project. This needs to be studied and reported accurately.
- This project has over 6 billion in private investment. The EIS needs to be done quickly so that the investment in Resolution Copper does not dry up.

General Analysis

- Include analysis of all pieces of the proposed mine and a thorough cumulative analysis.
- Make sure there is adequate fieldwork done to be able to conduct a deeper level of evaluation; more than is required by NEPA. People scream for NEPA; then, the NEPA completed is so poorly that they complain about NEPA. You need to get it right.
- The U.S. Environmental Protection Agency said Rosemont was the worst EIS it had ever read. We hope the work will be on a different level than was done on Rosemont.
- The Forest Service should ask the U.S. Geological Survey to be a cooperating agency. It has the geology and geography expertise. It could also help in the tribal consultation process by helping the tribes.
- It is very important that this process bring in independent analysis and research, rather than relying on the work that Rio Tinto has done. Otherwise, it is not reliable.
- The hydrology is very complicated. We want you to bring in an independent hydrologist to analyze all hydrology work. Rio Tinto hydrologists cannot be trusted.

- Hydrology and cultural issues need very robust analyses.
- Issues include transportation, recreation, cultural resources, mineral processing, water, and others.

Questions about the Project

NEPA Process

- What is the NEPA process?
- What is the EIS time frame? How long is it going to take?
- How will this EIS affect mining activity? How do NEPA and the Record of Decision (ROD) bind Resolution Copper to future obligations? Resolution Copper states that it will abide by all rules and regulations—NEPA, etc. It appears that after the land is turned over, Resolution Copper does not have to do anything covered in the NEPA document. Is this true? How will they be bound by decisions made in the EIS? How will the Forest Service implement the ROD?
- The National Defense Reauthorization Act (NDAA) is written so that no matter what happens with the NEPA document, Resolution Copper gets the land. Is this true?
- This is a unique legislated NEPA situation. How does the legislation in Defense Reauthorization Act work in conjunction with NEPA and the Forest Service objection process? The legislation currently conflicts with itself. NEPA and the 60-day requirement included in the NDAA are in conflict. The NDAA says “60 days after Final EIS;” what does Final EIS mean? The legislation does not include a ROD or the objection process. Does this take all discretion away from the Forest Service? How will this be addressed?
- You should know that some people in the opposition have questions about the validity of the NEPA process and are asking, “If we take part in this process, does this mean that we are supporting the process and project?”
- You need to explain the history, the legislative action, and how this impacts the implementation of the NEPA process. Does the legislation make everything meaningless? If not, what can be affected?
- Are there similar projects that could be presented, and how they were implemented? This would be helpful.
- Can this project be stopped? You need to tell people that this is an opportunity to change “how” the project is implemented, not “whether” it is going to be implemented. The Forest Service has to help the public understand this and how their input will be used.
- How will copper prices impact this project? The Forest Service needs to be able to answer how commodity prices will influence the proposal; you need to make sure that mitigation implementation is not tied to the copper commodity prices.
- Is the Forest Service going to do a real cumulative impacts analysis? It would be helpful in scoping meetings for them to talk about all the moving parts and how they fit together.
- How does the management plan for Apache Leap fit into the EIS process?
- How does the tribal consultation process fit in to the EIS process?

- How does the land appraisal process fit in to the EIS process?
- People need to understand impacts so they can comment appropriately, and they need to talk about it in scoping period. Will you talk about potential impacts during the scoping period?
- Will a no action alternative be evaluated?
- How does the Forest Service plan to address the question as to whether Oak Flat is considered sacred?
- Will the Forest Service consider the proposal the Recreation Users are developing?
- Will the EIS include plans for mitigating loss of recreation trails by including new trail construction in the proposal?

Tailings Facility / Baseline Environmental Assessment

- What are the physical laws that permit and regulate tailings disposal on public lands?
- We are concerned about the Forest Service saying that the tailings pile is not a connected action. It should be included in the total scoping of this project. Can you answer how it cannot be a connected action?
- There was a lot of confusion surrounding tailings pile baseline EA comment period. Some people did not comment at the correct time because Resolution Copper told people in Queen Valley it was not important. Because of this, they were unable to comment at the end of the process. Can you make this more clear to people?
- We think that the EA/Finding of No Significant Impact (FONSI) for the tailings location was a mistake. We asked that the hydrology study be included in the EIS, and the Forest Service decided not to do that. This creates a problem in terms of where the tailings site is located. Will there be other EAs for tailings geology/water studies? These are connected actions and should be under one EIS.
- In our reading of the legislation, before the scoping process begins, the baseline characterization of the tailings needs to be approved and results complete in order to illustrate that it is a viable tailings location. The objection period for the characterization has just ended. You should not do scoping before this is decided. How can we meaningfully respond and determine the issues that should be covered if we do not know what the pieces of the puzzle look like?
- Will viable alternatives to the proposed tailings location be evaluated in the EIS? Will the Pinto Valley site be evaluated?
- Will the tailings area be constructed with a liner?

Mine Plan of Operations / Permits

- Publishing the Notice of Intent (NOI) this soon is a mistake because the MPO as available to the public is not the current version of the MPO. This version was published in 2014; the Tonto National Forest has since asked Resolution Copper to make changes to this version. We do not know what Resolution Copper changed and need to know what is in the most current version of the MPO. Where is the current version of the MPO?

- There has been discussion at Rio Tinto that they are going to smelt overseas. Now they are talking about smelting in Salt Lake City. What is the plan for smelting? In scoping, you must present the whole project.
- All of the project components must be analyzed in the EIS; this includes the total impacts of transportation. If you do not know where you are transporting for smelting, how can you determine those impacts?
- Rio Tinto, under its Cattle Company organization, just rezoned an area as a loading facility/drying facility; is this part of the current MPO?
- According to the Rio Tinto subsidence plan, a portion of the subsidence zone is on State Trust land. No one has talked about how that fits into this plan. How does this fit into the MPO?
- How are other agencies involved, and what other permits are involved? Where is Resolution Copper with various permits? What permits do they have now, and what do they have yet to get?
- Will alternatives to the proposed mining technique be fully developed and studied?

Miscellaneous

- Would the Forest Service like to set up a meeting to see our scale model?
- How was SWCA chosen as the contractor?

Stakeholders Interviewed

All stakeholders interviewed are listed in the table below.

Organization	Representative	Type of Interview
Access Fund	Brady Robinson, Executive Director	Telephone
	Curt Shannon, Policy Analyst	In person
Arizona Mining Association	Kelly Norton, President	Telephone
Arizona Trail Association	Matt Nelson, Executive Director	In person
Concerned Citizens and Retired Miners Coalition	Roy Chavez	In person
Martin Ranches	George Martin Lynn Martin	In person
Queen Creek Coalition	Paul Diefenderfer Erik Filsinger	In person
Queen Valley Domestic Fire District Queen Valley Water Board Queen Valley Homeowners Association	Cecil Fendley Bruce Wittig Pamela Bennett, President	In person
Sierra Club, Grand Canyon Chapter	Sandy Bahr, Chapter Director	Telephone
Superior Chamber of Commerce	Pamela Rabago	In person
Superior Copper Alliance and Legends of Superior Trail (LOST)	Bill Vogler	In person
Superstition Area Land Trust	Charles Ault, President Davis Ochs, Treasurer	In person
Audubon Arizona	Vashti “Tice” Supplee, Executive Director	Telephone
Arizona Mining Reform Coalition	Roger Featherstone, Director	Telephone
Globe/Miami Chamber of Commerce	Ellen Kretsch, Director	Telephone
International Mountain Biking Association	Patrick Kell, Regional Director	Telephone
Save the Tonto National Forest	John Kreig, Director	Telephone
TRALS – Tonto Recreation Alliance	John Bricker	Telephone
Arizona Chamber of Commerce and Industry	Glenn Hammer	Telephone
Wildlife Habitat Council	Maaike Schotborgh	Telephone
East Valley Chapter of the Back Country Horsemen of America	Steve McClintock Russ Wright Bill Blackerby	Telephone
Maricopa Audubon	Mark Larson, President	Telephone

Other organizations contacted for interviews, but not scheduled, include the following:

- Arizona Cattlemen's and Ranchers' Association (Globe/Miami)
- University of Arizona Mining School, Lowell Institute
- Center for Biological Diversity
- Tucson Audubon
- Inter-Tribal Council of Arizona

APPENDIX A

Interview Guide

Draft Interview Guide for Resolution Copper Project and Land Exchange EIS

Protocol: Those stakeholders selected for interviews will be contacted via email or telephone inviting them to be interviewed and explaining the purpose. An SWCA representative (Marty Rozelle or Jill Grams) will follow up with each stakeholder to set a specific time. The conversation will be free flowing and will cover at a minimum the questions below.

Introduction: Hello. My name is Marty Rozelle/Jill Grams and we are with SWCA Environmental Consultants. SWCA is the third-party consultant working for the Tonto National Forest to complete the Resolution Copper Project and Land Exchange Environmental Impact Statement. We are just getting started, and the purpose of this interview is to learn more about your information needs and ways you'd like to be involved as we complete the Public Involvement Plan and begin the EIS process. We hope to speak with a broad range of stakeholders.

Once we have completed our interviews, we will summarize the themes and concerns that we have heard and share them with the Tonto Forest Service and the SWCA team. Your input today will be used to refine the public involvement program. No comments will be attributed to you specifically, as we want you to feel that you can be totally candid. Is that all right with you? May we list you as someone we interviewed?

General answer to questions Marty/Jill cannot answer: That's an important question and I don't have an answer. Let me get back to our team and ask the right person to give you a call within the next few days. Is that OK?

1. As I understand, you represent the _____ (organization, agency, city, community, etc.)?
Please tell me about your _____.
 - Purpose?
 - Membership?
 - Geographic area in which it operates?
 - Other
2. Can you tell me a little more about what your _____'s involvement or history has been with this project?
3. Do you (or your organization) have concerns that you believe need to be addressed in the EIS?
Please elaborate.
4. Do you have a sense of how your neighbors (members, etc.) may feel about the project?
5. Who else is likely to be interested in this project?
6. How would you like to be involved in the EIS process?
7. What the best way to get information out to those who might be interested in this project?
8. Do you have any suggestions for the design of the Scoping Meetings?
9. Is there anything more you would like me to know? Do you have any questions for us?

Conclusion: Thank you so much for your time. As I said, once we are done with the interviews we will be presenting a summary to the EIS team. Aside from answering questions (if there are any), this information will guide us in future outreach and involvement activities. We are getting ready to publish the Notice of Intent and are hoping to do this in mid-February. This will be the official kickoff to the 60-day public scoping period. Please submit your official scoping comments during that time.

APPENDIX B

Observations and Recommendation Based on Stakeholder Assessment



To: Chris Garrett, Charles Coyle, Jill Grams
From: Marty Rozelle
Date: March 14, 2016
Subject: Observations and Recommendation Based on Stakeholder Assessment

From the stakeholder interview summaries compiled by Jill Grams and the individual interview notes, I have made some overall observations and recommendations about the public involvement program.

OBSERVATIONS AND IMPRESSIONS

Trust. No entity in this entire project is fully trusted. The TNF represents the federal government, which is enough for some. Distrust goes back decades with some in the ranching community. In the past TNF employees have publicly opposed the project. SWCA is an unknown entity for most. Others commented on Rosemont EIS as being a “disaster.” Resolution’s active engagement process has been viewed by some as a “sales” job and may include “facts” that have not been verified.

That being said, each entity also received positive comments. The TNF was complimented on the interactive process for the land planning project. SWCA is a third-party independent consultant selected via a rigorous process by the TNF, and they answer only to the TNF. Resolution enjoys a good relationship with many stakeholders and is praised for its community engagement and openness in responding to questions.

Process. Clarification is needed for several items:

- What is the relationship between the Land Exchange legislation and the NEPA process?
- Who are the ultimate decision makers for the land exchange and the EIS. Who makes the final overall decision?
- What decisions have already been made?
- Can this project be legally stopped? Does this [Land Exchange] make everything meaningless? If not, what can be affected?
- Will alternatives to the proposed mining technique be fully developed and studied? Same question for tailings disposal site.

There is a strong desire for a thorough independent impact assessment, including social, economic and cumulative impacts under NEPA. This includes a complete development and analysis of alternatives including “no action.”

Desire for Involvement. Uneven. Some stakeholders have been involved for the past decade, and it is important to respect that. Some more recently. Some want full involvement through the alternative development and analysis stage. Supporters don’t consistently participate, as evidenced in these quotes. “We have been very cautious getting involved because of all of the political sensitivities. We fully support the Forest Service having a thorough process.” “Some local businesses are suppliers to the casino and feel they have to walk a fine line in expressing their support.” Several encouraged us not to hurry the process. Give the public time to digest information at each step of the process.

Level of Information. Some stakeholders and individuals are very informed – especially around their specific areas of interest. They have devoted hours of independent research and at times hired their own experts. The Resolution Community Work Group has met monthly for almost three years and a review of their meeting summaries shows extensive information exchange with a wide variety of experts. At the same time there is plenty of misinformation floating around. Some stakeholders feel that the information presented by Resolution has been one-sided. Thus people may feel informed, but the information may be biased. Elected officials of the San Carlos Apache and Town of Superior might not completely reflect the views and opinions of their respective residents.

RECOMMENDATIONS

Trust.

- The TNF must fully and publicly embrace the public involvement process and program. Each staff member who comes into contact with the public must be open to the public's input, demonstrate they are listening, and be clear as to the role of the Forest including things that can and can't be done.
- SWCA will demonstrate its third-party role throughout the entire EIS process, including alternatives development and impact analysis.
- It would be helpful if Resolution would encourage stakeholder participation in the Forest Service EIS process and consider curtailing their community involvement efforts. The public is likely to be confused with multiple involvement efforts.

Process

- The TNF must be very clear as to how the Land Exchange legislation and NEPA will work, and what, if anything, is already decided.
- TNF guarantees that a robust NEPA process will be followed.
- Don't hurry the public's involvement.

Desire for Involvement

- Everyone will not be happy – that's OK. Demonstrate that the TNF will honestly work with stakeholders throughout the EIS process and will provide feedback on how their concerns have been addressed
- Create authentic opportunities to engage the public throughout the EIS process, beyond scoping
- Respect past levels of involvement by stakeholders and use techniques to draw out the quieter or reluctant stakeholder.
- Capitalize on existing mechanisms for communication
- Carefully document all involvement opportunities

Level of Information

- Create a set of FAQs that will be continually updated. Anyone who speaks with the public must know these FAQs.
- Be prepared to clarify misinformation
- Appreciate extensive individual and collective expertise across stakeholder groups

APPENDIX B

Scoping Meetings



United States Department of Agriculture
Tonto National Forest

**Resolution Copper Project and Land Exchange
Environmental Impact Statement**

*Resolution Copper Project and
Land Exchange EIS*

PUBLIC SCOPING MEETING

Neil Bosworth
Forest Supervisor

Tom Torres
Deputy Forest Supervisor

Mark Nelson
Project Manager

WHY ARE WE HERE?

✖ Scoping

- + Initial phase of EIS process
- + Together, we “scope” issues related to proposed mine and land exchange
- + We want to understand your concerns

✖ Your comments will help us

- + Define issues for study in EIS
- + Identify alternatives to address issues
- + Identify mitigations to lessen or avoid adverse effects

OUR COMMITMENT TO YOU

- ✘ **Listen** to your concerns
- ✘ **Consider** each public comment
- ✘ Conduct **open** and **transparent** process
- ✘ Complete **independent** and **objective** analysis
- ✘ **Work** to address your concerns within the bounds of our authority



Arizona Hedgehog Cactus, Oak Flat area

OUR REQUEST

- ✖ Express your concerns freely and openly
- ✖ Provide comments to help us develop a comprehensive EIS
- ✖ Be patient... the EIS process will take years to complete... this is only the beginning...



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US Forest Service

Caring for the Land
and Serving People



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A BIT MORE DETAIL...

- ✖ Our Team
- ✖ EIS Process
- ✖ Land Exchange
- ✖ Proposed Mine
- ✖ Example Issues
- ✖ Questions



Benson Spring, proposed tailings facility area

NATIONAL ENVIRONMENTAL POLICY ACT (1969)

NEPA IS...

- ✘ Formal structured process to federal decision-making
- ✘ Requires federal agency to analyze and disclose effects
- ✘ Provides for public involvement in federal decisions
- ✘ Requires development and analysis of alternatives to a proposed federal action

NEPA IS NOT...

- ✘ A voting process or other measure of relative support or opposition to a proposed action
- ✘ Does not provide a federal agency with decision-making authority
- ✘ Does not overrule other federal laws

NEPA- MORE INFORMATION

✖ Internet resources:

Council on Environmental Quality

<http://www.whitehouse.gov/administration/eop/ceq>

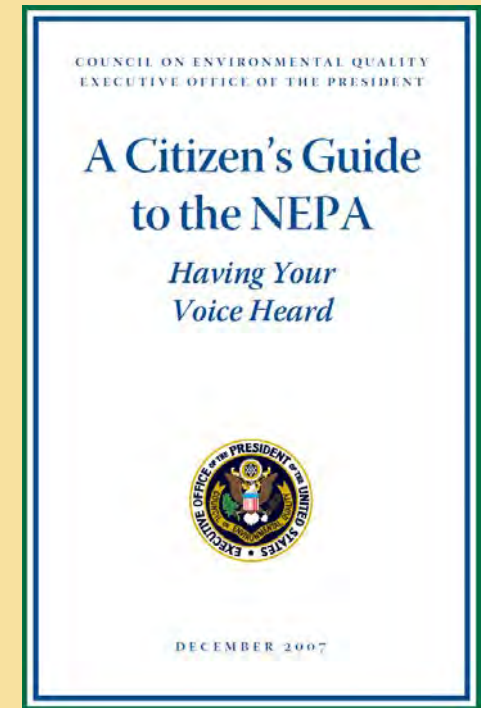
Forest Service NEPA Policy

<http://www.fs.fed.us/emc/nepa/>

✖ Written resources

✖ Visit with our EIS Team

✖ Call or visit a Forest Service office



PURPOSE OF THE FEDERAL ACTION

1. To consider approval of a proposed plan of operations submitted by Resolution Copper, which would govern surface disturbance on Forest Service lands from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.
2. To exchange lands between Resolution Copper and the United States as directed by Section 3003 the National Defense Authorization Act for 2015 (NDAA).

THE PROPOSED ACTION:

To approve the proposed plan of operations as submitted by Resolution Copper and to complete the land exchange as directed by Congress under Section 3003 of the NDAA

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- ✘ We will develop and analyze alternatives to the proposed action
 - + Must address issues identified through scoping
 - + Must meet the purpose of the federal action

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- ✘ 4,400 acres of FS disturbance
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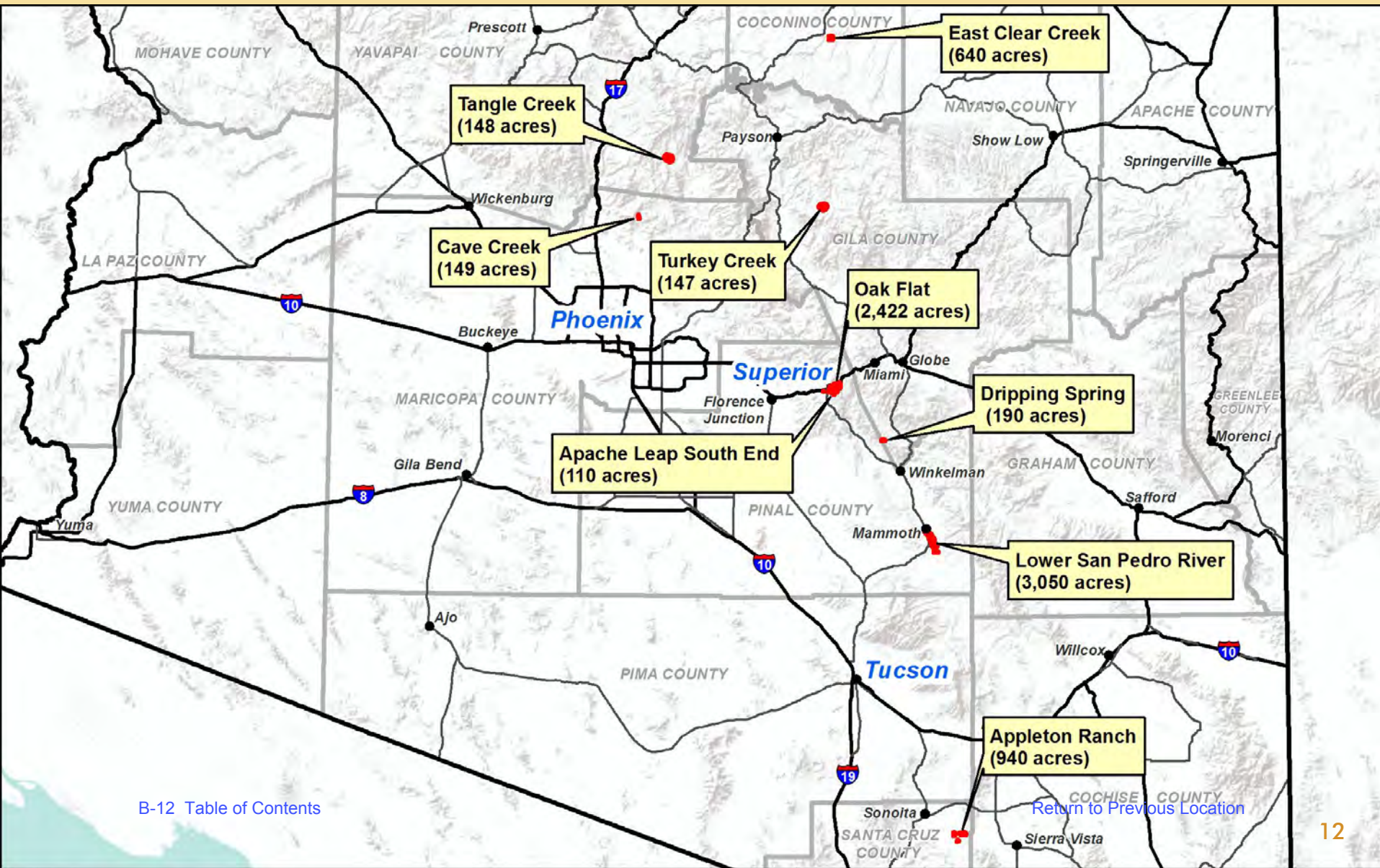
ADMINISTRATION OF LAND EXCHANGE

- ✘ Oak Flat parcel will become private (2,422 acres)
- ✘ Eight parcels located elsewhere in AZ will become federal land (5,344 acres)

LAND EXCHANGE

- ✗ Federal law authorizes and directs the land exchange
- ✗ Requires completion of an EIS prior to exchanging the land
 - ✗ Land exchange
 - ✗ Plan of operations
- ✗ Mandates government appraisal of lands
 - ✗ Appraisal will be made public when completed
- ✗ Requires Forest Service to consult with affected tribes
 - ✗ Seek to identify mutually acceptable measures to address tribal issues

LAND EXCHANGE PARCELS



Resolution's Proposed Mine

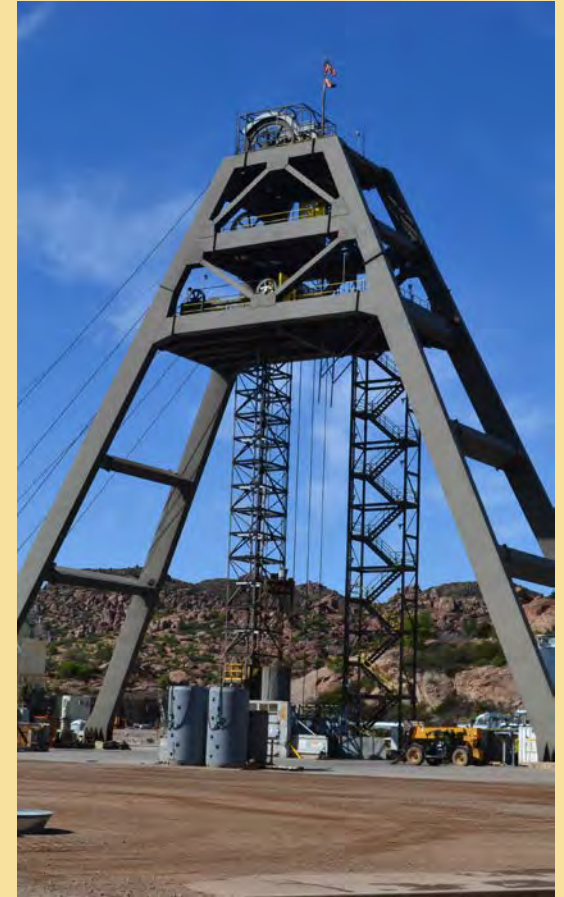
- ✗ Forest Service, private and state land
- ✗ Construction: 10 years
- ✗ Operations: 40 years
- ✗ Reclamation: 5–10 years
- ✗ 25 million tons of copper
 - ✗ US consumes about 1.8 million tons of copper per year
 - ✗ About 1/3 of US consumption
 - ✗ Copper important to our daily life
- ✗ Deposit located 5,000–7,000 feet underground
- ✗ Ore mined using panel caving method (i.e. block caving)



Sample of Copper
Ore from Resolution
Deposit
(5,232 ft. depth)

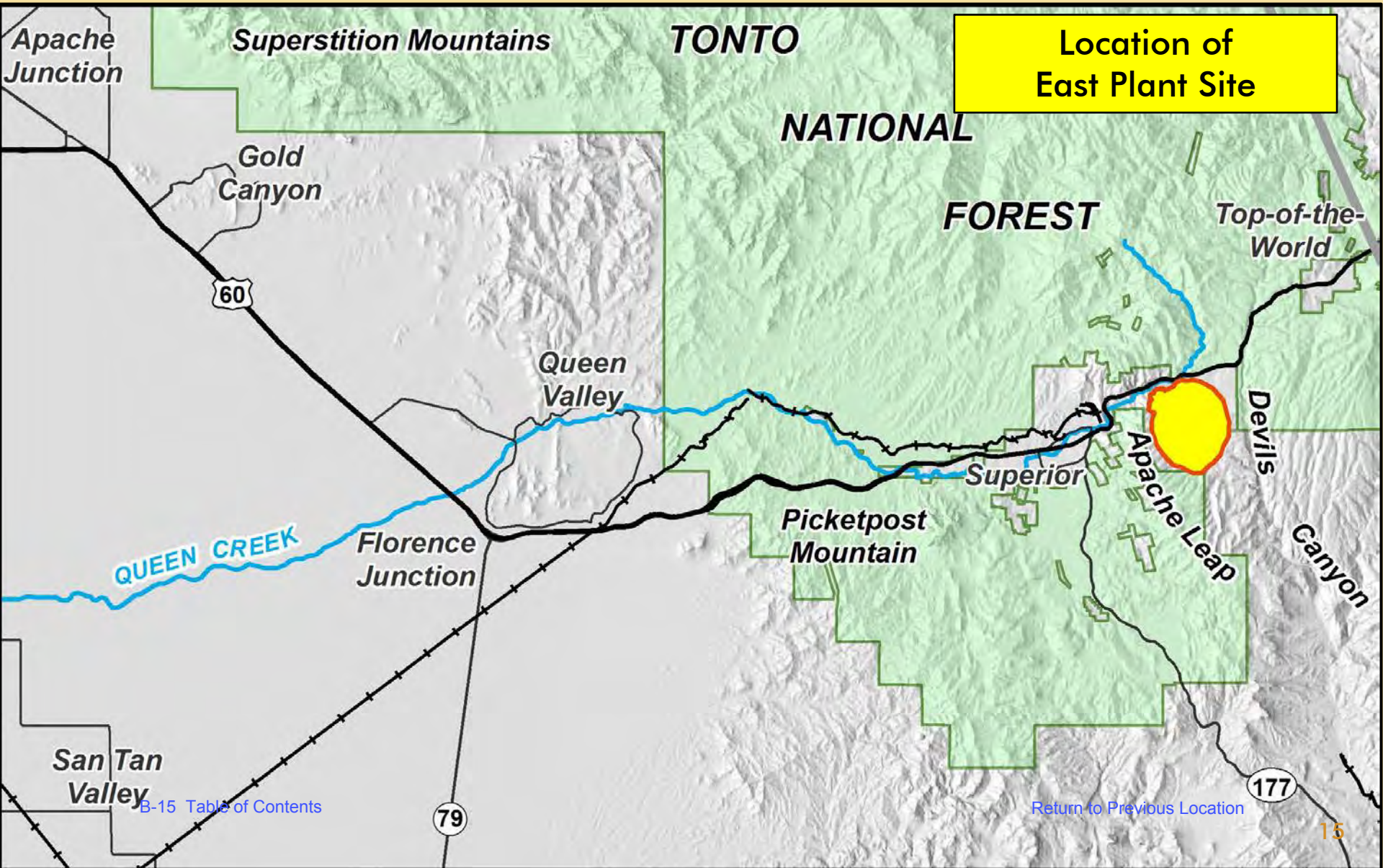
Resolution's Proposed Mine (cont.)

- ✘ Accessed by six vertical shafts at East Plant Site
- ✘ Crushed ore transported underground for processing at West Plant Site
- ✘ Flotation process, producing copper and moly concentrates
- ✘ Almost no waste rock
- ✘ Tailings piped to tailings disposal site on Forest Service land

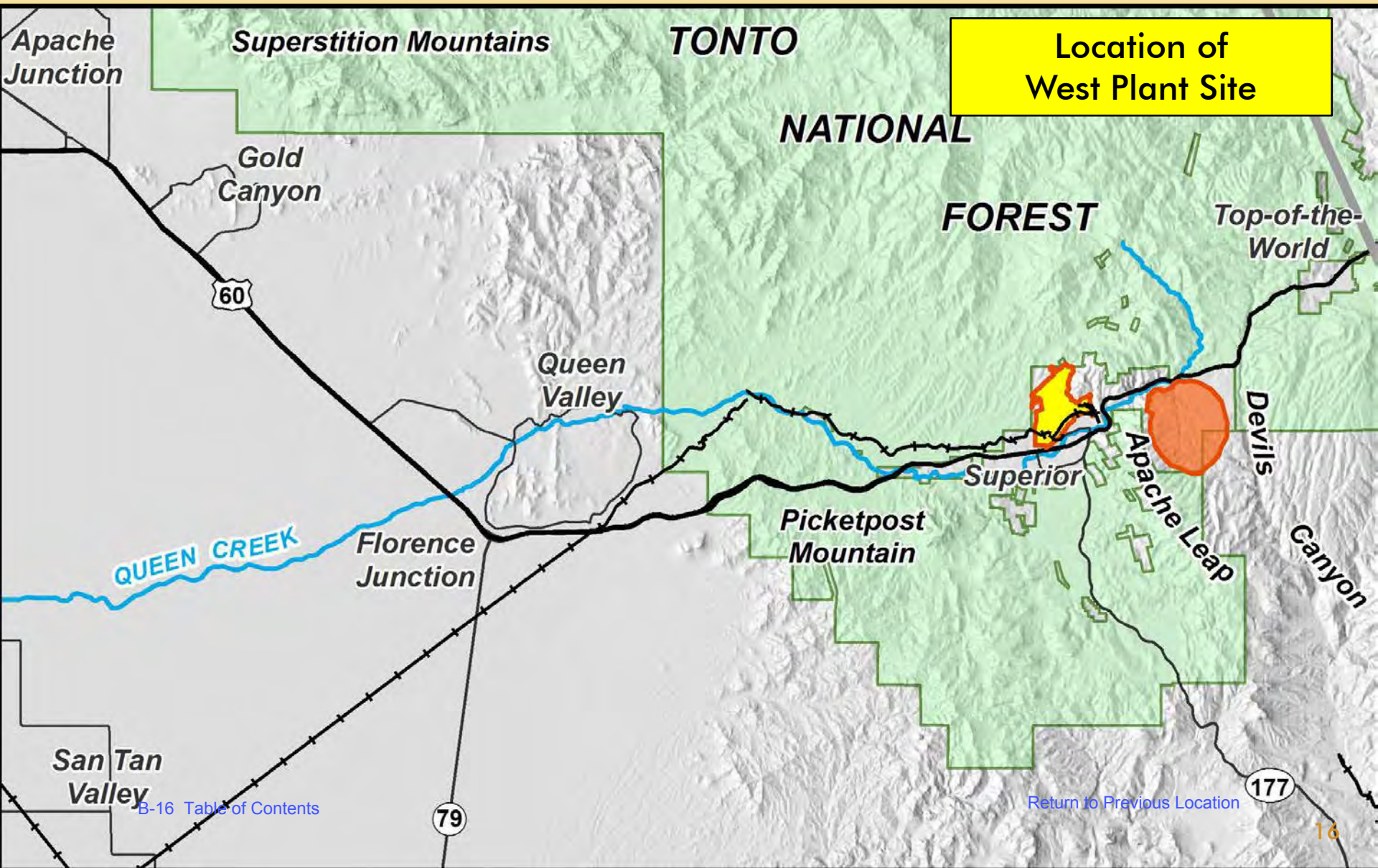


Mine Shaft
East Plant Site

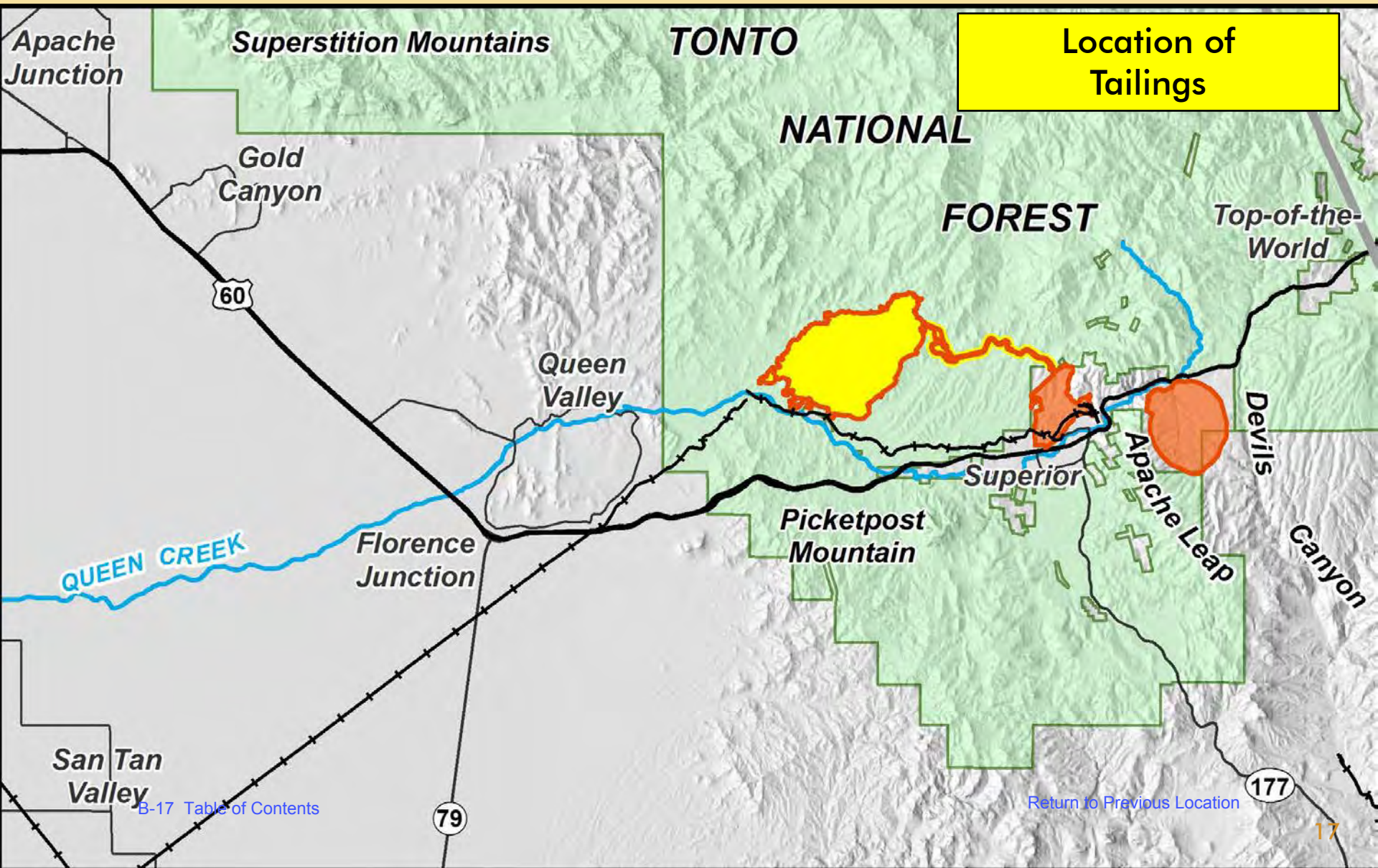
Location of Major Operational Facilities



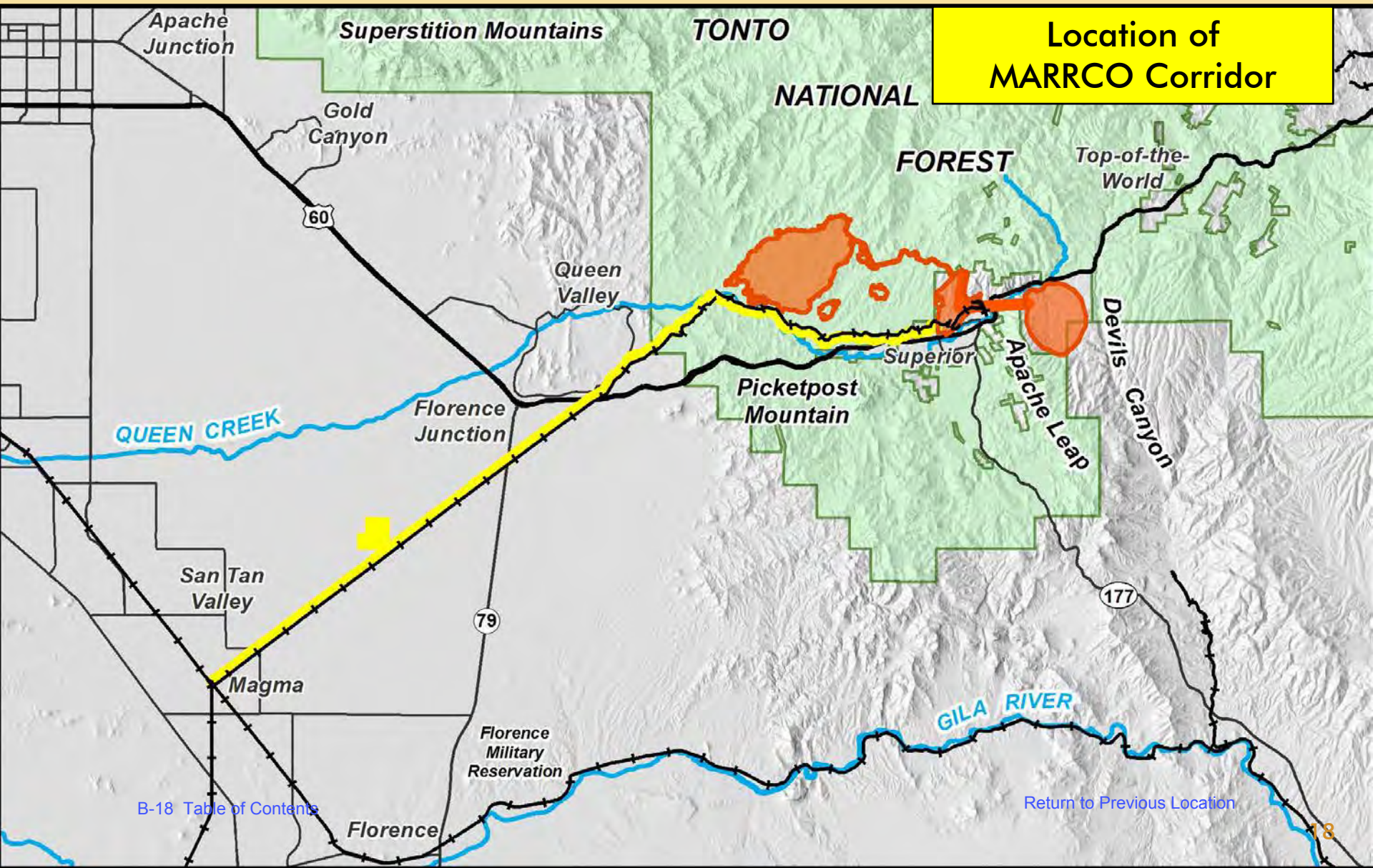
Location of Major Operational Facilities



Location of Major Operational Facilities



Location of Major Operational Facilities



PLEASE HELP US IDENTIFY ISSUES FOR ANALYSIS

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- ✘ We will analyze issues on Forest Service, private and state lands
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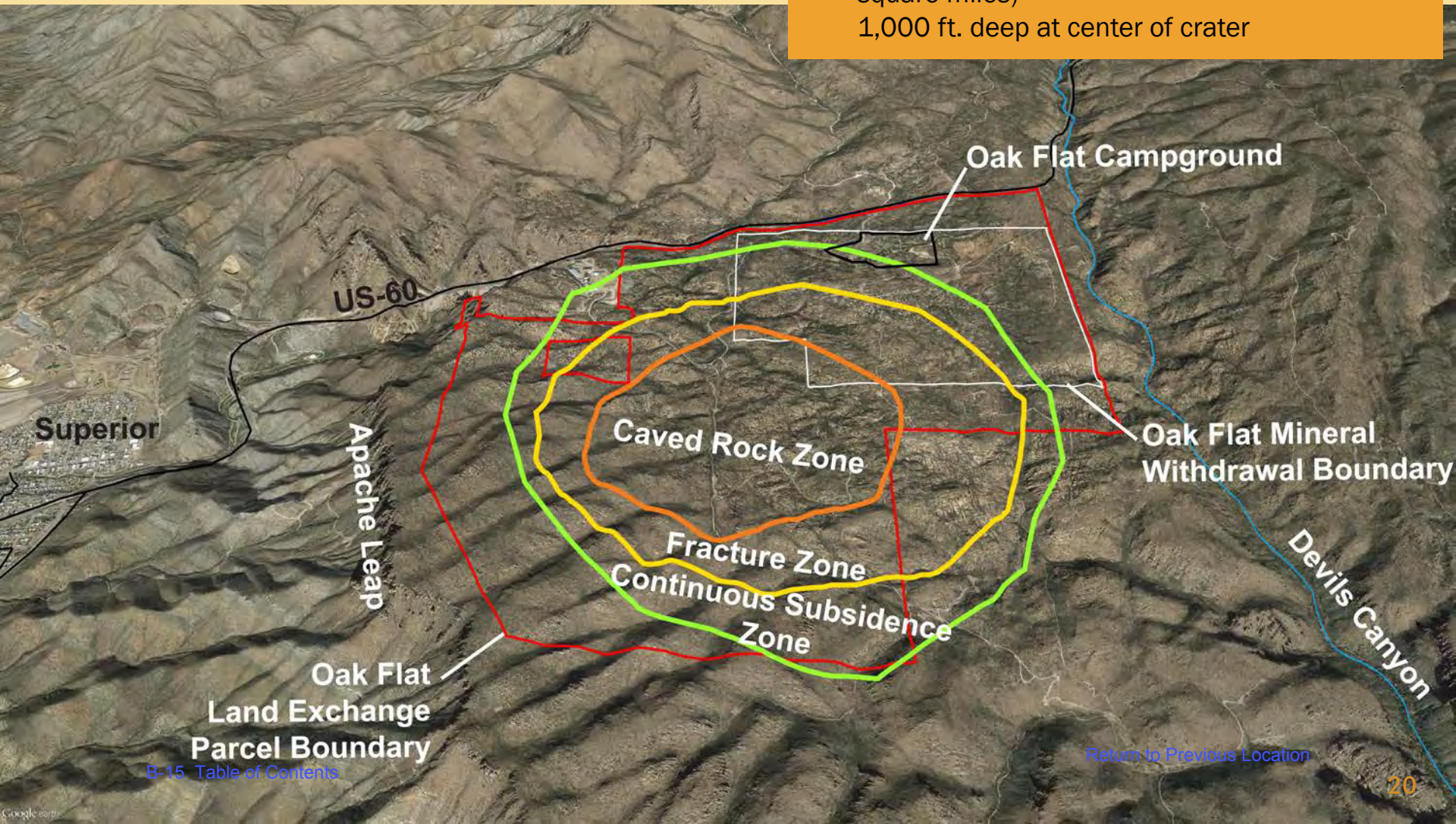


EXAMPLES OF SIGNIFICANT ISSUES: SURFACE SUBSIDENCE

Resolution projects:

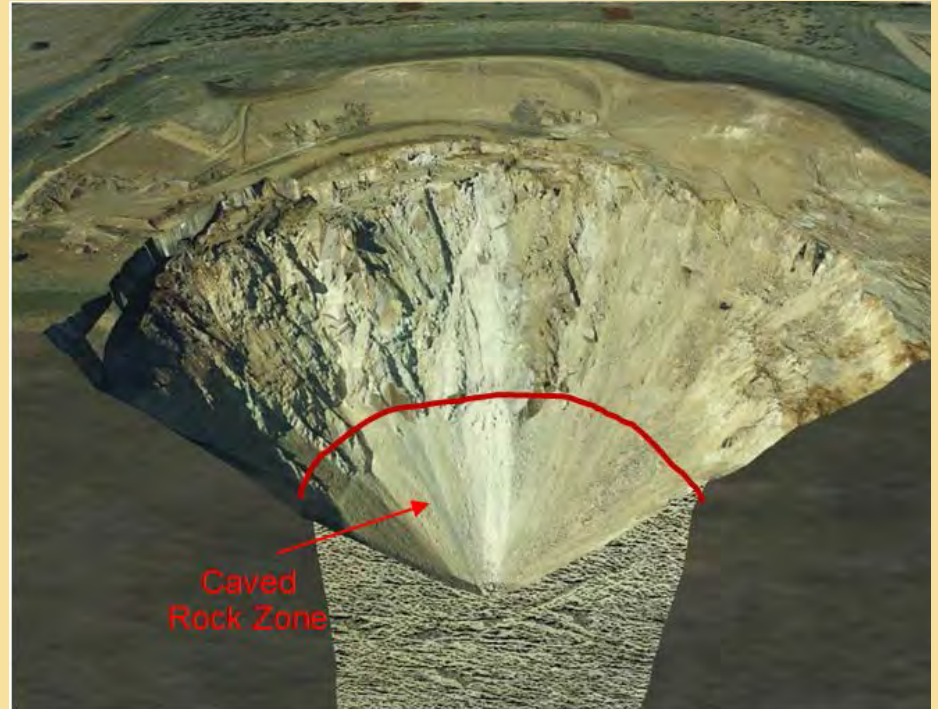
1.5 mile diameter subsidence crater (1.8 square miles)

1,000 ft. deep at center of crater



EXAMPLES OF SIGNIFICANT ISSUES: SURFACE SUBSIDENCE

- ✘ How would subsidence affect cultural resources at Oak Flat?
- ✘ How would subsidence affect surface water quantity and quality?
- ✘ Would subsidence cause physical hazards to wildlife or humans?
- ✘ Would subsidence affect Apache Leap?



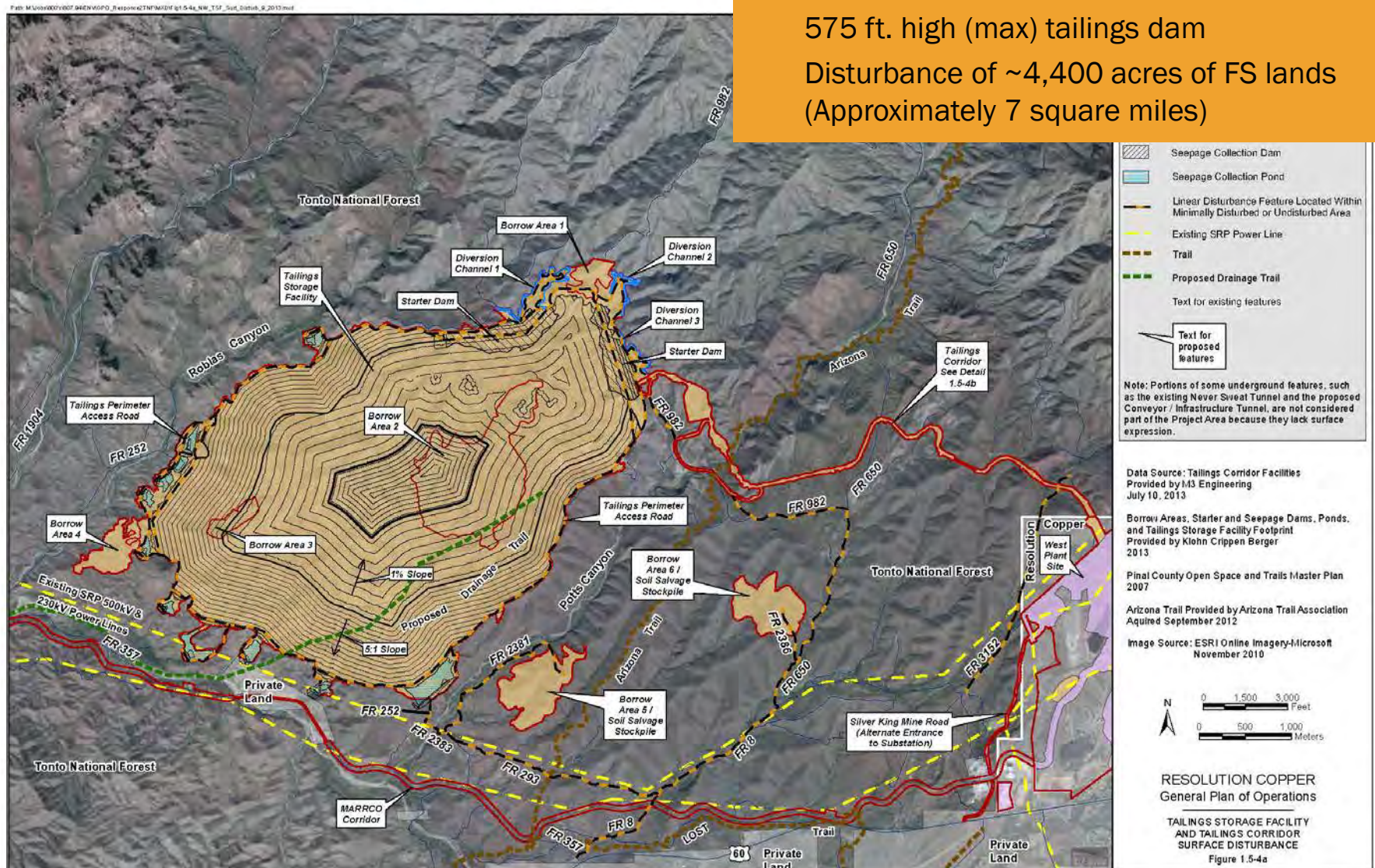
Example of subsidence zone at
Northparkes mine in Australia

EXAMPLES OF SIGNIFICANT ISSUES: TAILINGS DISPOSAL FACILITY

Permanent storage of ~1.5 billion tons of tailings at TSF

575 ft. high (max) tailings dam

Disturbance of ~4,400 acres of FS lands
(Approximately 7 square miles)



EXAMPLES OF SIGNIFICANT ISSUES: TAILINGS DISPOSAL FACILITY

- ✗ Would dust from tailings affect public health in Queen Valley?
- ✗ Would tailings cause water pollution?
- ✗ Would the tailings facility destroy cultural resources?
- ✗ Would the tailings cause long-term environmental hazards?



Example of tailings disposal facility at
Sierrita Mine, Arizona

EXAMPLES OF SIGNIFICANT ISSUES: SOCIOECONOMIC EFFECTS

- ✘ How would the project effect employment opportunities in Superior area?
- ✘ How would the project affect state and local tax revenue?
- ✘ How would the project effect local school systems and other public services?
- ✘ How would the project affect the total economic activity in the community and region?

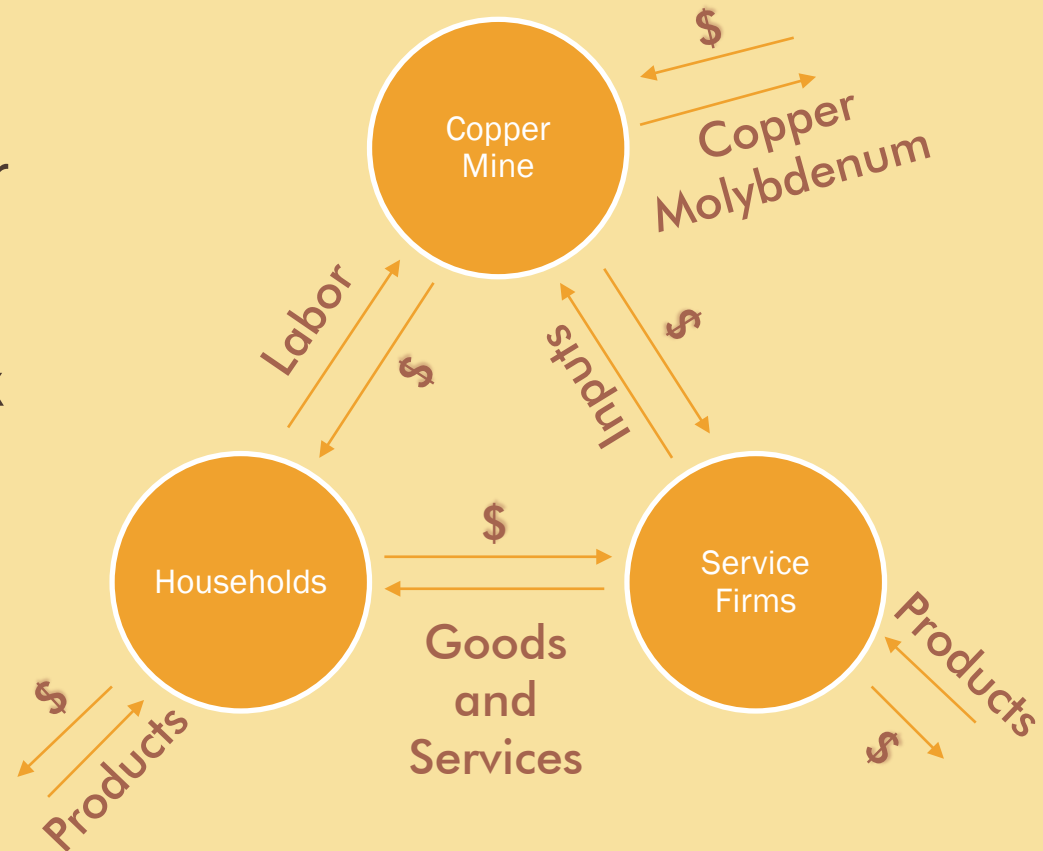


Figure adapted from *Importance of Economic Multipliers* (University of Nevada Reno)

COMMENTS ARE **MOST** HELPFUL WHEN THEY:

- ✗ Are solution oriented and provide specific examples rather than simply opposing the proposed project.
- ✗ Identify significant resource issues or other concerns that should be addressed in the EIS analysis; and
- ✗ Suggest potential alternatives that should be considered.

Example: *“The EIS should consider the potential for acid rock drainage to leak into underground aquifers and to contaminate springs and other water sources downstream from Oak Flat.”*

COMMENTS ARE LEAST HELPFUL WHEN THEY:

- ✗ simply express a personal opinion or
- ✗ address issues that are beyond the scope of this project or the legal authority of the Forest Service to influence or change.

Example: *“Mining is terribly destructive. Mining should not be allowed on any Forest lands.”*

While these types of comments are noted and recorded, they do not help the Forest Service fully analyze the environmental impacts of the project.

HOW TO SUBMIT COMMENTS

In person: Drop off a comment form in the box
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By voicemail or fax: 1-866-546-5718

By mail: Resolution EIS Comments
P.O. Box 34468
Phoenix, AZ 85067-4468

By email: comments@ResolutionMineEIS.us

On website: www.ResolutionMineEIS.us



United States Department of Agriculture
Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Questions?



United States Department of Agriculture
Tonto National Forest

**Resolution Copper Project and Land Exchange
Environmental Impact Statement**

*Resolution Copper Project and
Land Exchange EIS*

PUBLIC SCOPING MEETING

Neil Bosworth

Forest Supervisor

Tom Torres

Deputy Forest Supervisor

Mark Nelson

Project Manager

WHY ARE WE HERE?

✖ Scoping

- + Initial phase of EIS process
- + Together, we “scope” issues related to proposed mine and land exchange
- + We want to understand your concerns

✖ Your comments will help us

- + Define issues for study in EIS
- + Identify alternatives to address issues
- + Identify mitigations to lessen or avoid adverse effects

OUR COMMITMENT TO YOU

- ✘ **Listen** to your concerns
- ✘ **Consider** each public comment
- ✘ Conduct **open** and **transparent** process
- ✘ Complete **independent** and **objective** analysis
- ✘ **Work** to address your concerns within the bounds of our authority



Arizona Hedgehog Cactus, Oak Flat area

OUR REQUEST

- ✖ Express your concerns freely and openly
- ✖ Provide comments to help us develop a comprehensive EIS
- ✖ Be patient... the EIS process will take years to complete... this is only the beginning...



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US Forest Service
Caring for the Land
and Serving People



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A BIT MORE DETAIL...

- ✖ Our Team
- ✖ EIS Process
- ✖ Land Exchange
- ✖ Proposed Mine
- ✖ Example Issues
- ✖ Questions



Benson Spring, proposed tailings facility area

NATIONAL ENVIRONMENTAL POLICY ACT (1969)

NEPA IS...

- ✘ Formal structured process to federal decision-making
- ✘ Requires federal agency to analyze and disclose effects
- ✘ Provides for public involvement in federal decisions
- ✘ Requires development and analysis of alternatives to a proposed federal action

NEPA IS NOT...

- ✘ A voting process or other measure of relative support or opposition to a proposed action
- ✘ Does not provide a federal agency with decision-making authority
- ✘ Does not overrule other federal laws

NEPA- MORE INFORMATION

- ✖ Internet resources:

Council on Environmental Quality

<http://www.whitehouse.gov/administration/eop/ceq>

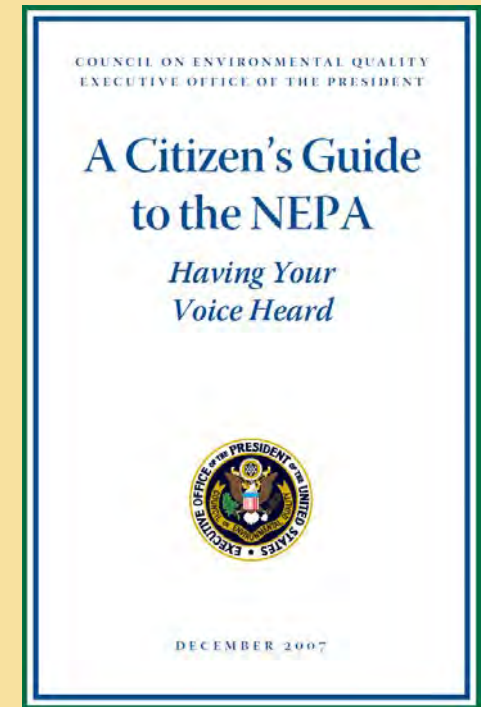
Forest Service NEPA Policy

<http://www.fs.fed.us/emc/nepa/>

- ✖ Written resources

- ✖ Visit with our EIS Team

- ✖ Call or visit a Forest Service office



PURPOSE OF THE FEDERAL ACTION

1. To consider approval of a proposed plan of operations submitted by Resolution Copper, which would govern surface disturbance on Forest Service lands from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.
2. To exchange lands between Resolution Copper and the United States as directed by Section 3003 the National Defense Authorization Act for 2015 (NDAA).

THE PROPOSED ACTION:

To approve the proposed plan of operations as submitted by Resolution Copper and to complete the land exchange as directed by Congress under Section 3003 of the NDAA

- ✘ The proposed action is the starting point for the EIS process
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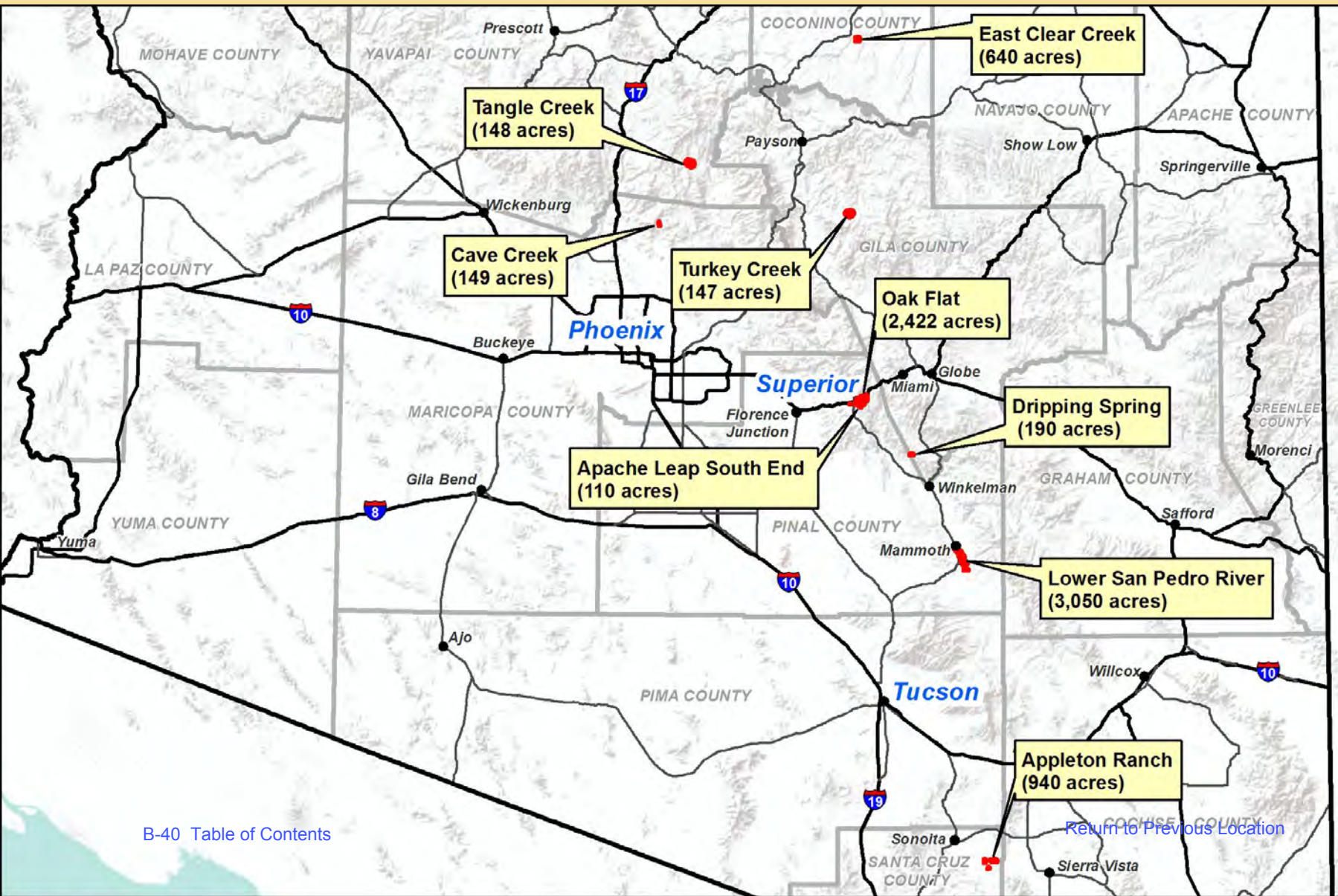
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LAND EXCHANGE

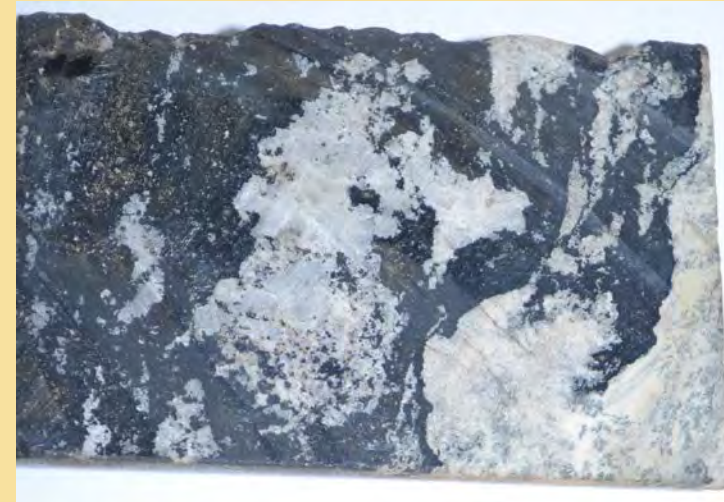
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LAND EXCHANGE PARCELS



Resolution's Proposed Mine

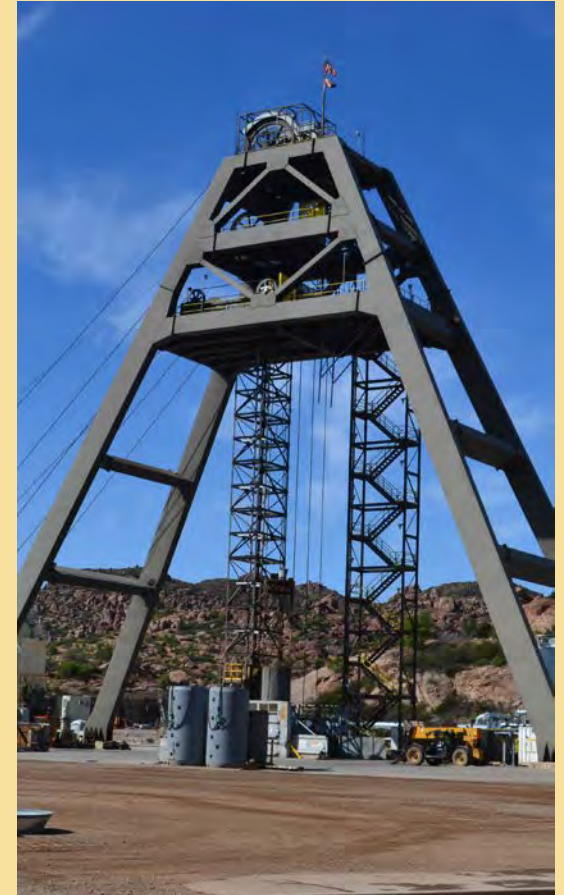
- ✗ Forest Service, private and state land
- ✗ Construction: 10 years
- ✗ Operations: 40 years
- ✗ Reclamation: 5–10 years
- ✗ 25 million tons of copper
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 - ✗ About 1/3 of US consumption
 - ✗ Copper important to our daily life
- ✗ Deposit located 5,000–7,000 feet underground
- ✗ Ore mined using panel caving method (i.e. block caving)



Sample of Copper Ore
from Resolution
Deposit
(5,232 ft. depth)

Resolution's Proposed Mine (cont.)

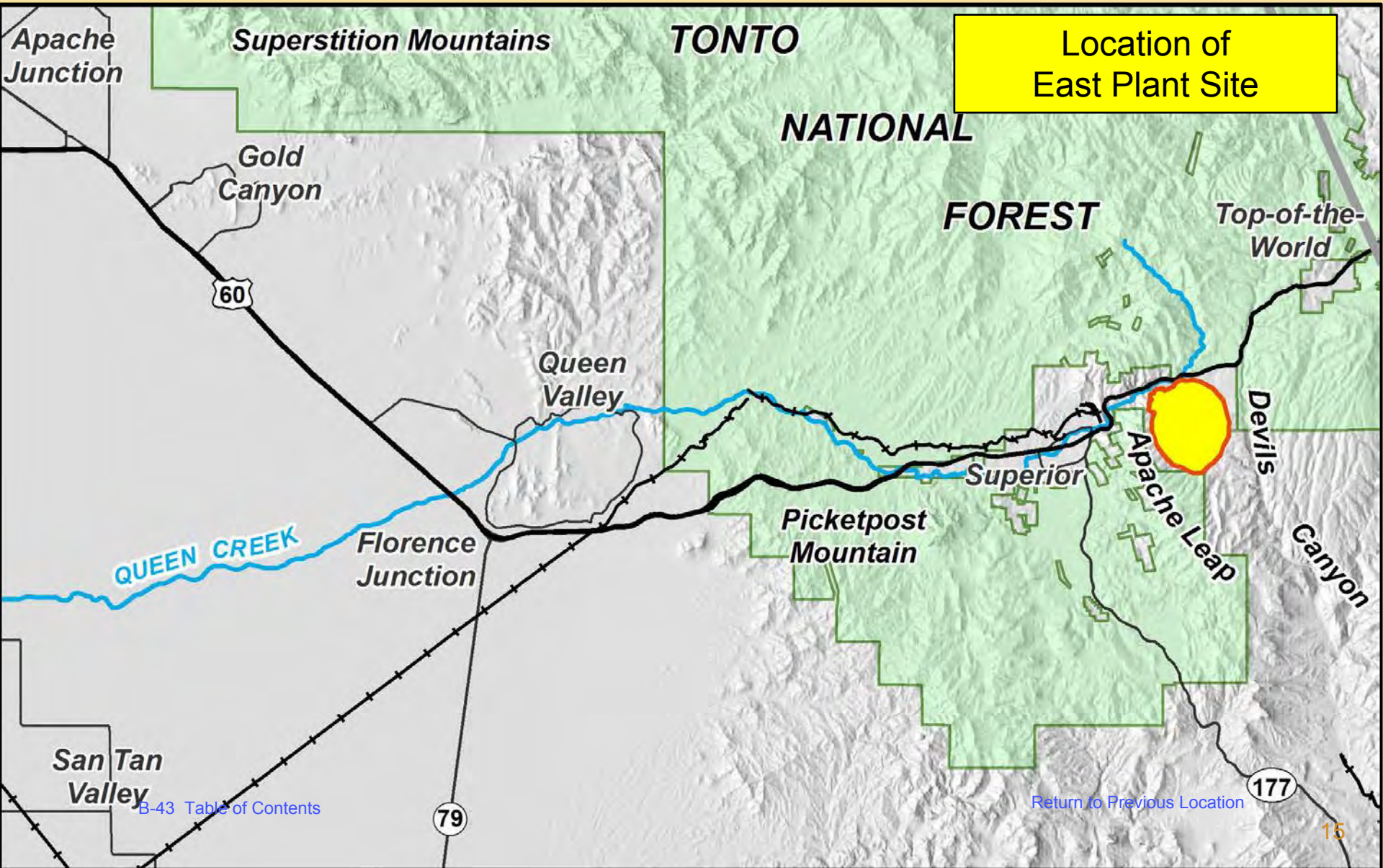
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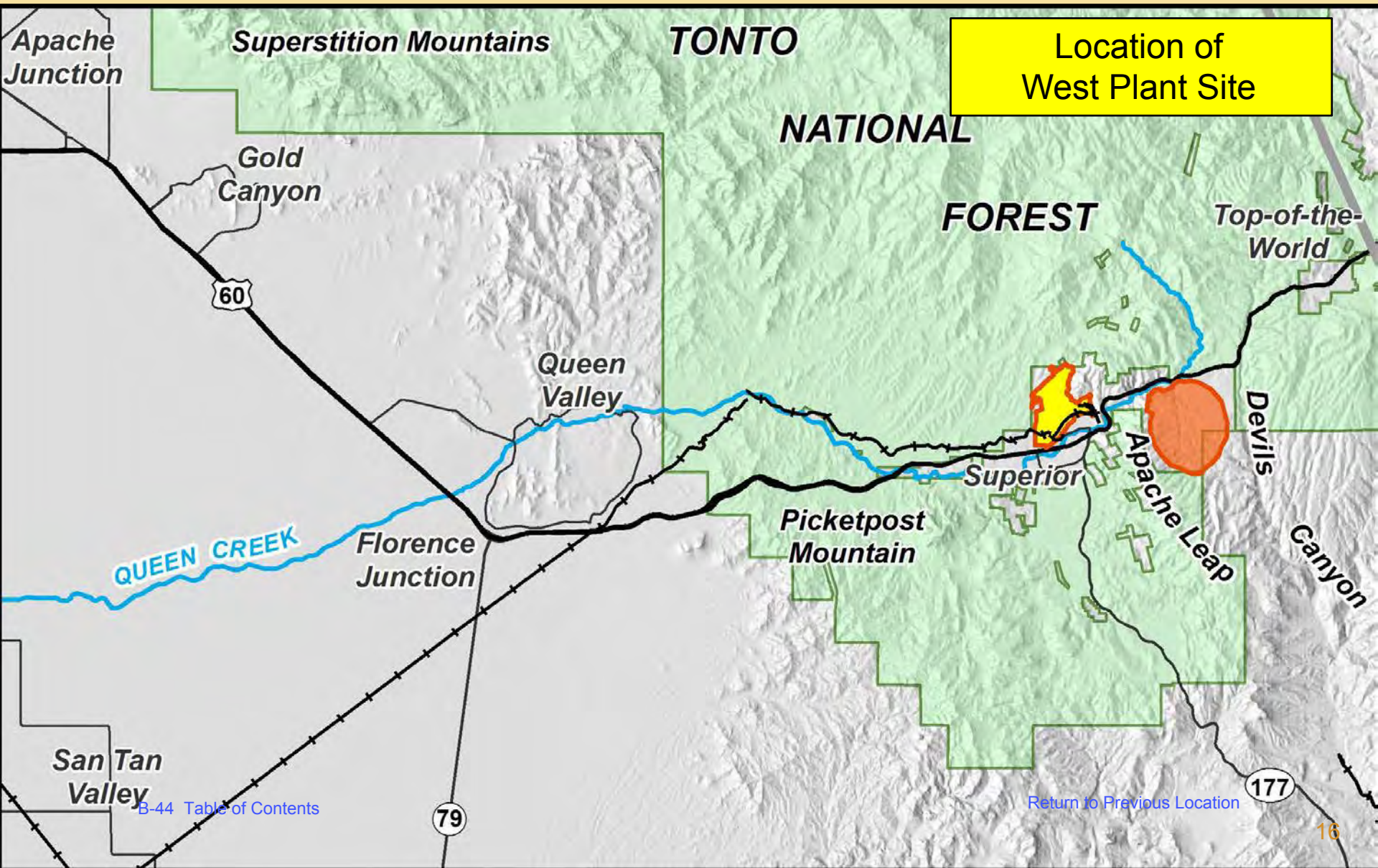
Mine Shaft
East Plant Site

[Return to Previous Location](#)

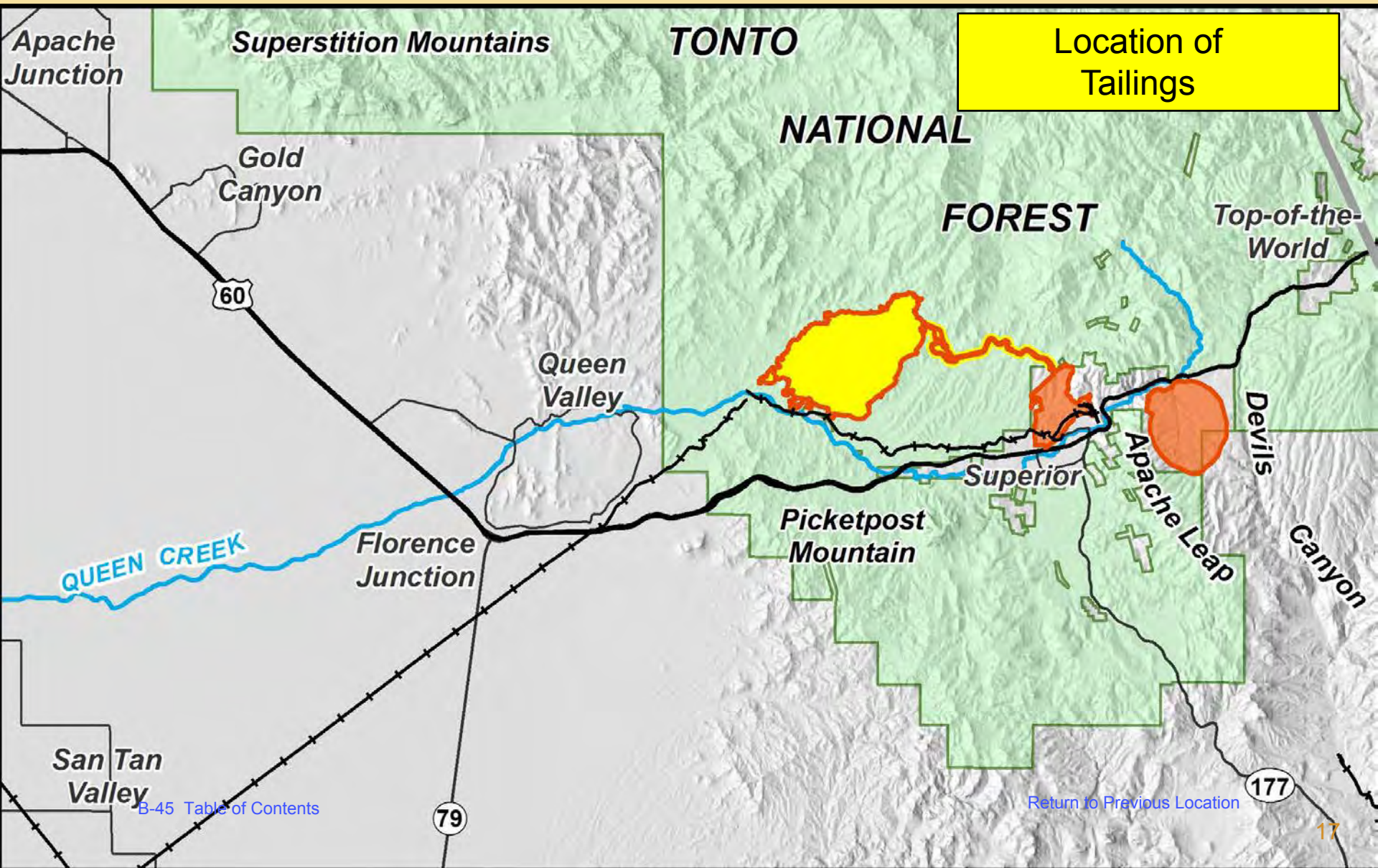
Location of Major Operational Facilities



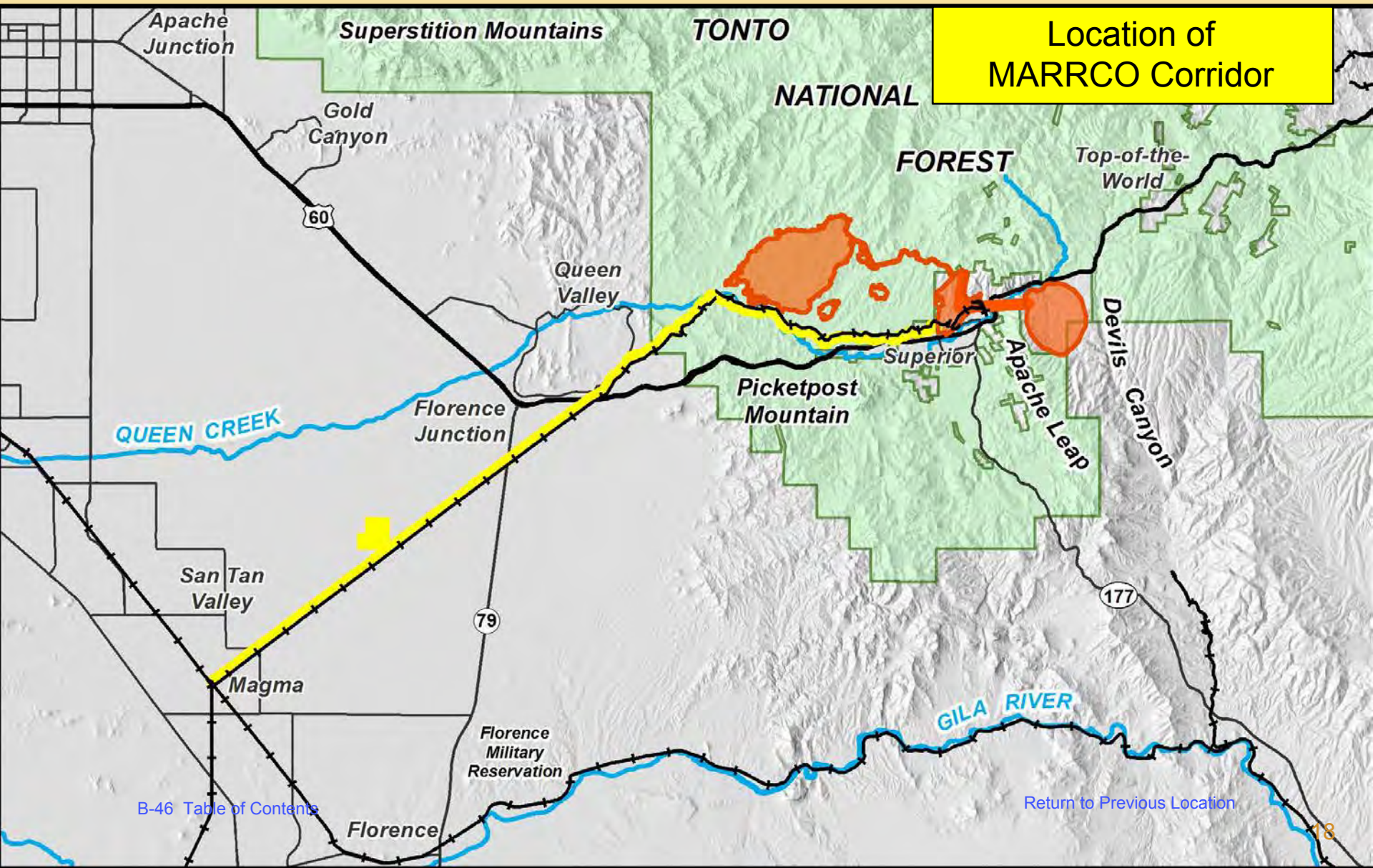
Location of Major Operational Facilities



Location of Major Operational Facilities



Location of Major Operational Facilities



Location of Filter Plant

Proposed Filter Plant Location

South End MARRCO Corridor

Central Arizona College San Tan Campus

San Tan Valley

0 1 2 4
Miles

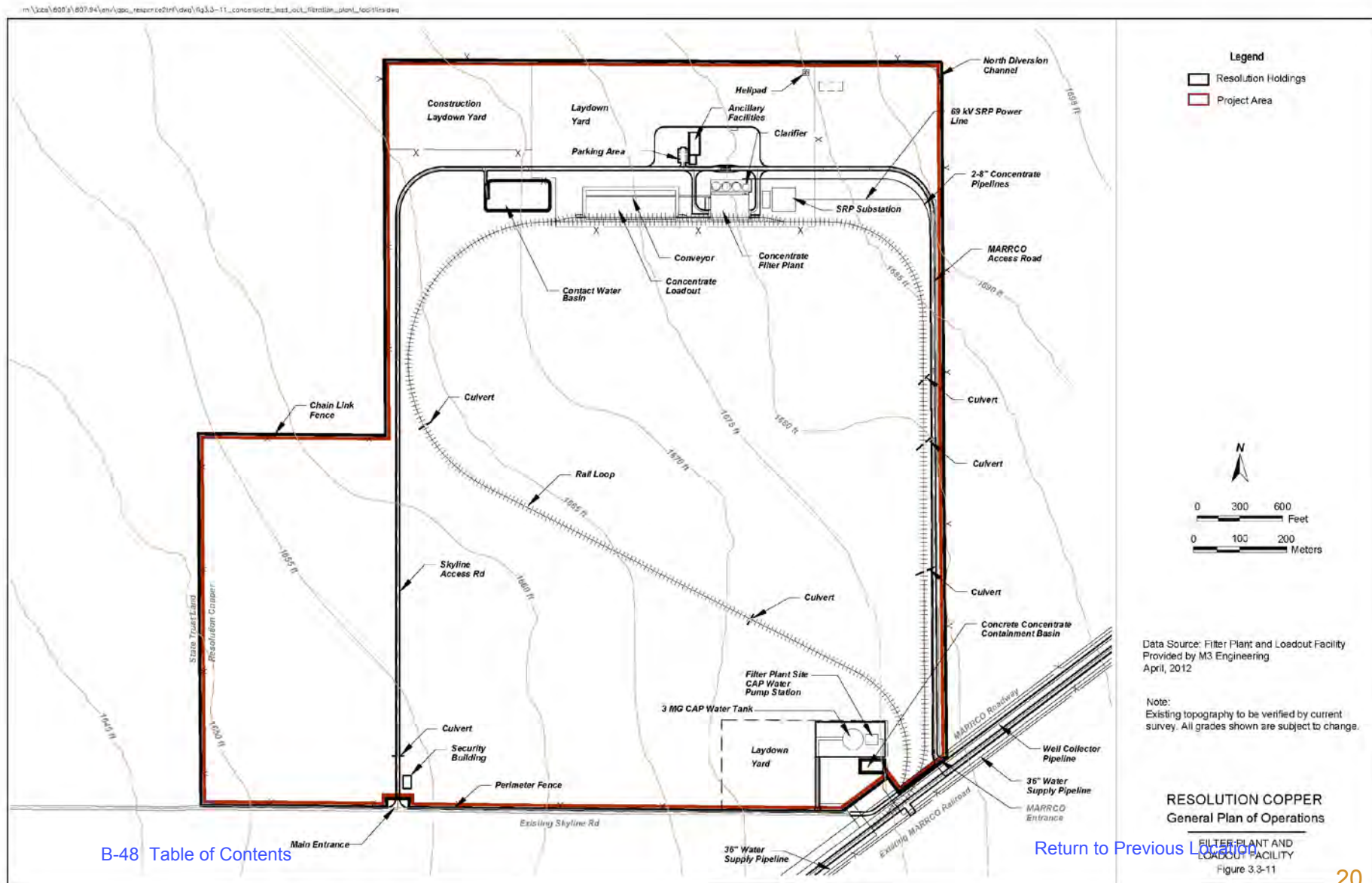
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Filter Plant Layout



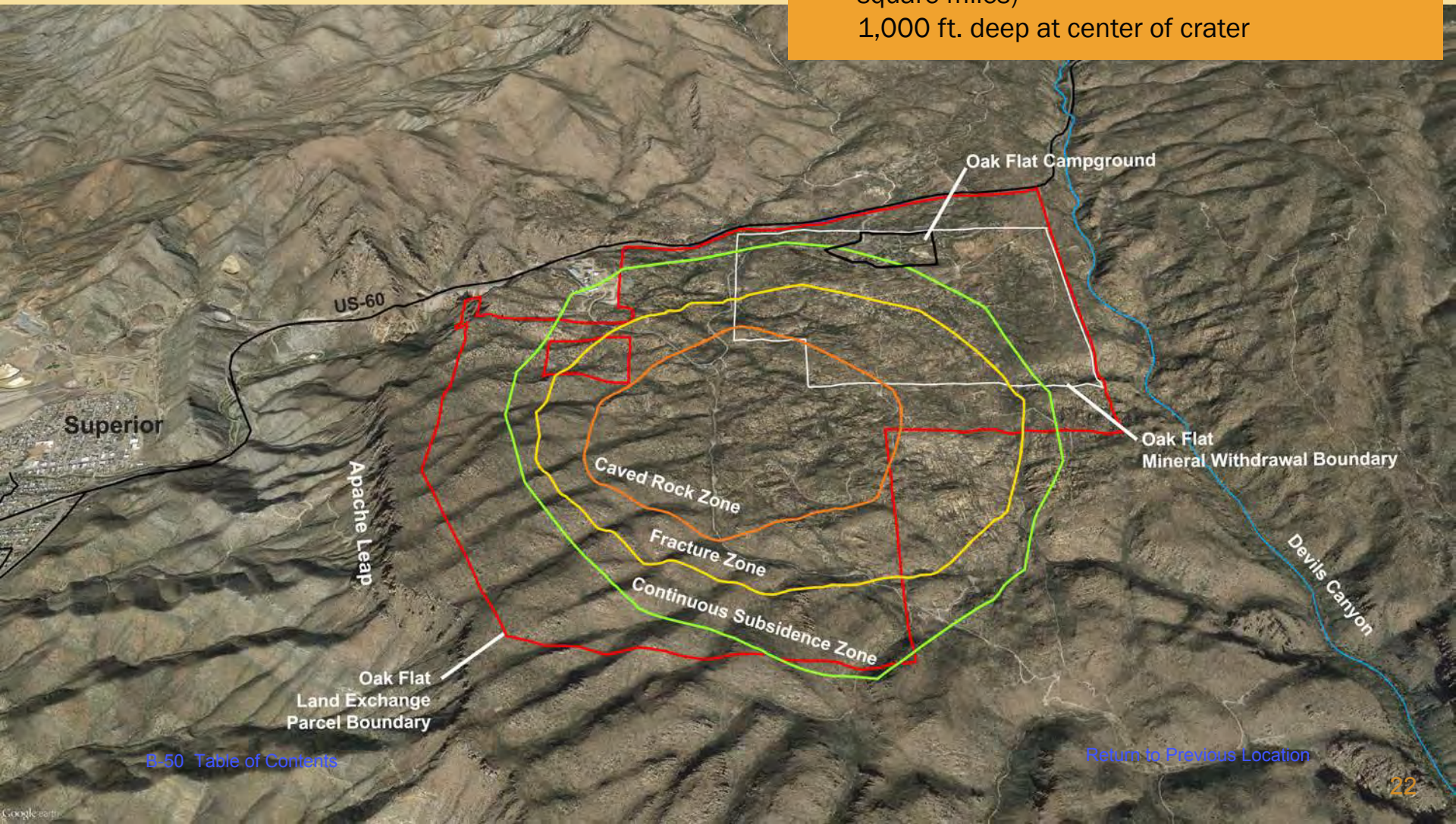
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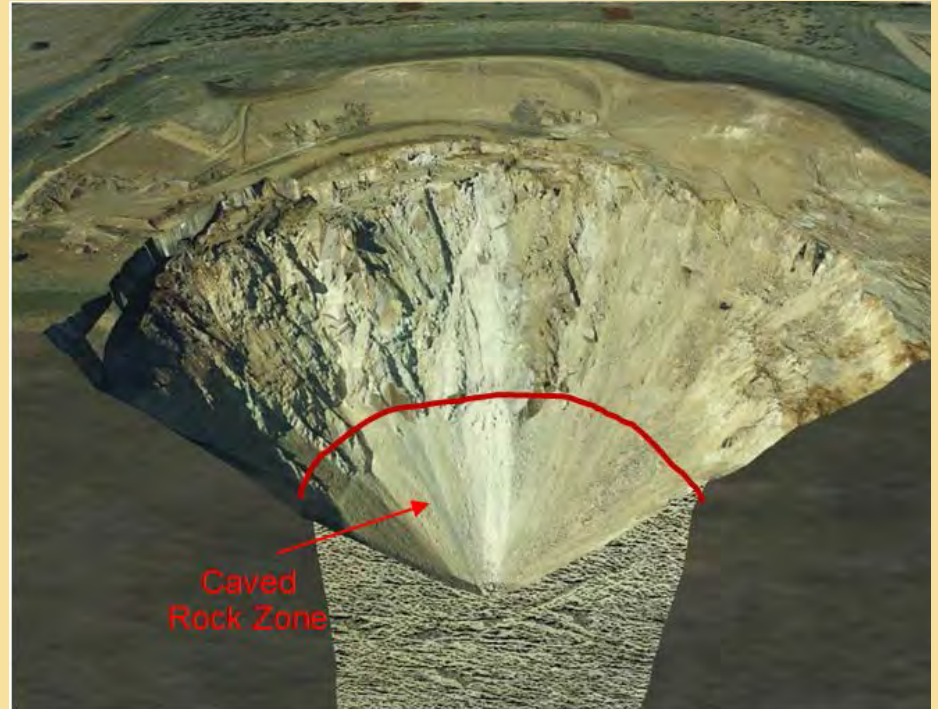
EXAMPLES OF SIGNIFICANT ISSUES: SURFACE SUBSIDENCE

Resolution projects:
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square miles)
1,000 ft. deep at center of crater



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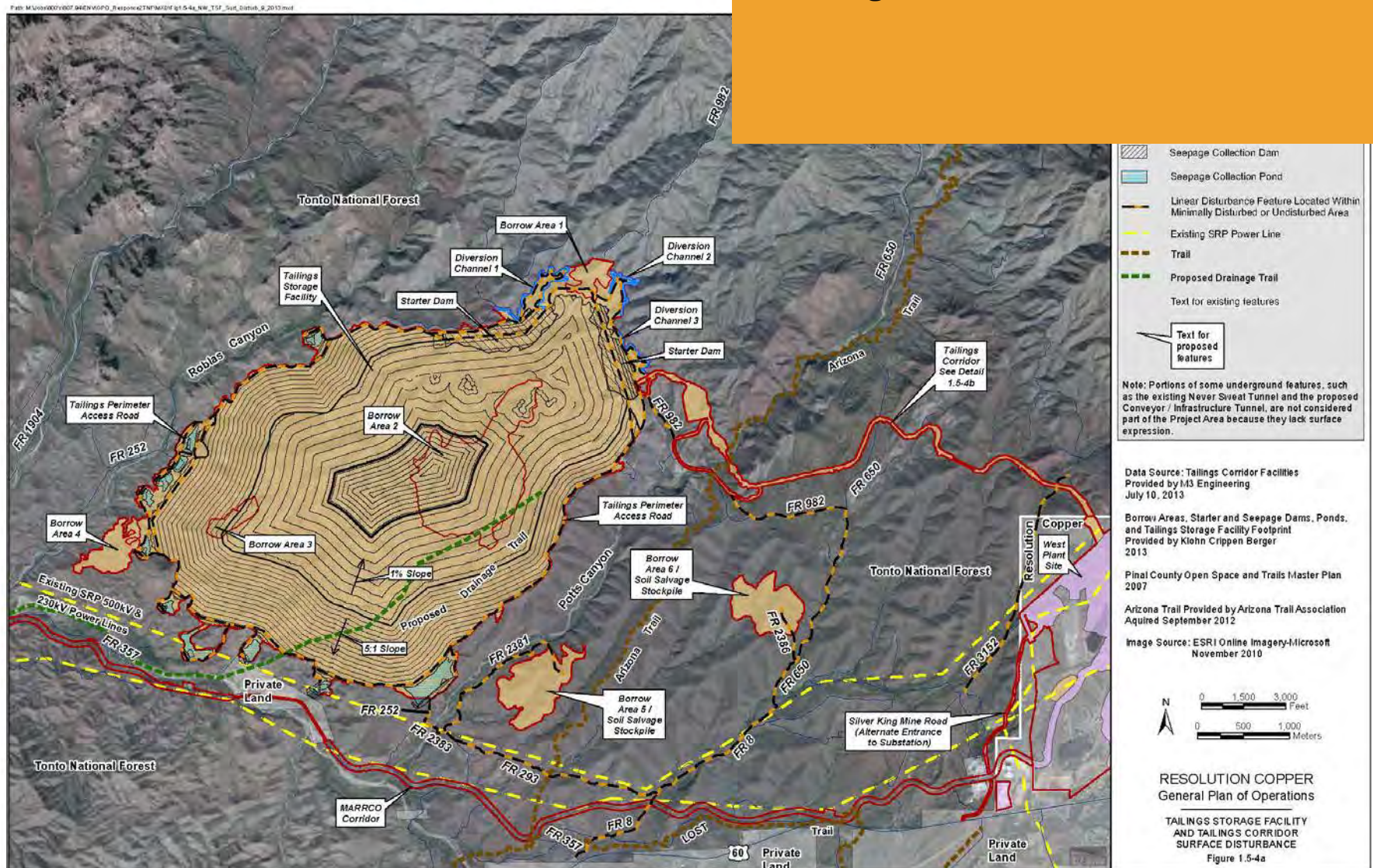
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Example of subsidence zone at Northparkes mine in Australia

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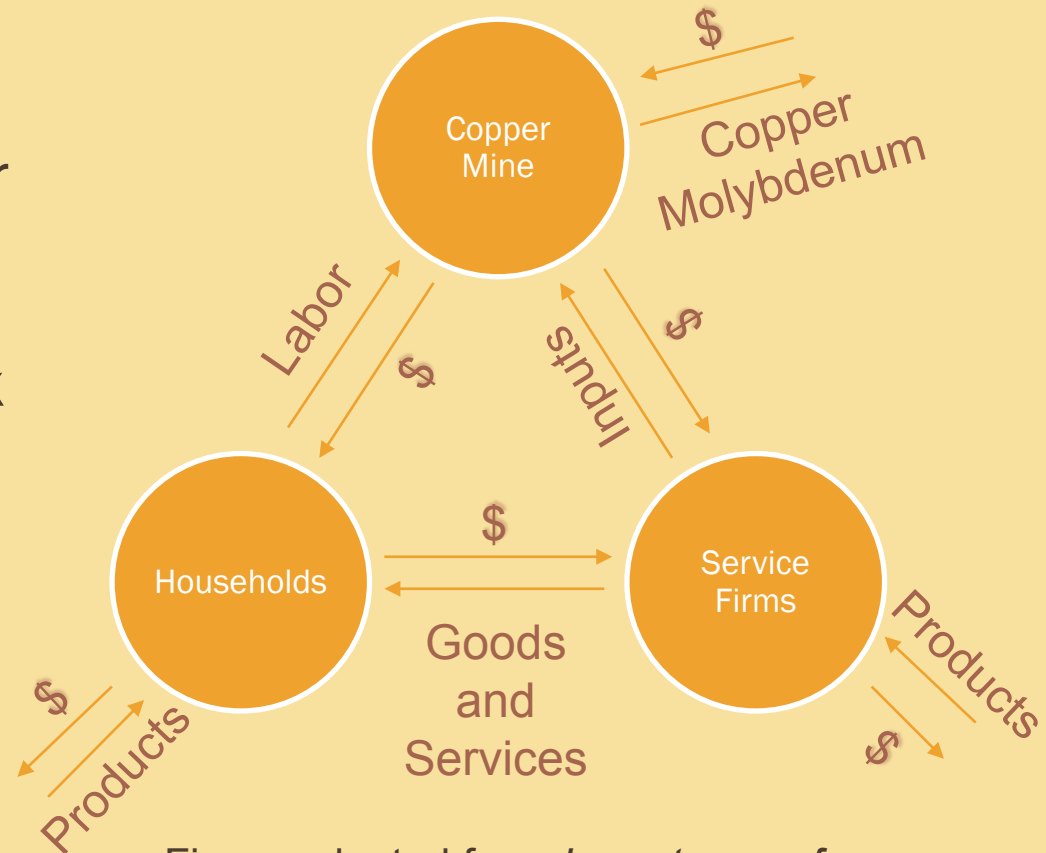


Figure adapted from *Importance of Economic Multipliers* (University of Nevada Reno)

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While these types of comments are noted and recorded, they do not help the Forest Service fully analyze the environmental impacts of the project.

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By mail: Resolution EIS Comments
P.O. Box 34468
Phoenix, AZ 85067-4468

By email: comments@ResolutionMineEIS.us

On website: www.ResolutionMineEIS.us



United States Department of Agriculture
Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Questions?



United States Department of Agriculture Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Overview

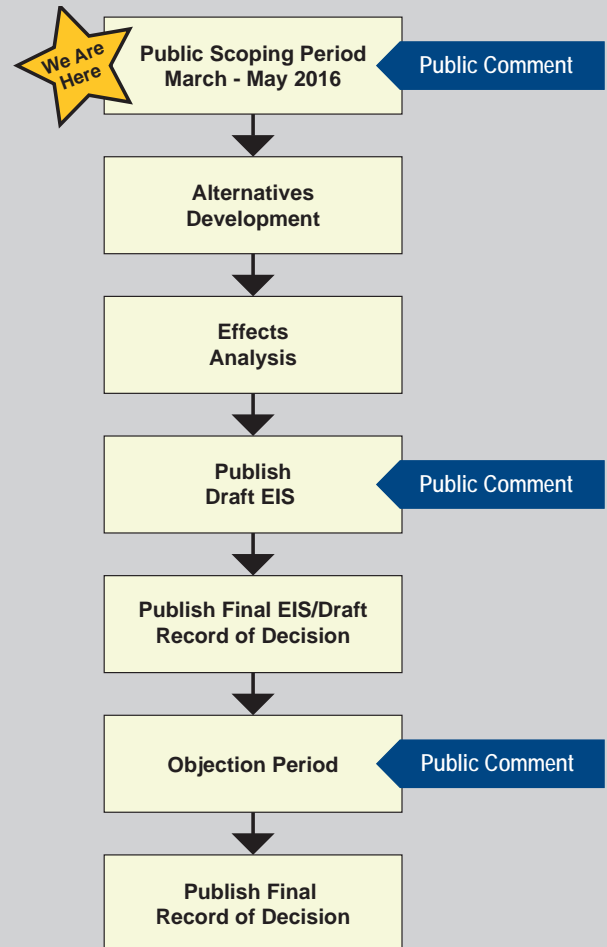
The Tonto National Forest (TNF) is preparing an environmental impact statement (EIS) to consider and disclose the environmental effects from: 1) approval of a proposed plan of operations for mining activities on National Forest land; 2) the exchange of land between Resolution Copper and the United States; and 3) any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

Resolution Copper submitted the General Plan of Operations (GPO) to the Forest Service in November 2013. The proposed GPO would authorize surface disturbance on Forest Service lands associated with development, mining, and processing of copper and molybdenum. In December 2014, Congress passed the Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2014 (NDAA). Section 3003 of this law authorizes and directs the Secretary of Agriculture to administer a land exchange, which will convey 2,422 acres of Forest Service land in the area of the proposed mine to Resolution Copper in exchange for 5,344 acres of private land on 8 parcels located elsewhere in eastern Arizona.

Approval of the proposed GPO would be a major federal action subject to the National Environmental Policy Act of 1969 (NEPA). Accordingly, the Forest Service will prepare an EIS to consider and publicly disclose the environmental effects of the proposed action. Section 3003 of the NDAA also requires the Secretary to prepare a single EIS prior to conveying the federal land, to be used as the basis for all decisions under federal law related to the proposed mine. The TNF is tasked with completion of the EIS.

The TNF is seeking comments from the public on the proposed project to help in determining the scope of the EIS environmental analysis. The Forest Service will use the public comments to identify significant issues for analysis and potential project alternatives. **The scoping comment period is from March 18, 2016 to May 17, 2016. Your comments will be most useful if received by the closing date of the scoping comment period.**

The NEPA Process



How to Submit Comments

Comments on the proposed project can be submitted in a variety of ways:

- Attend an open house public meeting
- Submit a comment at www.ResolutionMineEIS.us
- Email written comments to:
comments@ResolutionMineEIS.us
- Send written comments via postal mail to:
Resolution EIS Comments
P.O. Box 34468, Phoenix, AZ 85067-4468
- Send fax or voicemail to 866-546-5718

For More Information

Visit the website www.ResolutionMineEIS.us or call Mark Nelson, Tonto National Forest, 602-225-5222
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Proposed Action

The Mining Proposal

- Expected to take 10 years to construct, have a 40 year operational life, followed by 5-10 years of reclamation
- Expected to mine approximately 50 billion pounds of copper, from a deposit located 5,000 to 7,000 feet underground
- Ore would be removed using an underground mining technique known as panel caving. Access to the ore body would be from vertical shafts in an area known as the East Plant Site, near Oak Flat. The ground surface above the ore body is expected to subside or drop because of the underground mining.
- Crushed ore would be transported underground to an area known as the West Plant Site for processing. The West Plant Site is the location of the old Magma Mine in Superior.
- Once processed, copper concentrate would be pumped as a slurry about 22 miles to a filter/loadout facility. The slurry pipelines follow an existing right-of-way known as the Magma Arizona Railroad Company (MARRCO) corridor. The MARRCO corridor would also include: an upgraded rail line, new water pipelines, new utility lines, several intermediate pump stations, and an estimated 30 new groundwater wells. From the filter/loadout facility, copper concentrate would be sent to market using rail or trucks.
- Tailings—the waste material left over after processing--would be pumped as a slurry 4.7 miles from the West Plant Site to a tailings facility. The tailings facility would eventually occupy about 4,400 acres of Forest land.
- Power to the project would be supplied by Salt River Project. Large 230-kV powerlines would be located along new and existing rights-of-way
- Access to the mine would be provided by existing roads. Magma Mine Road would eventually be relocated due to expected subsidence.

The Land Exchange

Section 3003 of the NDAA authorizes the exchange of specified federal lands if Resolution Copper offers to convey to the United States the specified non-federal land. Resolution Copper has formally offered to do so. The following summarizes the land parcels that will be exchanged.

The 2,422-acre Oak Flat parcel will be transferred from the Department of Agriculture to Resolution Copper.

The following parcels will be transferred from Resolution Copper to the Department of Agriculture:

- 110 acres near Superior, Arizona, known as the Non-Federal Parcel-Apache Leap South End, to be administered by the TNF
- 148 acres in Yavapai County, Arizona, known as the Non-Federal Parcel-Tangle Creek, to be administered by the TNF
- 147 acres in Gila County, Arizona, known as the Non-Federal Parcel-Turkey Creek, to be administered by the TNF
- 149 acres near Cave Creek, Arizona, known as the Non-Federal Parcel-Cave Creek, to be administered by the TNF
- 640 acres north of Payson, Arizona, known as the Non-Federal Parcel-East Clear Creek, to be administered by the Coconino National Forest

The following parcels will be transferred from Resolution Copper to the Department of the Interior:

- 3,050 acres near Mammoth, Arizona, known as the Non-Federal Parcel-Lower San Pedro River, to be administered by the Bureau of Land Management (BLM) as part of the San Pedro Riparian National Conservation Area
- 940 acres south of Elgin, Arizona, known as the Non-Federal Parcel-Appleton Ranch, to be administered by the BLM as part of the Las Cienegas National Conservation Area
- 160 acres near Kearny, Arizona, known as the Non-Federal Parcel-Dripping Springs, to be administered by the BLM

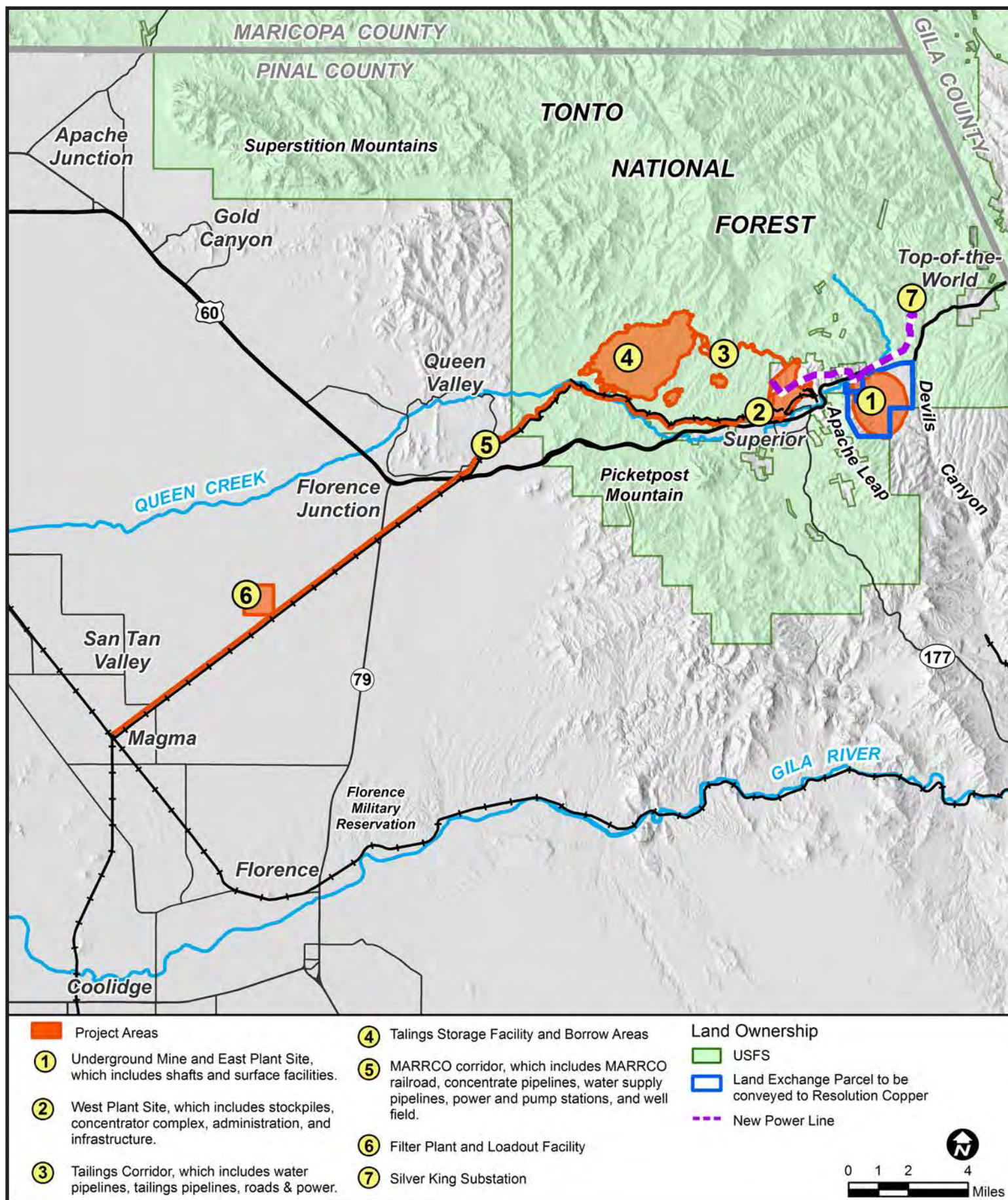
Also as a requirement of the NDAA, if requested by the Town of Superior, Arizona, the following land will be transferred from the TNF to the Town of Superior:

- 30 acres associated with the Fairview Cemetery
- 250 acres associated with parcels contiguous to the Superior Airport
- 265 acres of reversionary interest associated with the Superior Airport

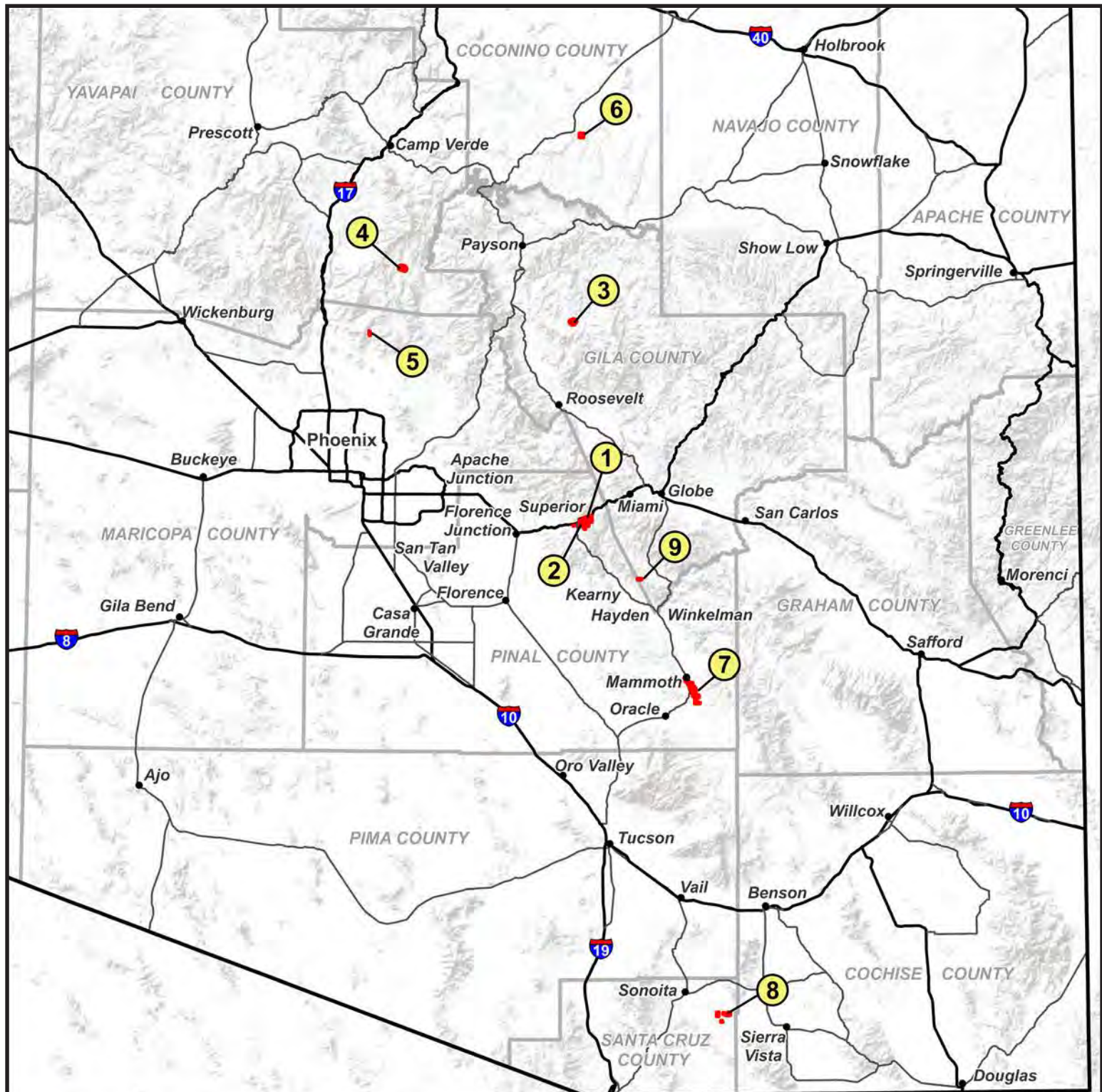
At this time, the Town of Superior has not requested this land transfer.

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Mining Proposal Components



Land Exchange Parcel Locations



Transfer From Federal Government to Resolution Copper

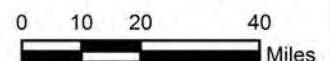
- ① Oak Flat (2,422 Acres)

Transfer From Resolution Copper to Forest Service

- ② Apache Leap South End (110 Acres)
- ③ Turkey Creek (147 Acres)
- ④ Tangle Creek (148 Acres)
- ⑤ Cave Creek (149 Acres)
- ⑥ East Clear Creek (640 Acres)

Transfer From Resolution Copper to Bureau of Land Management

- ⑦ Lower San Pedro River (3,050 Acres)
- ⑧ Appelton Ranch (940 Acres)
- ⑨ Dripping Springs (190 Acres)



Resolution Copper Project and Land Exchange Environmental Impact Statement

Frequently Asked Questions

What is the “Proposed Action” to be analyzed in the EIS?

The proposed action is to approve the proposed plan of operations as submitted by Resolution Copper Mining LLC (Resolution Copper) and to complete the land exchange as directed by Congress under Section 3003 of the National Defense Authorization Act. The EIS will analyze three components. 1) The EIS will analyze the effects of approval of the proposed plan of operations. The Forest Service is required by federal regulation to respond to the proposed plan of operations. 2) The EIS will analyze the effect of the exchange of lands between the federal government and Resolution Copper. 3) The EIS will analyze whether to amend the Tonto National Forest Land and Resource Management Plan to facilitate the proposed mining operations and the land exchange.

What led to the initiation of this land exchange?

In December, Congress passed the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA). Section 3003 of this law authorizes and directs the Secretary of Agriculture to administer a land exchange between Resolution Copper and the United States Forest Service, which will convey 2,422 acres of Forest Service land in the area of the proposed mine to Resolution Copper.

What would the federal government (taxpayers) get in return?

In exchange for transferring the Oak Flat parcel out of federal ownership, Resolution Copper will convey private land parcels to the Federal Government consisting of 5,344 acres of private land on 8 parcels located elsewhere in Arizona.

What will happen to Oak Flat Campground and Apache Leap?

The Oak Flat Campground will be conveyed to Resolution Copper during the land exchange. As a condition of conveyance of the Federal land, Resolution Copper must agree to provide access to the surface of Oak Flat Campground to members of the public, until such a time that operations of the mine preclude that access due to safety concerns. Apache Leap is not part of the area to be conveyed to Resolution Copper; rather, some private lands currently owned by Resolution Copper near Apache Leap would be conveyed to the Forest Service during the exchange. Apache Leap will be designated a Special Management Area, and will be managed to protect the cultural, archaeological, and historical resources found there.

How will the ore be mined?

The ore would be mined underground using a technique known as panel caving. With this technique, a series of horizontal tunnels would be constructed below the ore body. The process begins with an initial round of explosives at the bottom of the ore body to break up the rock. Then rock is funneled downward and removed. The void created in the removal process allows gravity to continue forcing the ore body downward. Automated loaders transfer the ore onto trains, where it is transported, crushed, and then conveyed to the surface for additional processing.

What is subsidence, and how much land subsidence is expected from this underground mine?

Subsidence is the gradual caving in or sinking of an area of land. In the context of underground mining, subsidence is the lowering of the Earth's surface due to collapse of bedrock and unconsolidated materials (sand, gravel, silt, and clay) into underground mined areas. Resolution Copper predicts that land subsidence is expected to occur directly above the underground mine, and is expected to begin occurring after approximately two years of operation. After 40 years of panel cave mining, the subsidence is estimated to be, on average, about 500 feet deep and reach a depth of 1,000 feet at its deepest point. The magnitude of subsidence and associated effects to the environment will be analyzed in the EIS.

Where will the tailings be placed, and how big will the tailings deposit be?

The quantity of tailings is estimated at 1.5 billion tons of rock crushed to a fine sand by the end of the life of the mine. Resolution has proposed construction of a 4,400 acre (6.8 sq. mile) tailings storage facility on national forest lands in an area located northwest of the town of Superior and east of the town of Queen Valley. The proposed tailings storage facility would range in height between 300 and 500 feet. The proposed tailings storage facility location, design, and configuration will be evaluated in the EIS, and alternatives will be developed and assessed.

Why can't the mine tailings replace the ore when it is removed?

This is a question that will be analyzed in the EIS process.

Why can't the mine tailings be placed where the land subsides from the mining operation?

This is a question that will be analyzed in the EIS process.

How will the copper be transported to market?

After crushing underground, the crushed ore would be transported to processing facilities located in Superior. The processing facilities would produce both copper and molybdenum concentrate. The molybdenum concentrate would be trucked directly to market from the processing facilities. The copper concentrate would be pumped as a slurry approximately 22 miles southwest to a loadout/filter facility. Once filtered, the concentrate would be sent to market via truck or rail.



If you would like to comment or be added to our mailing list, please fill out this form and submit it into the box provided or mail it to the address on the reverse side. Please submit your comments by **May 17, 2016**. You are also welcome to comment online at **www.ResolutionMineEIS.us**. Thank you!

[illegible]

ADDRESS: _____

PLEASE ADD ME TO THE MAILING LIST (circle one): **YES** **NO**

Comments sought by the Tonto National Forest include specific comments to the proposed action, appropriate information that could be pertinent to analysis of environmental effects, identification of significant issues, and identification of potential alternatives. Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the agency with the ability to provide the respondent with subsequent environmental documents.

Only those individuals who provide timely and specific written comments will have eligibility to file an objection (36 CFR 218.5) under 36 CFR 218.8. For objection eligibility, each individual or representative from each entity submitting timely and specific comments must either sign the comment or verify identity upon request. Issues raised in an objection must be based upon previously submitted timely, specific written comments regarding the proposed action unless based on new information arising after the designated comment opportunities.

**Resolution EIS Comment
P.O. Box 34468
Phoenix, AZ 85067-4468**

Fold Here and Tape Closed

Make Your Comments Count!

To be most useful, comments should be clear, concise, specific, and focused on the issues that you would like addressed in the EIS. We are also interested in any suggestions for alternatives that you have to the mining proposal.

Comments that are solution-oriented and provide specificity are of much greater help to the agency than those that simply oppose or advocate a course of action. Numerous comments that repeat the same basic message will typically be responded to collectively. General comments that state an action will have impacts will not help the agency identify issues unless the relevant causes and environmental effects are explained.

There are multiple ways to comment. Comment forms are available, but not required. Send comments by mail, email (comments@ResolutionMineEIS.us), website (www.ResolutionMineEIS.us), fax or voicemail (866-546-5718), or hand-deliver to the Forest Service before the public scoping period ends on May 17, 2016.

Although there are many ways to comment, you only need to provide your comment once for it to receive full consideration.



United States Department of Agriculture
Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Welcome

to the Resolution Copper Project and Land Exchange
Environmental Impact Statement scoping meeting

Please Sign In Here

MEETING AGENDA

5:00 – 5:30 Sign-in and Orientation

5:30 – 6:00 Forest Service Presentation

6:00 – 6:45 Question & Answer

6:45 – 8:00 Open House

Resolution Copper Project and Land Exchange Environmental Impact Statement

Project Overview

The Environmental Impact Statement (EIS) will disclose effects and analyze two components:

Mining Proposal

Resolution Copper Mining (LLC) has proposed construction of a large scale mine on a mixture of Forest Service, private, and state lands. In November 2013, Resolution requested Forest Service approval to conduct mining operations on Forest Service land.

The Tonto National Forest is required to respond to Resolution's proposal.

Land Exchange

In December 2014, Congress directed the Forest Service to exchange 2,422 acres of public land (known as the Oak Flat parcel) with Resolution in return for 5,344 acres of private land in Arizona.



PROPOSED LARGE SCALE MINE

- Expected to mine over 50 billion pounds of copper from a deposit located 5,000 to 7,000 feet underground.
- Ore would be removed using an underground mining technique known as panel caving, which would create subsidence of the land surface at the Oak Flat parcel.
- Expected to take 10 years to construct, have a 40-year operational life, followed by 5-10 years of reclamation.
- Mining would take place on lands that would become private after the land exchange is complete.
- Disposal of tailings (pulverized rock left over after ore processing) and construction of other mine facilities are proposed for National Forest lands.



Resolution Copper Project and Land Exchange Environmental Impact Statement

National Environmental Policy Act of 1969 (NEPA)

NEPA requires federal agencies to assess how proposed actions may impact the environment. Using the NEPA process, agencies evaluate the **environmental and related social and economic impacts** of their proposed actions.

What is an EIS?

An Environmental Impact Statement (EIS) is a document, prepared in accordance with NEPA, that discloses environmental impacts of a proposed action.

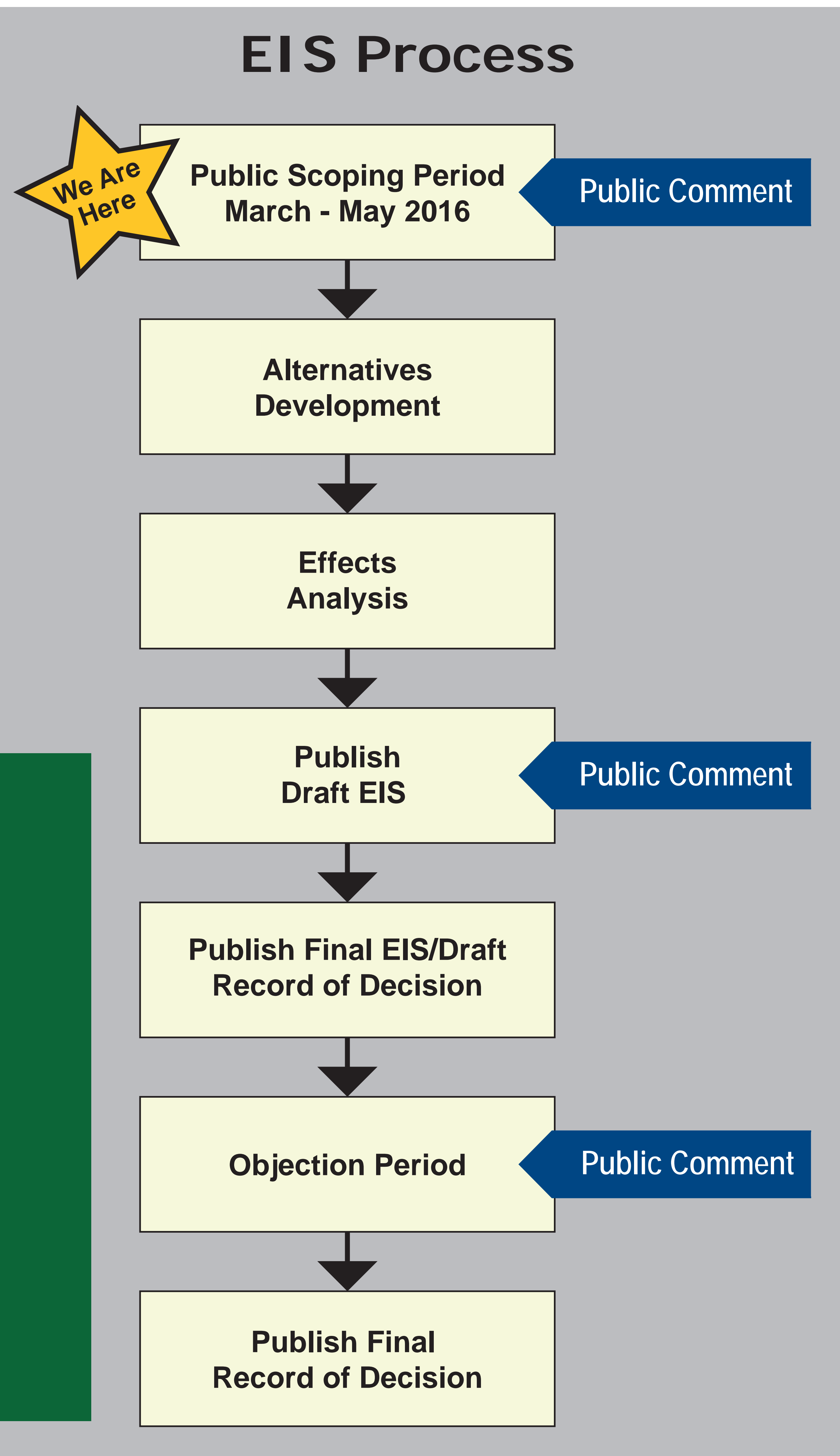
The Tonto National Forest is preparing an EIS to evaluate the Resolution Copper Project and Land Exchange.

What is Scoping?

Public scoping is the beginning of the EIS process. We are here to answer questions about the project and solicit public comments. Please provide specific comments, information that could be pertinent to analysis of environmental effects, or suggestions for potential alternatives.

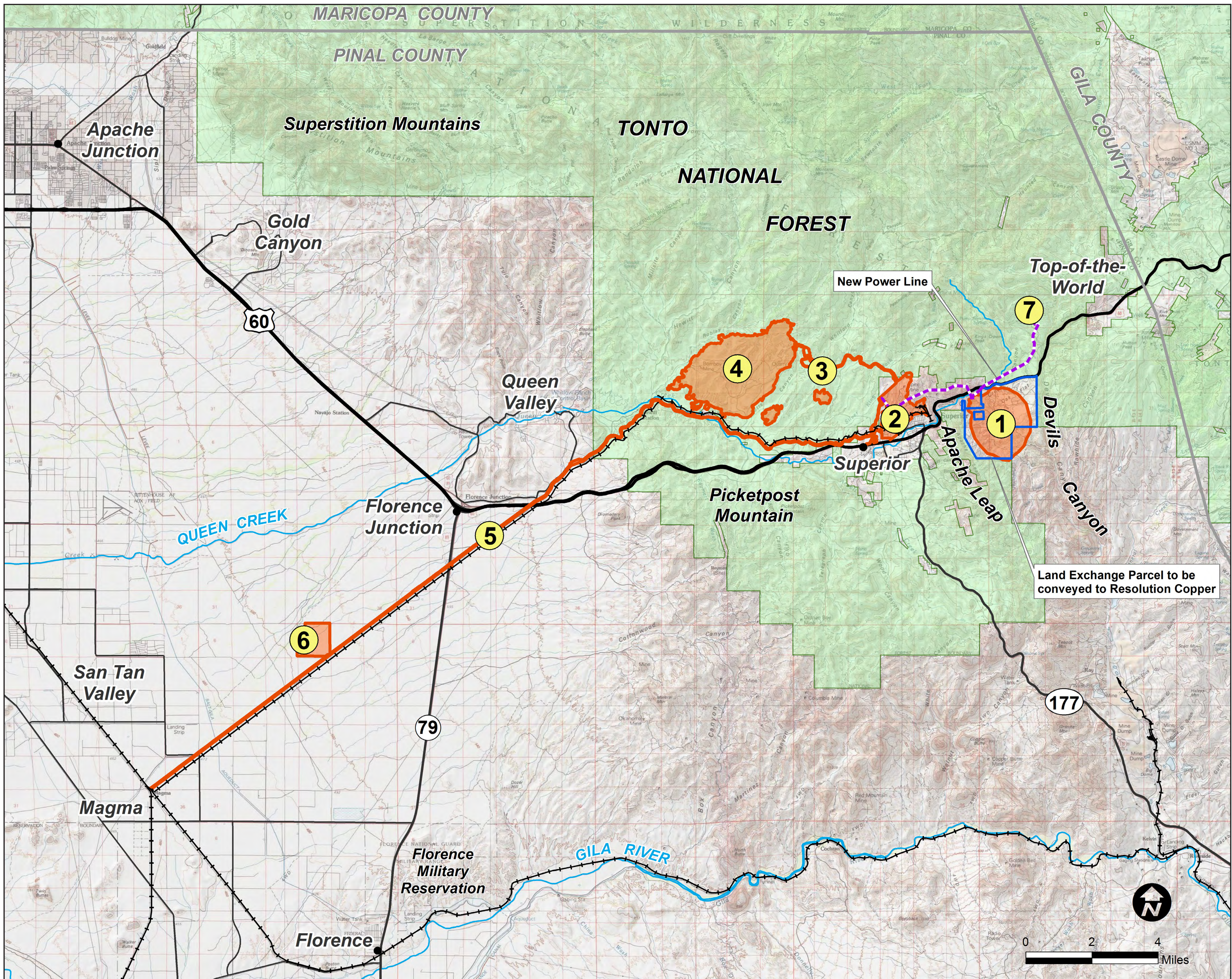
Public involvement is a fundamental part of NEPA and development of an EIS. Public input helps federal agencies make well-informed decisions on proposed actions.

The Tonto National Forest will work to engage the public throughout the EIS process.

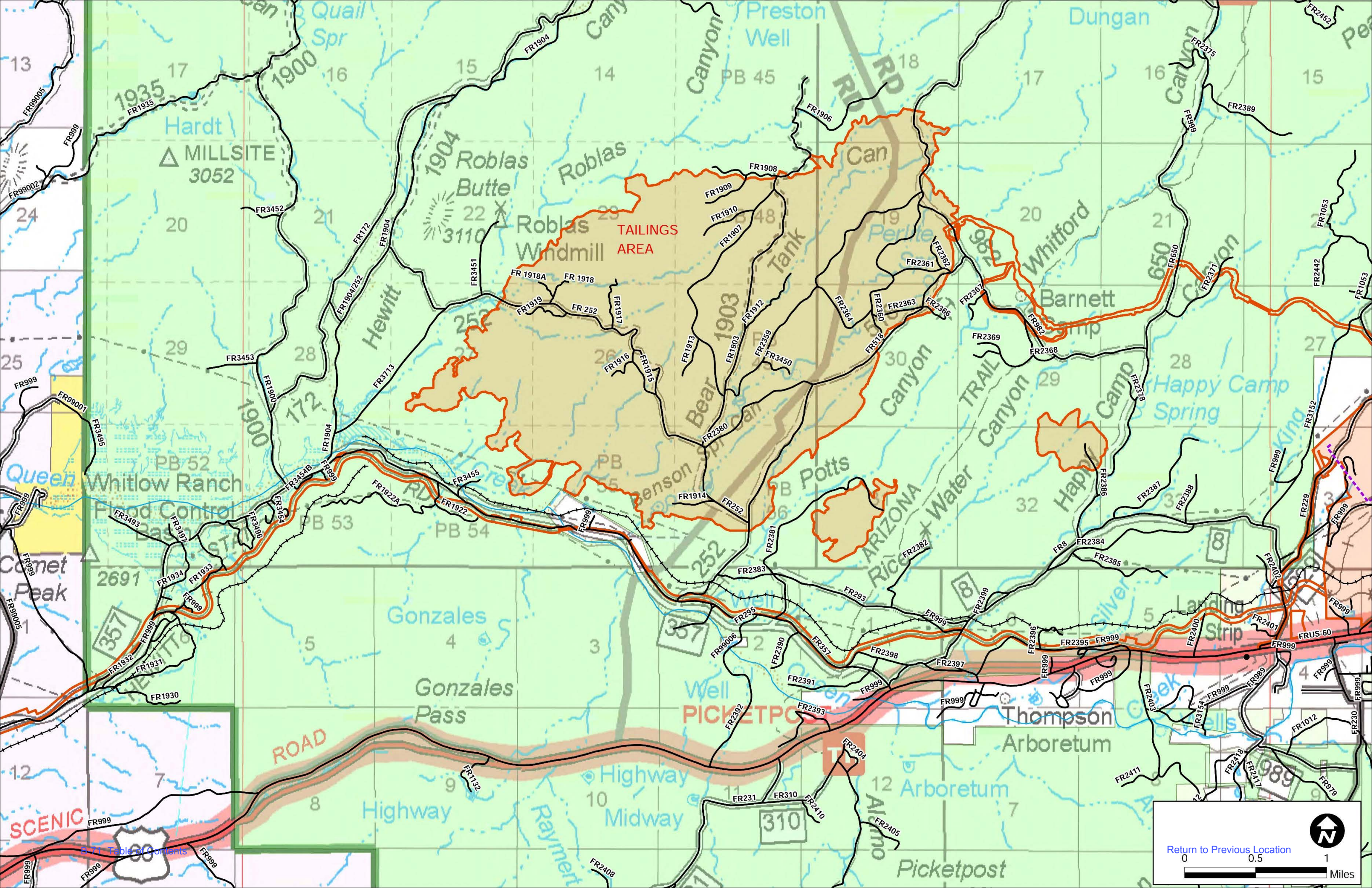


Resolution Copper Project and Land Exchange Environmental Impact Statement

Proposed Mining Operations

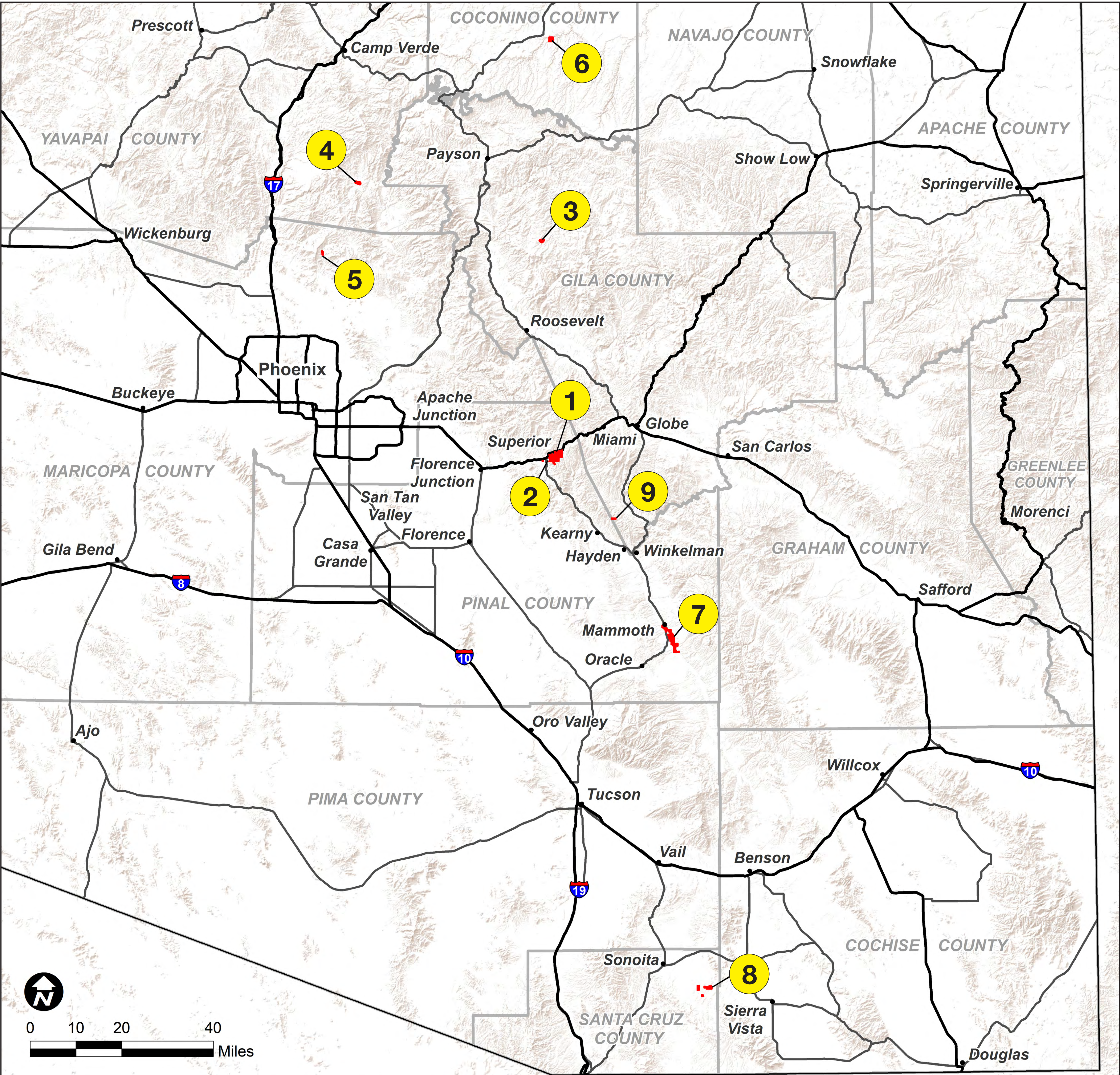


- 1** Removal of ore at underground mine and East Plant Site. Initial access provided by existing roads. Magma Mine Road would eventually be relocated due to expected subsidence.
- 2** Crushed ore delivered underground to West Plant Site and processed using flotation
- 3** A pipeline would be used to pump tailings 4.7 miles to the tailings facility.
- 4** Tailings facility would eventually occupy about 4,400 acres of Forest Service land.
Copper concentrate would be pumped as a slurry about 22 miles to a filter/loadout facility. The slurry pipelines would lie along existing right-of-way known as the Magma Arizona Railroad Company (MARRCO) corridor.
- 5** The MARRCO corridor would also include: an upgraded rail line, new water pipelines, new utility lines, several intermediate pump stations, and an estimated 30 new groundwater recovery wells.
- 6** From filter/loadout facility, copper concentrate would be sent to market using rail or trucks. Molybdenum concentrate trucked to market directly from the West Plant Site.
- 7** Power to the project would be supplied by Salt River Project. New 230-kV power lines would be located along new and existing rights-of-way.



Resolution Copper Project and Land Exchange
Environmental Impact Statement

Land Exchange



Transfer From Federal Government to Resolution Copper

- 1 Oak Flat (2,422 Acres)

Transfer From Resolution Copper to Forest Service

- 2 Apache Leap South End (110 Acres)
3 Turkey Creek (147 Acres)
4 Tangle Creek (148 Acres)
5 Cave Creek (149 Acres)
6 East Clear Creek (640 Acres)

Transfer From Resolution Copper to Bureau of Land Management

- 7 Lower San Pedro River (3,050 Acres)
8 Appleton Ranch (940 Acres)
9 Dripping Springs (160 Acres)

Resolution Copper Project and Land Exchange Environmental Impact Statement

Land Exchange Overview

Transfer from federal government to Resolution Copper Mining, LLC

1 Oak Flat Parcel: 2,422 acres



Oak Flat Parcel



Oak Flat Parcel



Oak Flat Campground

Transfer from Resolution Copper Mining, LLC to Bureau of Land Management

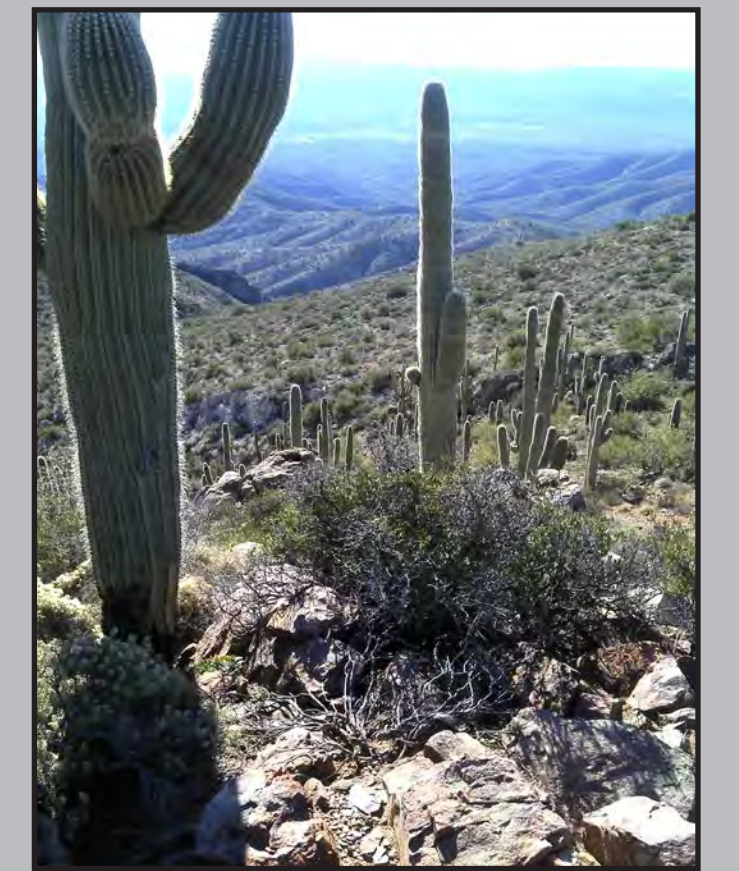
7 Lower San Pedro River 3,050 acres



8 Appleton Ranch 940 acres



9 Dripping Springs 160 acres

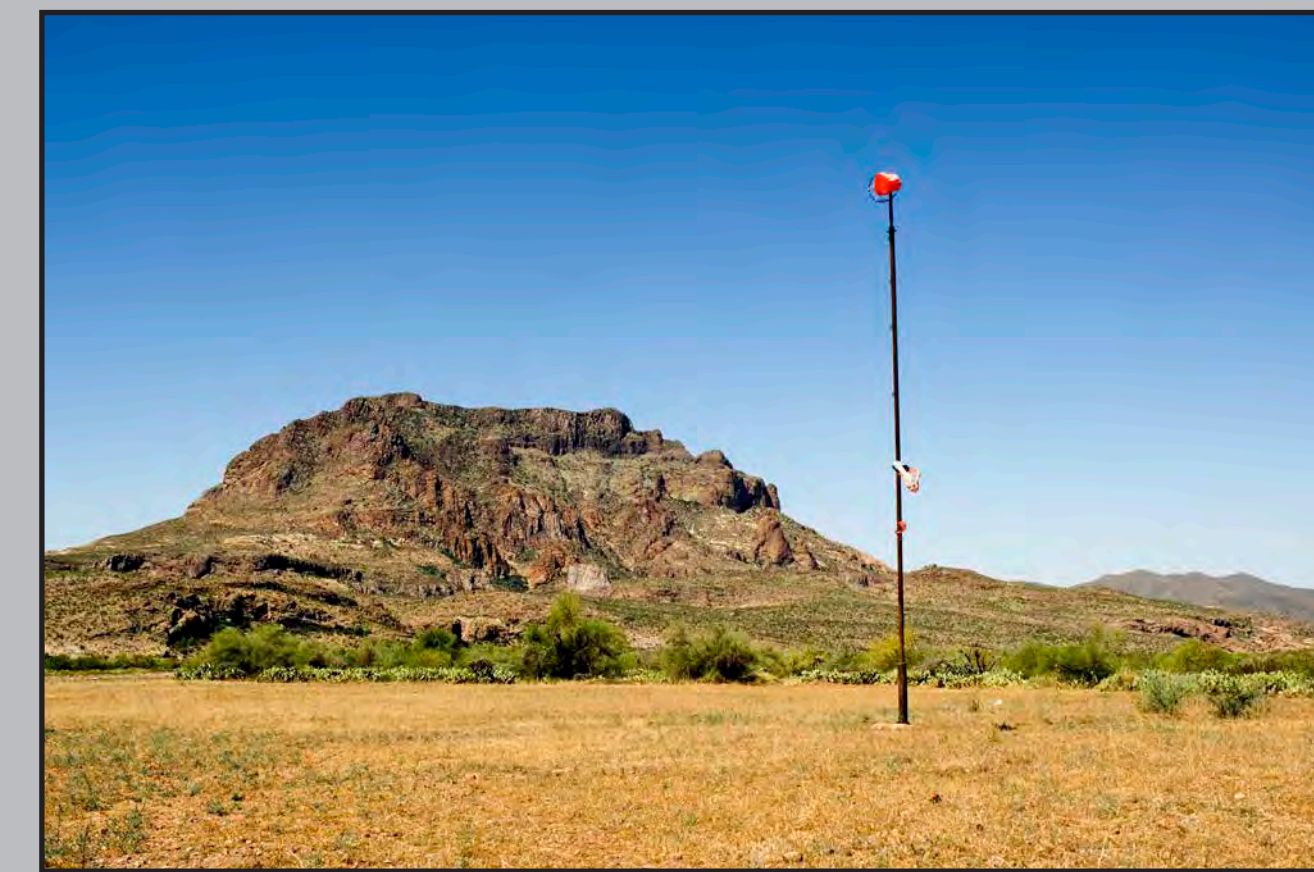


Transfer from United States to Town of Superior (if requested)

Fairview Cemetery 30 acres



Parcels Near Superior Airport 250 acres

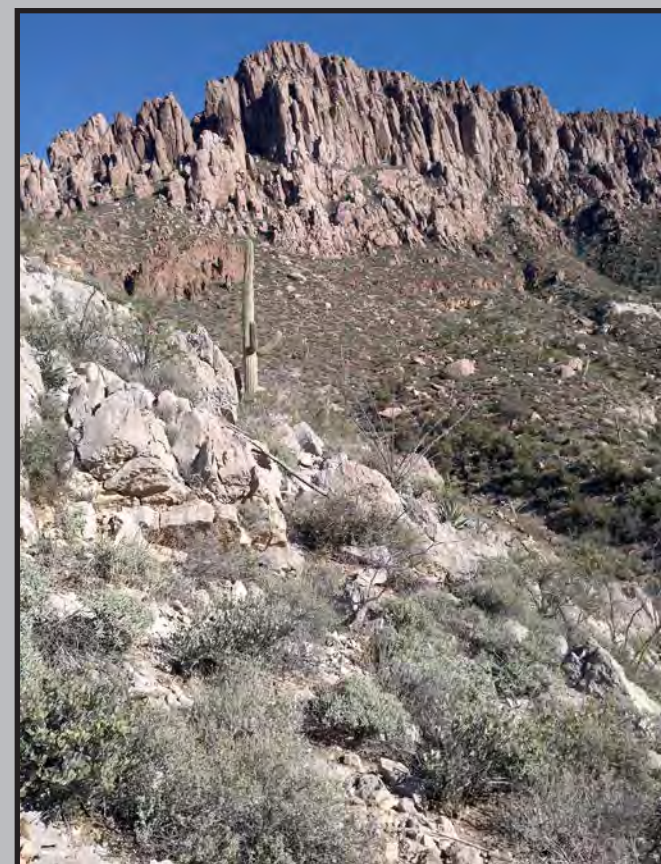


Superior Airport Reversionary Interest, 265 acres



Transfer from Resolution Copper Mining, LLC to Forest Service

2 Apache Leap South End 110 acres



3 Turkey Creek 147 acres



4 Tangle Creek 148 acres



5 Cave Creek 149 acres



6 East Clear Creek 640 acres



Resolution Copper Project and Land Exchange Environmental Impact Statement

Example Issue Statements

As part of scoping, we need your input
on important issues to be analyzed

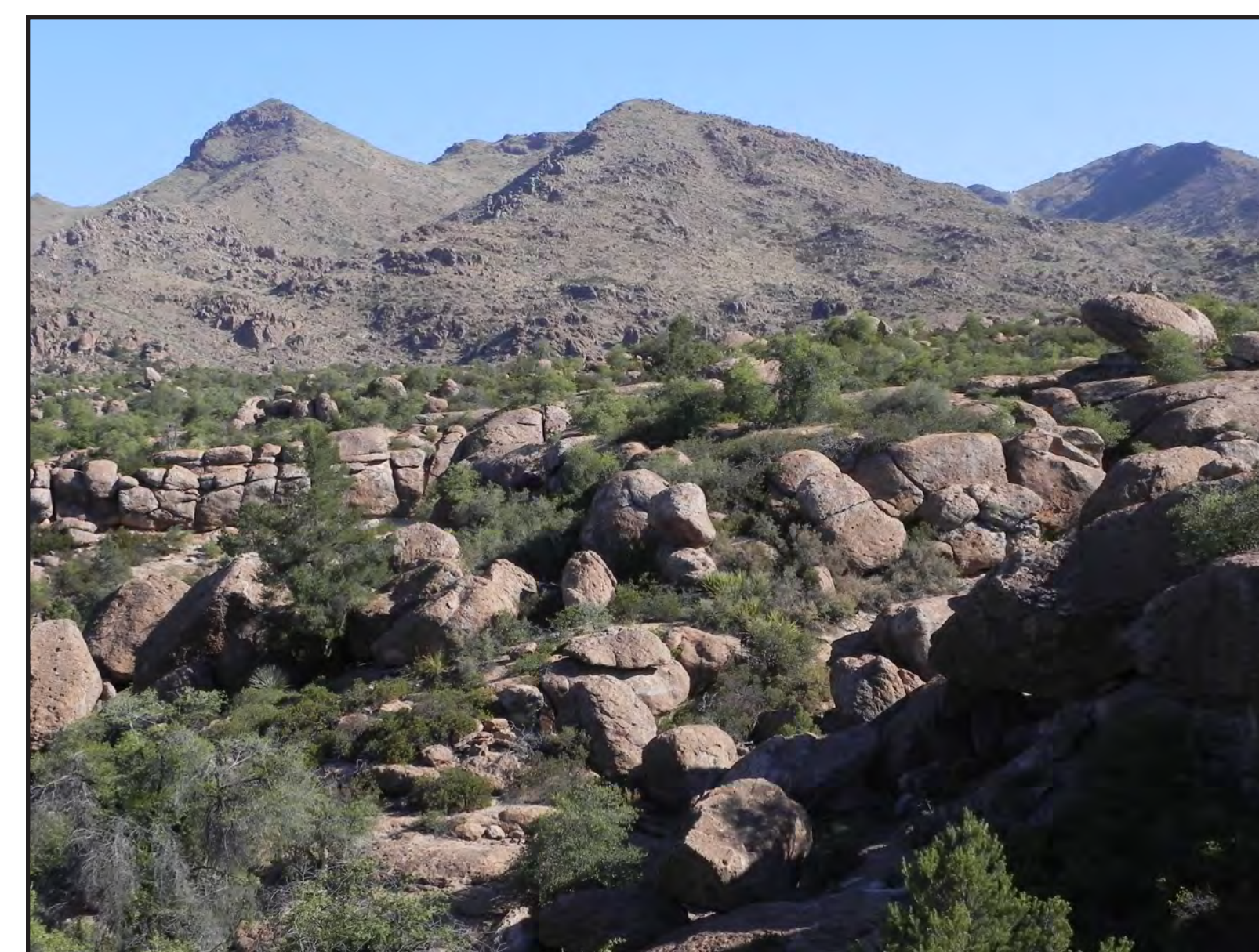
What issues concern you?

How will the mine affect **threatened, endangered, and sensitive species**?



Arizona Hedgehog Cactus

How will the mine and the land exchange affect **cultural resources**, and the newly designated **Chi'chil Bildagoteel (Oak Flat) Historic District**?



Oak Flat

How will the mine and land exchange affect **sites sacred to Native Americans**?

How will the mine operations affect **air quality and visibility**?

How much **employment and tax revenue** will result from the mine?

What will happen to **property values**?

How will the mine and land exchange affect **OHV use, recreation, and wilderness areas**?



Apache Leap

*Please provide written comments about
specific issues that concern you*

**Resolution Copper Project and Land Exchange
Environmental Impact Statement**

Example Issue Statements: **Water**

Water resources could be affected by the mine in a variety of ways. Groundwater is currently being pumped to dewater the mine, and additional water supplies would be needed for ore processing. Changes to groundwater levels can potentially affect sensitive surface resources like springs and perennial streams. Runoff could be diverted by changes to the topography, such as around the area of subsidence and the tailings facility, which could change the amount of water reaching downstream drainages. The water quality of groundwater and surface water could be affected by mine drainage or seepage from the tailings facility.



Devils Canyon



Resolution Mine Infrastructure near Oak Flat

How will dewatering for mining affect the groundwater aquifer?

Will dewatering or surface diversions affect riparian areas along Devil's Canyon, Queen Creek, Gila River, or other drainages?

Will mining affect groundwater quality? Will seepage from the tailings facility impact downstream waters or residential wells?

Will runoff from tailings or the mine site be contaminated?

Where will the mine water supply come from?

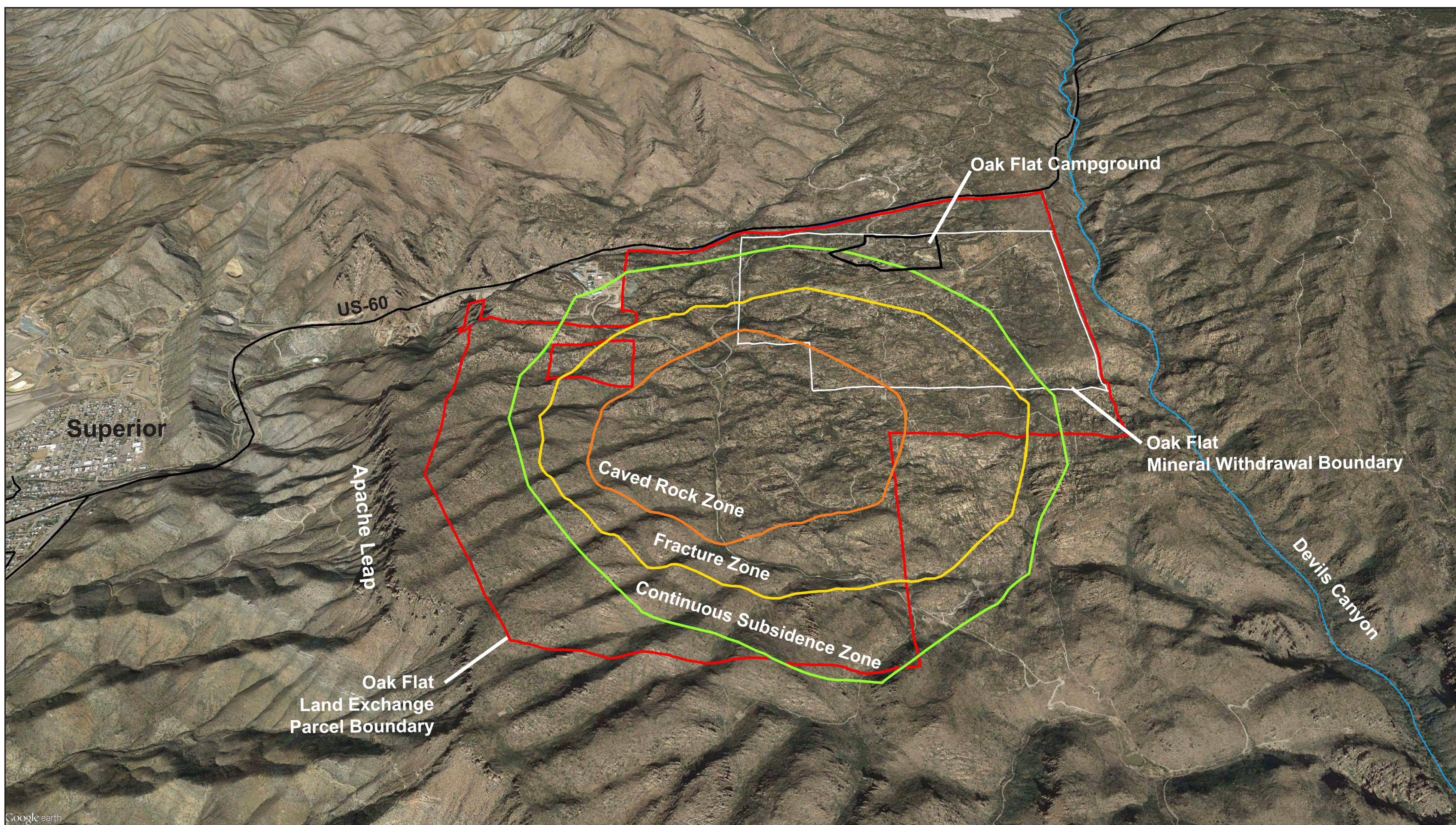
Will the mine affect seeps and springs? Will other livestock water sources be affected?

***Please provide written comments about
specific issues that concern you***

**Resolution Copper Project and Land Exchange
Environmental Impact Statement**

Example Issue Statements: **Subsidence**

Underground mining can result in what's known as subsidence. Resolution Copper proposes to gradually remove ore approximately 5,000 to 7,000 feet below the surface, which will leave a void. Slowly, the earth and rock overhead will collapse downwards to fill that void. Eventually the ground surface itself will sink downwards. Resolution Copper predicts that over a period of about 40 years, a subsidence crater up to 1,000 feet deep could develop where Oak Flat is today.



How wide and deep would the subsidence crater be?

How fast would the subsidence happen?

Can other mining technologies be used that would prevent subsidence from occurring?

Will subsidence affect Apache Leap?

***Please provide written comments about
specific issues that concern you***



United States Department of Agriculture
Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Public Comment

Please provide scoping comments!

The scoping comment period is from March 18, 2016 to May 17, 2016.*
Your comments will be most useful if received by the closing date of the scoping comment period.

*** The comment period has been extended through July 18, 2016.**

- Fill out the **comment form** provided and drop in box or mail in at a later date
- Provide a **verbal comment tonight** with the court reporter
- Send email to: **comments@ResolutionMineEIS.us**
- Send voicemail or fax to: **1-866-546-5718**
- Fill out comment form on website: **www.ResolutionMineEIS.us**
- Send mail to : Resolution EIS Comments
P.O. Box 34468
Phoenix, AZ 85067-4468

For Further Information:

Tonto National Forest Supervisor's Office
2324 E. McDowell Rd. Phoenix, Arizona 85006
(602) 225-5200
Project Manager: Mark Nelson

<http://www.fs.usda.gov/tonto/>
<http://www.ResolutionMineEIS.us/>

APPENDIX C

Announcements

included for the convenience of the State agencies because the poverty guidelines for Alaska and Hawaii are higher than for the 48 contiguous States.

Authority: 42 U.S.C. 1786.

Dated: March 14, 2016.

Audrey Rowe,

Administrator, Food and Nutrition Service.

[FR Doc. 2016-06222 Filed 3-17-16; 8:45 am]

BILLING CODE 3410-30-P

DEPARTMENT OF AGRICULTURE

Forest Service

Newspapers for Publication of Legal Notices in the Northern Region

AGENCY: Forest Service, USDA.

ACTION: Notice.

SUMMARY: This notice lists the newspapers that will be used by all Ranger Districts, Forests, Grasslands, and the Regional Office of the Northern Region to publish legal notices for public comment and decisions subject to predecisional administrative review under 36 CFR parts 218 and 219. The intended effect of this action is to inform interested members of the public which newspapers will be used to publish legal notices for public comment or decisions; thereby allowing them to receive constructive notice of a decision, to provide clear evidence of timely notice, and to achieve consistency in administering the objection processes.

DATES: Publication of legal notices in the listed newspapers will begin with decisions subject to administrative review that are made the first day following the date of this publication. The list of newspapers will remain in effect until another notice is published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: Regional Administrative Review Coordinator; Northern Region; P.O. Box 7669; Missoula, Montana 59807. Phone: (406) 329-3381.

SUPPLEMENTARY INFORMATION: The newspapers to be used are as follows:
Northern Region Regional Forester Decisions for:

Montana: The Missoulian, Great Falls Tribune, and The Billings Gazette;
Northern Idaho and Eastern Washington: Coeur d'Alene Press and Lewiston Tribune; North Dakota and South Dakota: Bismarck Tribune.

Northern Region Forest Supervisor and District Ranger Decisions for:
Beaverhead/Deerlodge National Forest (NF)—Montana Standard
Bitterroot NF—Ravalli Republic

Custer NF—Billings Gazette (Montana);
Rapid City Journal (South Dakota)
Dakota Prairie Grasslands—Bismarck Tribune (North and South Dakota)
Flathead NF—Daily Inter Lake
Gallatin NF—Bozeman Chronicle
Helena NF—Helena Independent Record

Idaho Panhandle NFs—Coeur d'Alene Press

Kootenai NF—Missoulian (Note this change as it was previously the Daily Inter Lake)

Lewis & Clark NF—Helena Independent Record

Lolo NF—Missoulian

Nez Perce-Clearwater NFs—Lewiston Tribune

Supplemental notices may be placed in any newspaper, but timeframes/deadlines will be calculated based upon notices in newspapers of record listed above.

Dated: March 11, 2016.

Leanne M. Marten,

Regional Forester.

[FR Doc. 2016-06140 Filed 3-17-16; 8:45 am]

BILLING CODE 3411-15-P

DEPARTMENT OF AGRICULTURE

Forest Service

Tonto National Forest; Pinal County, AZ; Resolution Copper Project and Land Exchange Environmental Impact Statement

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an Environmental Impact Statement for approval of a plan of operations for the Resolution Copper Project and associated land exchange; request for comments; and notice of public scoping.

SUMMARY: The Tonto National Forest (TNF) is preparing an Environmental Impact Statement (EIS) to evaluate and disclose the potential environmental effects from: (1) Approval of the "General Plan of Operations" (GPO) submitted by Resolution Copper Mining, LLC (Resolution Copper), for operations on National Forest System (NFS) land associated with a proposed large-scale mine; (2) the exchange of land between Resolution Copper and the United States; and (3) amendments to the Tonto National Forest Land and Resource Management Plan (forest plan) (1985, as amended).

DATES: Comments concerning the scope of the analysis must be received by May 17, 2016.

ADDRESSES: Send written comments to: Resolution EIS Comments, P.O. Box

34468, Phoenix, AZ 85067-4468.

Comments may also be sent via email to: Comments@resolutionmineeis.us, submitted via Web site at www.resolutionmineeis.us, or submitted by leaving a verbal message at 1-866-546-5718. Additional information regarding submittal of comments is provided below in the Scoping section. Written and oral comments may also be submitted during open houses that will be held by the U.S. Forest Service (Forest Service), as follows:

1. March 31, 2016, 5:00-8:00 p.m.
Queen Valley Recreation Hall, 1478 East Queen Valley Drive, Queen Valley, Arizona.

2. April 4, 2016, 5:00-8:00 p.m.
Superior High School, Multi-purpose room, 100 Mary Drive, Superior, Arizona.

3. April 5, 2016, 5:00-8:00 p.m. Elks Lodge, 1775 East Maple Street, Globe, Arizona.

4. April 6, 2016, 5:00-8:00 p.m.
Southwest Regional Library, 775 North Greenfield Road, Gilbert, Arizona.

FOR FURTHER INFORMATION CONTACT: Mark Nelson, Project Manager, at 602-225-5222 or mrnelson@fs.fed.us during normal business hours.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Purpose and Need for Action

The project is located in the Globe and Mesa Ranger Districts, Tonto National Forest, Arizona. The TNF is evaluating the proposed action at this time to comply with its statutory and regulatory obligations to respond to a proposed plan of operations submitted by Resolution Copper and to comply with Section 3003 of the Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA).

The purpose and need for this project is twofold:

1. To consider approval of the proposed GPO submitted by Resolution Copper, which would govern surface disturbance on NFS lands from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.

2. To exchange lands between Resolution Copper and the United States as directed by Section 3003 the NDAA.

Resolution Copper submitted the proposed GPO for approval by the Forest Service in November 2013. The

proposed GPO was submitted in accordance with Forest Service regulations for locatable minerals set forth at 36 Code of Federal Regulations (CFR) 228 Subpart A. The Forest Service must: (1) Evaluate the proposed GPO; (2) consider requirements set forth at 36 CFR 228.8, including those to minimize adverse effects to the extent feasible, comply with applicable laws, regulations, and standards for environmental protection, and provide for reclamation; and (3) respond to the proposal as set forth at 36 CFR 228.5(a). Approval of the proposed GPO would be a major federal action subject to the National Environmental Policy Act of 1969 (NEPA). Accordingly, the Forest Service must also prepare an EIS to consider and publicly disclose the potential environmental effects of the proposed action.

The NDAA was enacted in December 2014. Section 3003 of this law directs the Secretary of Agriculture (Secretary) to exchange certain NFS land in the area of the proposed mine with Resolution Copper in exchange for private land parcels located throughout eastern Arizona. Section 3003 of the NDAA also requires the Secretary to prepare an EIS prior to conveying the federal land, which shall be used as the basis for all decisions under federal law related to the proposed mine, the GPO, and any related major federal actions. The Forest Service, an agency within the U.S. Department of Agriculture, is the lead agency tasked with completion of the EIS, because the Forest Service has management responsibility for the federal land that will be conveyed to Resolution Copper and for the federal land that would be affected by the proposed GPO.

Proposed Action

The proposed action is to approve the proposed GPO as submitted by Resolution Copper and to complete the land exchange as directed by Congress under Section 3003 of the NDAA. As proposed in the GPO, the Resolution Copper mine would affect federal, state, and private lands. The proposed action by the Forest Service would only approve mining operations on NFS lands, because the Forest Service does not have jurisdiction to regulate mining operations that occur on private or state land. However, the EIS will consider and disclose environmental effects that would occur on federal, private, and state lands associated with the proposed mine and the land exchange. Connected actions related to the GPO and amendment of the forest plan will also be analyzed. Impacts of reasonably foreseeable actions in the project area

will be considered in combination with the impacts of the project to estimate the potential cumulative impacts of project implementation.

Substantial mining activities described in the GPO would affect a 2,422-acre parcel of land known generally as the "Oak Flat" parcel. Section 3003 of the NDAA directs the conveyance of the Oak Flat parcel to Resolution Copper. In exchange for the Oak Flat parcel, Resolution Copper would transfer eight parcels located throughout Arizona, totaling 5,344 acres, to the United States. The Forest Service will not regulate mining activities on the Oak Flat parcel, which is to be conveyed to Resolution Copper, because it will be private land. The Forest Service will need to approve a plan of operations only for related operations that are proposed on NFS land outside of the Oak Flat parcel. The following sections provide additional information regarding the proposed mining operations and the land exchange.

Proposed Mining Operations

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 operation would include, but is not limited to, the following facilities and activities, which would be conducted on a mixture of NFS, private, and state lands:

- The mining itself would take place under the Oak Flat parcel.
- An area known as the East Plant Site would be developed adjacent to the Oak Flat parcel. This area would include mine shafts and a variety of surface facilities to support mining operations. This area currently contains two operating mine shafts, a mine administration building, and other mining infrastructure. Portions of the East Plant site would be located on NFS lands, and would be subject to Forest Service regulatory jurisdiction.
- Mined ore would be crushed underground and then transported underground approximately 2.5 miles west to an area known as the West Plant Site, where ore would be processed to produce copper and molybdenum concentrates. Portions of the West Plant site would be located on NFS lands, and would be

subject to Forest Service regulatory jurisdiction.

- The copper concentrate would be pumped as a slurry through a 22-mile pipeline to a filter plant and loadout facility located near Florence Junction, Arizona, where copper concentrate would be filtered and then sent to off-site smelters via rail cars or trucks. The molybdenum concentrate would be filtered, dried, and sent to market via truck directly from the West Plant Site.
 - The copper concentrate slurry pipeline would be located along an existing, previously disturbed right-of-way known as the Magma Arizona Railroad Company (MARRCO) corridor. The MARRCO corridor would also host other mine infrastructure, including, but not limited to, water pipelines, power lines, pump stations, and groundwater wells for recovery of banked Central Arizona Project water. A portion of the MARRCO corridor is located on NFS lands and would be subject to Forest Service regulatory jurisdiction.
 - Tailings produced at the West Plant Site would be pumped as a slurry through several pipelines for 4.7 miles to a tailings storage facility. The tailings storage facility would gradually expand over time, eventually reaching about 4,400 acres in size. The proposed tailings storage facility is located on NFS lands and would be subject to Forest Service regulatory jurisdiction.
 - All power to the mine would be supplied by the Salt River Project. Portions of the proposed electrical infrastructure would be located on NFS land and would be subject to Forest Service regulatory jurisdiction. A Forest Service special use permit would be required to approve construction and operation of new power lines on NFS lands by the Salt River Project.
 - Reclamation would be conducted to achieve postclosure land use objectives, including closing and sealing the mine shafts, removing surface facilities and infrastructure, and establishing self-sustaining vegetative communities using local species. The proposed tailings storage facility would be reclaimed in place, providing for permanent storage of mine tailings.
- An initial review of the consistency of the proposed GPO with the forest plan indicates that approval of the proposed GPO would result in conditions that are inconsistent with the forest plan. An amendment to the forest plan is proposed that may address objectives,

standards, and guidelines relating to recreation, vegetation, cultural resource management, visual quality, and wildlife.

Land Exchange

Section 3003 of the NDAA directs the conveyance of specified federal lands to Resolution Copper if Resolution Copper offers to convey the specified non-federal land to the United States, which Resolution Copper has done. The following paragraphs summarize the land parcels that will be exchanged.

The 2,422-acre Oak Flat parcel will be transferred by the United States to Resolution Copper.

The following parcels will be transferred from Resolution Copper to the United States, to be included in the NFS:

- 10 acres near Superior in Pinal County, Arizona, known as the Non-Federal Parcel—Apache Leap South End, to be administered by the TNF
- 148 acres in Yavapai County, Arizona, known as the Non-Federal Parcel—Tangle Creek, to be administered by the TNF
- 147 acres in Gila County, Arizona, known as the Non-Federal Parcel—Turkey Creek, to be administered by the TNF
- 149 acres near Cave Creek in Maricopa County, Arizona, known as the Non-Federal Parcel—Cave Creek, to be administered by the TNF
- 640 acres north of Payson in Coconino County, Arizona, known as the Non-Federal Parcel—East Clear Creek, to be administered by the Coconino National Forest

The following parcels will be transferred from Resolution Copper to the U.S. Department of the Interior:

- 3,050 acres near Mammoth in Pinal County, Arizona, known as the Non-Federal Parcel—Lower San Pedro River, to be administered by the Bureau of Land Management (BLM) as part of the San Pedro Riparian National Conservation Area
- 940 acres south of Elgin in Santa Cruz County, Arizona, known as the Non-Federal Parcel—Appleton Ranch, to be administered by the BLM as part of the Las Cienegas National Conservation Area
- 160 acres near Kearny in Gila and Pinal Counties, Arizona, known as the Non-Federal Parcel—Dripping Springs, to be administered by the BLM

Also as a requirement of the NDAA, if requested by the Town of Superior, Arizona, the following land will be transferred from the United States to the Town of Superior:

- 30 acres associated with the Fairview Cemetery
- 250 acres associated with parcels contiguous to the Superior Airport
- 265 acres of federal reversionary interest associated with the Superior Airport

As of February 2016, the Town of Superior has not requested this land transfer.

Possible Alternatives

The EIS will analyze the no action alternative, which would neither approve the proposed GPO nor complete the land exchange. However, the responsible official does not have discretion to select the no action alternative, because it would not be consistent with the requirements of 36 CFR 228.5, nor would it comply with the NDAA. Further information regarding the nature of the decision to be made is presented in a following section.

Additional alternatives may be evaluated in the EIS. These alternatives may require changes to the proposed GPO, which are necessary to meet Forest Service regulations for locatable minerals set forth at 36 CFR 228 Subpart A.

Lead and Cooperating Agencies

The Forest Service will be the lead agency preparing the EIS. Cooperating agencies have not yet been identified.

Responsible Official

The Forest Supervisor of the TNF will be the responsible official who prepares the record of decision (ROD), approves the GPO, and administers the land exchange.

Nature of Decision To Be Made

The TNF Supervisor will consider the beneficial and adverse impacts of each alternative. With respect to the proposed GPO, the TNF Forest Supervisor has discretion to determine whether changes in the proposed GPO will be required prior to approval. With respect to the land exchange, the TNF Forest Supervisor has limited discretion to make decisions that are consistent with Section 3003 of the NDAA. The nature of the decision to be made is discussed further in the following sections.

General Plan of Operations

Using the analysis in the EIS and supporting documentation, the TNF Forest Supervisor will make the following decisions regarding the proposed GPO:

1. Decide whether to approve the proposed GPO submitted by Resolution

Copper, or require changes or additions to the proposed GPO to meet the requirements for environmental protection and reclamation set forth at 36 CFR Subpart A before approving a final GPO. The Forest Service decision may be to approve a plan of operations composed of elements from one or more of the alternatives considered. The alternative that is selected for approval in the final GPO must minimize adverse impacts on NFS surface resources to the extent feasible.

2. Decide whether to approve amendments to the forest plan, which would be required to approve the final GPO.

3. Decide whether to approve a special use permit for the Salt River Project to authorize construction and operation of power lines on NFS lands.

Regulations of the Secretary of Agriculture that govern the use of surface resources in conjunction with mining operations on NFS lands are set forth under 36 CFR 228 Subpart A. These regulations require that the Forest Service respond to parties who submit proposed mining plans for approval to conduct mining operations on or otherwise use NFS lands in conjunction with mining for part or all of their planned actions. In accordance with regulations at 36 CFR 228.5, the submittal of the proposed GPO by Resolution Copper requires the Forest Service to consider whether to approve the proposed GPO or to require changes or additions deemed necessary to meet the requirements of the regulations for locatable mineral operations set forth in 36 CFR Subpart A. The Forest Service cannot categorically prohibit mining operations that are reasonably incident to mining of locatable minerals on NFS lands in the area of the proposed action.

Land Exchange

Congress has directed the Forest Service to complete the land exchange contemplated by Section 3003 of the NDAA. This act directs the Secretary to convey to Resolution Copper all right, title, and interest of the United States in and to identified federal land if Resolution Copper offers to convey to the United States all right, title, and interest of Resolution Copper in and to identified non-federal lands. With respect to the land exchange, the Forest Supervisor has limited discretion to: (1) Address concerns of affected Indian Tribes; (2) insure that title to the non-federal lands offered in the exchange is acceptable; (3) accept additional non-federal land or a cash payment from Resolution Copper to the United States in the event that the final appraised value of the federal land exceeds the

value of the non-federal land; or (4) other matters related to the land exchange that are consistent with Section 3003 of the NDAA.

Final EIS and Record of Decision

The Forest Supervisor plans to release two draft RODs in conjunction with the final EIS. The first draft ROD would address the land exchange and the second draft ROD would address the GPO. Each draft decision would be subject to 36 CFR 218, "Project-Level Pre-decisional Administrative Review Process." Depending on the nature of the forest plan amendments required, the draft decisions may also be subject to 36 CFR 219 Subpart B, "Pre-decisional Administrative Review Process."

Following resolution of objections to the draft RODs, final RODs would be issued. Resolution Copper would have an opportunity to appeal the decisions as set forth at 36 CFR 214, "Postdecisional Administrative Review Process for Occupancy and Use of National Forest System Lands and Resources."

Prior to approval of the GPO, Resolution Copper may be required to modify the proposed GPO to align it with the description of the selected alternative in the final ROD. In addition, the TNF Forest Supervisor would require Resolution Copper to submit a reclamation bond or other financial assurance to ensure that NFS lands and resources involved with the mining operation are reclaimed in accordance with the approved GPO and Forest Service requirements for environmental protection (36 CFR 228.8 and 228.13). After the Forest Service has determined that the GPO conforms to the ROD and that the reclamation bond is acceptable, it would approve the GPO.

Implementation of mining operations that affect NFS lands and resources may not commence until a plan of operations is approved and the reclamation bond or other financial assurance is in place.

Section 3003 of the NDAA requires the Secretary to convey all right, title, and interest of the United States in and to the federal land to Resolution Copper no later than 60 days after the date of publication of the final EIS.

Preliminary Issues

Issues to be analyzed in the EIS will be developed during this scoping process. Preliminary issues expected to be analyzed include potential impacts to: Air quality, socioeconomic; groundwater and surface water quality; riparian and aquatic areas and springs; surface water runoff; ground subsidence; historical and cultural

resources; traditional cultural properties and cultural landscapes; biological resources, including threatened and endangered species; environmental justice; recreation; transportation; noise; and visual resources. This list is subject to change based on comments received from the public and resource agencies.

Permits or Licenses Required

The following is a partial list of additional permits that may be required: Permits associated with well drilling and groundwater withdrawal (Arizona Department of Water Resources); air permits (Arizona Department of Environmental Quality and Pinal County); aquifer protection permit (Arizona Department of Environmental Quality); right-of-way permit for new 50-foot powerline right-of-way (Arizona State Land Department); Certificate of Environmental Compatibility for new power lines (Arizona Corporation Commission Power Plant and Line Siting Committee); Arizona Pollutant Discharge Elimination System permit (Arizona Department of Environmental Quality); dam safety permits (Arizona Department of Water Resources); water quality certification under Section 401 of the Clean Water Act (issued by the Arizona Department of Environmental Quality); and a permit under Section 404 of the Clean Water Act (administered by the U.S. Army Corps of Engineers).

Scoping Process

This notice of intent initiates the scoping (public involvement) process, which guides the development of the EIS. Public comments may be submitted to the TNF in a variety of ways, including: via email, via the project Web site, by mail, via facsimile, and verbally by leaving a phone message. In addition, the TNF will conduct a minimum of four open houses during which members of the public can learn about the proposed action and the NEPA review process, and submit comments. Comments sought by the TNF include specific comments to the proposed action, appropriate information that could be pertinent to analysis of environmental effects, identification of significant issues, and identification of potential alternatives.

Written comments may be sent to: Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468. Comments may also be sent via email to: Comments@resolutionmineeis.us, submitted via Web site at www.resolutionmineeis.us, sent via facsimile to 1-866-546-5718, or submitted by leaving a verbal message at 1-866-546-5718.

It is important that reviewers provide their comments at such times and in a manner in which they are useful to the agency's preparation of the EIS. Although comments are welcome at any time during the NEPA review, they will be most useful to us if they are received within 60 days following the publication of this notice. Comments should clearly articulate the reviewer's concerns. Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the agency with the ability to provide the respondent with subsequent environmental documents.

Dated: March 9, 2016.

Neil Bosworth,

Forest Supervisor.

[FR Doc. 2016-05781 Filed 3-17-16; 8:45 am]

BILLING CODE 3411-15-P

COMMISSION ON CIVIL RIGHTS

Advisory Committees Expiration

AGENCY: United States Commission on Civil Rights.

ACTION: Solicitation of applications.

SUMMARY: Because the terms of the members of the Missouri Advisory Committee are expiring on July 24, 2016, the United States Commission on Civil Rights hereby invites any individual who is eligible to be appointed to apply. The memberships are exclusively for the Missouri Advisory Committee, and applicants must be residents of Missouri to be considered. Letters of interest must be received by the Central Regional Office of the U.S. Commission on Civil Rights no later than May 24, 2016. Letters of interest must be sent to the address listed below.

Because the terms of the members of the North Carolina Advisory Committee are expiring on July 24, 2016, the United States Commission on Civil Rights hereby invites any individual who is eligible to be appointed to apply. The memberships are exclusively for the North Carolina Advisory Committee, and applicants must be residents of the North Carolina to be considered. Letters of interest must be received by the Southern Regional Office of the U.S. Commission on Civil Rights no later than May 24, 2016. Letters of interest must be sent to the address listed below.

Because the terms of the members of the Arizona Advisory Committee are

Rule). Therefore, the Secretary of Agriculture is seeking nominations for individuals to be considered as Committee members. The public is invited to submit nominations for membership. Committee information can be found at the following Web site: <http://www.fs.usda.gov/main/planningrule/committee>.

DATES: Written nominations must be received by July 11, 2016. The package must be sent to the address below.

ADDRESSES: Send nominations and applications to USDA Forest Service, NFS—Ecosystem Management Coordination, Mail Stop 1106, 201 14th Street Southwest, Mailstop 1106, Washington, DC 20025; by express mail or overnight courier service. If sent via the U.S. Postal Service, they must be sent to the following address: U.S. Department of Agriculture, Forest Service, Ecosystem Management Coordination, 1400 Independence Avenue Southwest, Mailstop 1106, Washington, DC 20250–1106.

FOR FURTHER INFORMATION CONTACT: Chris French, Designated Federal Officer, by telephone at 202–205–0895 or via email at cfrench@fs.fed.us; or Jennifer Helwig, Committee Coordinator, by phone at 202–205–0892 or via email at jahelwig@fs.fed.us.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Background

The purpose of the Committee is to provide advice and recommendations on implementation of the Planning Rule. To date, the current Committee officially transmitted their recommendations to improve the transition process for Forest Service leadership and planning teams; recommendations to produce a Planning 101 video; and recommendations for the development of assessments. The current Committee's membership will expire in September 2016. The Committee will be asked to perform the following duties or other requests made by the Secretary of Agriculture or the Chief of the Forest Service:

1. Offer recommendations on outreach efforts, public engagement, and stakeholder collaboration;
2. Offer recommendations on broad scale and multiparty monitoring and other ways to engage partnerships in land management plan revisions;

3. Offer recommendations on communication tools and strategies to help provide greater understanding of the land management planning process; and

4. Offer recommendations on potential best management practices and problem solving resulting from early implementation of the 2012 Planning Rule.

Advisory Committee Organization

This Committee will be comprised of not more than 21 members who provide balanced and broad representation within each of the following three categories of interests:

1. Up to 7 members who represent one or more of the following:
 - a. Represent the Affected Public-At-Large,
 - b. Hold State-Elected Office (or designee),
 - c. Hold County or Local-Elected Office,
 - d. Represent American Indian Tribes, and
 - e. Represent Youth.
2. Up to 7 members who represent one or more of the following:
 - a. National, Regional, or Local Environmental Organizations,
 - b. Conservation Organizations or Watershed Associations,
 - c. Dispersed Recreation Interests,
 - d. Archaeological or Historical interests, and
 - e. Scientific Community.
3. Up to 7 members who represent one or more of the following:
 - a. Timber Industry,
 - b. Grazing or Other Land Use Permit Holders or Other Private Forest Landowners,
 - c. Energy and Mineral Development,
 - d. Commercial or Recreational Hunting and Fishing Interests, and
 - e. Developed Outdoor Recreation, Off-Highway Vehicle Users, or Commercial Recreation Interests.

The Committee will meet three to six times annually or as often as necessary and at such times as designated by the Designated Federal Officer.

The appointment of members to the Committee will be made by the Secretary of Agriculture. Any individual or organization may nominate one or more qualified persons to serve on the Committee. Individuals may also nominate themselves. To be considered for membership, nominees must submit a:

1. Resume describing qualifications for membership to the Committee;
2. Cover letter with a rationale for serving on the Committee and what you can contribute; and

3. Complete form AD–755: Advisory Committee Membership Background Information.

Letters of recommendation are welcome. The form AD–755 may be obtained from the following Web site: <http://www.fs.usda.gov/main/planningrule/committee>; or via email from Jennifer Helwig at jahelwig@fs.fed.us. All nominations will be vetted by USDA. The Secretary of Agriculture will appoint committee members to the Committee from the list of qualified applicants.

Members of the Committee will serve taken into account the needs of the diverse groups served by USDA, membership shall include to the extent possible, individuals with demonstrated ability to represent minorities, women, and persons with disabilities.

Dated: May 12, 2015.

Gregory L. Parham,

Assistant Secretary for Administration.

[FR Doc. 2016–12313 Filed 5–24–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Forest Service

Tonto National Forest; Pinal County, AZ; Resolution Copper Project and Land Exchange Environmental Impact Statement

AGENCY: Forest Service, USDA.

ACTION: Notice of Extension of Public Scoping Period for the Resolution Copper Project and Land Exchange Environmental Impact Statement.

SUMMARY: The Tonto National Forest (TNF) is extending the public scoping period for the Resolution Copper Project and Land Exchange environmental impact statement (EIS). The TNF previously published a notice of intent to prepare an EIS as well as a notice of public scoping in the **Federal Register** on March 18, 2016 [81 FR 14829]. The previous notice provided for public scoping through May 17, 2016.

DATES: Numerous individuals and several organizations requested an extension of the public scoping period, as well as additional public scoping meetings. The TNF Forest Supervisor has decided to accommodate these requests by extending the public scoping period through July 18, 2016 and holding one additional public scoping meeting on June 9, 2016. Comments concerning the scope of the analysis must be received by July 18, 2016.

ADDRESSES: Send written comments to: Resolution EIS Comments, P.O. Box

34468, Phoenix, AZ 85067-4468. Comments may also be sent via email to: Comments@resolutionmineeis.us, submitted via Web site at www.resolutionmineeis.us, or submitted by leaving a verbal message at 1-866-546-5718.

Written and oral comments may also be submitted during the additional public scoping meeting, which will be held at the Central Arizona College San Tan Campus 3736 E. Bella Vista Rd., San Tan Valley, AZ 85143. The public scoping meeting will be held on June 9, 2016 at 5:00–8:00 p.m.

FOR FURTHER INFORMATION CONTACT: Mark Nelson, Project Manager, at 602-225-5222 or mrnelson@fs.fed.us during normal business hours.

SUPPLEMENTARY INFORMATION: Comments sought by the TNF include specific comments to the proposed action, appropriate information that could be pertinent to analysis of environmental effects, identification of significant issues, and identification of potential alternatives. It is important that reviewers provide their comments at such times and in a manner in which they are useful to the agency's preparation of the EIS. Although comments are welcome at any time during the NEPA review, they will be most useful to us if they are received by July 18, 2016. Comments should clearly articulate the reviewer's concerns. Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the agency with the ability to provide the respondent with subsequent environmental documents.

Dated: May 16, 2016.

Neil Bosworth,
Forest Supervisor.

[FR Doc. 2016-12334 Filed 5-24-16; 8:45 am]

BILLING CODE 3411-15-P

DEPARTMENT OF AGRICULTURE

Forest Service

Information Collection: Youth Conservation Corps Application and Medical History

AGENCY: Forest Service, USDA.

ACTION: Notice; request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, the Forest Service, U.S. Department of Agriculture; the Fish and Wildlife

Service and National Park Service, U.S. Department of Interior are seeking comments from all interested individuals and organizations on the extension with revision of a currently approved information collection, Youth Conservation Corps Application and Medical History.

DATES: Comments must be received in writing on or before July 25, 2016 to be assured of consideration. Comments received after that date will be considered to the extent practicable.

ADDRESSES: Comments concerning this notice should be addressed to Volunteers & Service Program Manager, USDA Forest Service, Recreation, Heritage, and Volunteer Resources, 201 14th Street NW., Mailstop 1125, Washington, DC 20024.

Comments also may be submitted via facsimile to 202-205-1145 or by email to: mmazyck@fs.fed.us.

The public may inspect comments received at USDA Forest Service, Washington Office, Sidney R. Yates Building during normal business hours. Visitors are encouraged to call ahead to 202-205-0650 to facilitate entry to the building.

FOR FURTHER INFORMATION CONTACT: Merlene Mazyck, Recreation, Heritage and Volunteer Resources staff, at 202-205-0650.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Relay Service (FRS) at 1-800-877-8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION:

Title: Youth Conservation Corps Application and Medical History.

OMB Number: 0596-0084.

Expiration Date of Approval: 07/31/2016.

Type of Request: Extension with revision.

Abstract: Under the Youth Conservation Corps Act of August 13, 1970, as amended (U.S. 18701-1706), the Forest Service, U.S. Department of Agriculture; the Fish and Wildlife Service, and National Park Service, U.S. Department of Interior cooperate to provide seasonal employment for eligible youth 15 through 18 years old. The Youth Conservation Corps achieves three important objectives:

1. Accomplish needed conservation work on public lands;
2. Provide gainful employment for 15 to 18 year old male and females from all social, economic, ethnic and racial backgrounds; and
3. Foster, on the part of the 15 through 18 year old youth, an understanding and

appreciation of the Nation's natural resources and heritage.

Youths seeking training and employment with the Youth Conservation Corps must complete the following form: FS-1800-18 Youth Conservation Corps Application. Youths who are selected for training and employment must also complete the FS-1800-3 Youth Conservation Corps Medical History. The applicant's parent or guardian must sign both forms. The application and medical history form are evaluated by participating agencies to determine the eligibility of each youth for employment with the Youth Conservation Corps.

FS-1800-18, Youth Conservation Corps (YCC) Application: Applicants are asked to answer questions that include their name, social security number, date of birth, age, mailing address, telephone numbers, email address, gender, educational background, desired work location, where they learned about the program, why they want to enroll in a YCC program, and whether they have worked with a group or team before and what they learned from that experience.

FS-1800-3, Youth Conservation Corps Medical History: Accepted applicants are asked to provide contact information, age and date of birth, gender, emergency contact information, parent or guardian's contact information and signature, medical insurance information, medical history including immunization history, and previous and current illnesses or conditions that may affect ability to perform certain tasks.

The purpose of this form is to certify the youth's physical fitness to work in the seasonal employment program.

Application

Estimate of Annual Burden: 23 minutes per form per respondent.

Type of Respondents: Youth 15 through 18 years old seeking seasonal employment with the above-named agencies, through the YCC program.

Estimated Annual Number of Respondents: 8,500.

Estimated Annual Number of Responses per Respondent: 1.

Estimated Total Annual Burden on Respondents: 3,255 hours.

Medical History Form

Estimate of Annual Burden: 23 minutes per form per respondent.

Type of Respondents: Youth 15 through 18 years old whom have been selected for employment with the above-named agencies, through the YCC program.

Estimated Annual Number of Respondents: 2,909.

REQUEST FOR COMMENTS AND NOTICE OF PUBLIC SCOPING ON RESOLUTION COPPER
PROJECT AND LAND EXCHANGE ENVIRONMENTAL IMPACT STATEMENT
U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, TONTO NATIONAL FOREST

The Tonto National Forest (TNF) is preparing an environmental impact statement (EIS) to evaluate and disclose the potential environmental effects from: (1) approval of a plan of operations submitted by Resolution Copper Mining, LLC (Resolution Copper), for mining operations on Forest Service lands associated with a proposed large-scale mine; (2) the exchange of land between Resolution Copper and the United States; and (3) amendments to the Tonto National Forest Land and Resource Management Plan.

Resolution Copper proposes mining and ore processing activities, which would take place near the town of Superior, Arizona on a mixture of private, state and Forest Service lands. Copper concentrate would be pumped approximately 22 miles southwest along an existing railroad corridor for additional processing near Magma, Arizona. Tailings disposal is proposed to take place approximately 5 miles northwest of Superior, on 4,400 acres of Forest Service land.

The congressionally authorized land exchange will transfer to Resolution Copper 2,422 acres of federal land around Oak Flat, located east of Superior. In return, Resolution Copper will transfer parcels of private land located throughout Arizona to the United States and, if requested, the town of Superior.

A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register and is available online at: <http://www.ResolutionMineEIS.us/>. The notice and supporting documentation is also available for review at the Tonto National Forest, 2324 East McDowell Road, Phoenix, AZ 85006.

Public open house meetings will be held as follows. Each meeting will take place from 5:00 to 8:00 p.m.; a presentation will take place at 5:30, followed by a brief question and answer period:

1. March 31, 5:00 – 8:00 p.m. Queen Valley Recreation Hall, 1478 East Queen Valley Drive, Queen Valley, Arizona.
2. April 4, 5:00 – 8:00 p.m. Superior High School, Multi-purpose room, 100 Mary Drive, Superior, Arizona.
3. April 5, 2016, 5:00 – 8:00 p.m. Elks Lodge, 1775 East Maple Street, Globe, Arizona.
4. April 6, 2016, 5:00 – 8:00 p.m. Southwest Regional Library, 775 North Greenfield Road, Gilbert, Arizona.

Additional information regarding the project can be obtained from Mark Nelson, Project Manager; (602) 225- 5222; mrNelson@fs.fed.us.

The proposed project is subject to the Project-Level Predecisional Administrative Review Process under Title 36 Code of Federal Regulations (CFR) Part 218, Subparts A and B.

How to Comment and Timeframe

Specific written comments (36 CFR Part 218.2) on the proposed project will be accepted for 60 calendar days following publication of the Notice of Intent to Prepare an Environmental Impact Statement in the Federal Register. If the comment period ends on a Saturday, Sunday, or Federal holiday, comments will be accepted until the end of the next Federal working day. The publication date in the Federal Register is the exclusive means for calculating the comment period. Those wishing to comment should not rely upon dates or timeframe information provided by any other source.

Comments should be within the scope of the proposed action, have a direct relationship to the proposed action, and must include supporting reasons for the Responsible Official to consider (36 CFR 218.2). If you are including references, citations, or additional information to be considered for this project, please provide a copy, specify exactly how the material relates to the project, and also indicate the part of the material (page or figure numbers) you would like us to consider.

Specific written comments may be submitted via mail to Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468, by fax to 866-546-5718, or in person (Monday through Friday, 8:00 am to 4:30 pm, excluding holidays) to: Mr. Neil Bosworth, Forest Supervisor, Tonto National Forest, 2324 East McDowell Road, Phoenix, AZ 85006. Verbal comments may be provided via voicemail at 866-546-5718, or in person at one of the public meetings. Electronic comments including attachments may be submitted by email in word (.doc), rich text format (.rtf), text (.txt), and hypertext markup language (.html) to comments@ResolutionMineEIS.us. Electronic comments may also be submitted via the project website (www.ResolutionMineEIS.us/comments).

Only individuals or entities (as defined by 36 CFR Part 218.2) who submit timely and specific written comments (as defined by 36 CFR Part 218.2) about this proposed project or activity during this or another public comment period established by the Responsible Official will be eligible to file an objection. Other requirements to be eligible to submit an objection are defined by 36 CFR Part 218.25 (a)(3) and include name, postal address, title of the project and signature or other verification of identity upon request and the identity of the individual or entity who authored the comments. Individual members of an entity must submit their own individual comments in order to have eligibility to object as an individual. A timely submission will be determined as outlined in 36 CFR Part 218.25 (a)(4). It is the responsibility of the sender to ensure timely receipt of any comments submitted. Comments received in response to this notice, including names and addresses of those who comment will be considered part of the public record for this project and will be available for public inspection and will be released if requested under the Freedom of Information Act.

The U.S. Department of Agriculture (USDA) is an equal opportunity provider and employer.

REQUEST FOR COMMENTS AND NOTICE OF PUBLIC SCOPING PERIOD EXTENSION ON RESOLUTION COPPER PROJECT AND LAND EXCHANGE ENVIRONMENTAL IMPACT STATEMENT

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, TONTO NATIONAL FOREST

The Tonto National Forest (TNF) is preparing an environmental impact statement (EIS) to evaluate and disclose the potential environmental effects from: (1) approval of a plan of operations submitted by Resolution Copper Mining, LLC (Resolution Copper), for mining operations on Forest Service lands associated with a proposed large-scale mine; (2) the exchange of land between Resolution Copper and the United States; and (3) amendments to the Tonto National Forest Land and Resource Management Plan.

A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register on March 18, 2016 and is available online at: <http://www.ResolutionMineEIS.us/>. The notice and supporting documentation is also available for review at the Tonto National Forest, 2324 East McDowell Road, Phoenix, AZ 85006. Based on requests from individuals and organizations for a scoping period extension and additional meetings, the TNF Forest Supervisor has decided to accommodate these requests by extending the public scoping period through July 18, 2016 and holding one additional public scoping meeting on June 9, 2016. Comments concerning the scope of the analysis must be received by July 18, 2016.

One additional public open house meeting will be held as follows:

- June 9, 2016, 5:00 – 8:00 p.m. Central Arizona College San Tan Campus, 3736 E. Bella Vista Rd., San Tan Valley, AZ 85143. The meeting will take place from 5:00 to 8:00 p.m.; a presentation will take place at 5:30, followed by a brief question and answer period

Additional information regarding the project can be obtained from Mark Nelson, Project Manager; (602) 225-5222; mrnelson@fs.fed.us.

The proposed project is subject to the Project-Level Predecisional Administrative Review Process under Title 36 Code of Federal Regulations (CFR) Part 218, Subparts A and B.

How to Comment and Timeframe

Specific written comments (36 CFR Part 218.2) on the proposed project will be accepted until July 18, 2016. Comments should be within the scope of the proposed action, have a direct relationship to the proposed action, and must include supporting reasons for the Responsible Official to consider (36 CFR 218.2). If you are including references, citations, or additional information to be considered for this project, please provide a copy, specify exactly how the material relates to the project, and also indicate the part of the material (page and/or figure numbers) you would like us to consider.

Specific written comments may be submitted via mail to Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468, by fax to 866-546-5718, or in person (Monday through Friday, 8:00 am to 4:30 pm, excluding holidays) to: Mr. Neil Bosworth, Forest Supervisor, Tonto National Forest, 2324 East McDowell Road, Phoenix, AZ 85006. Verbal comments may be provided via voicemail at 866-546-5718, or in person at one of the public meetings. Electronic comments including attachments may be submitted by email in Word (.doc or .docx), rich text format (.rtf), text (.txt), and hypertext markup language (.html) to comments@ResolutionMineEIS.us. Electronic comments may also be submitted via the project website (www.ResolutionMineEIS.us/comments).

Only individuals or entities (as defined by 36 CFR Part 218.2) who submit timely and specific written comments (as defined by 36 CFR Part 218.2) about this proposed project or activity during this or another public comment period established by the Responsible Official will be eligible to file an objection. Other requirements to be eligible to submit an objection are defined by 36 CFR Part 218.25 (a)(3) and include name, postal address, title of the project and signature or other verification of identity upon request and the identity of the individual or entity who authored the comments. Individual members of an entity must submit their own individual comments in order to have eligibility to object as an individual. A timely submission will be determined as outlined in 36 CFR Part 218.25 (a)(4). It is the responsibility of the sender to ensure timely receipt of any comments submitted. Comments received in response to this notice, including names and addresses of those who comment will be considered part of the public record for this project and will be available for public inspection and will be released if requested under the Freedom of Information Act.

The U.S. Department of Agriculture (USDA) is an equal opportunity provider, employer, and lender.

SOLICITUD DE COMENTARIOS Y AVISO DE EXTENSIÓN DEL PERÍODO DE INVESTIGACIÓN SOBRE LA DECLARACIÓN DE IMPACTO AMBIENTAL DEL PROYECTO DE COBRE RESOLUTION E INTERCAMBIO DE TERRENO

DEPARTAMENTO DE AGRICULTURA DEL U.S., SERVICIO FORESTAL, BOSQUE NACIONAL TONTO

El Bosque Nacional Tonto (TNF) está preparando una declaración sobre el impacto ambiental (EIS) para evaluar y revelar los posibles efectos ambientales de: (1) aprobación de un plan de operaciones presentado por el Resolution Copper Mining LLC (Resolution Copper), para operaciones mineras en terrenos del Servicio Forestal asociado con una propuesta mina a gran escala; (2) el intercambio de terreno entre Resolution Copper y los Estados Unidos; y (3) enmiendas al Plan de Manejo de Recursos y del Terreno del Bosque Nacional Tonto.

Un Aviso de Intención de Preparar una Declaración de Impacto Ambiental fue publicado en el Registro Federal en el 18 de marzo, 2016 y está disponible en el internet en: <http://www.ResolutionMineEIS.us/> El aviso y la documentación que aporta apoyo también está disponible para repaso en el Tonto National Forest, 2324 East McDowell Road, Phoenix, AZ 85006. Basado en las solicitudes hechas por individuos y organizaciones de una extensión del período de investigación y reuniones adicionales, el Supervisor de Bosque TNF ha decidido hacer los ajustes con el fin de satisfacer las solicitudes de extender el período de investigación pública hasta el 18 de julio, 2016 y de celebrar una reunión adicional de investigación pública el 9 de junio, 2016. Comentarios tocante el ámbito del análisis deberán ser recibidos antes del 18 de julio, 2016.

Se celebrará una reunión adicional pública a puertas abiertas como sigue:

- 9 de junio, 2016, 5:00 – 8:00 P.M. Central Arizona College, San Tan Campus, 3736 E. Bella Vista Rd., San Tan Valley, AZ 85143. Se celebrará la reunión de 5:00 a 8:00 P.M., se hará una presentación a las 5:30, seguido por un prevé período de preguntas y respuestas.

Podrá obtenerse información adicional sobre el proyecto de Mark Nelson, Director del Proyecto; (602) 225-5222; mrNelson@fs.fed.us

El proyecto propuesto está sujeto al Proceso Administrativo de Revisión Pre Decisión a Nivel de Proyectos bajo Título 36 del Código de Regulaciones Federales (CFR) Parte 218, Sub partes A y B.

Cómo Comentar y Plazos de Tiempo

Comentarios escritos específicamente (36 CFR Parte 218.2) sobre el proyecto propuesto serán aceptados hasta el 18 de julio, 2016. Los comentarios deberían estar dentro del ámbito de investigación sobre la acción propuesta, teniendo una relación directa con la acción propuesta, y deben incluir motivos que lo respalden para la consideración por el Oficial Responsable de considerarlos (36 CFR 218.2). Si usted incluye referencias, citas, o información adicional para consideración sobre este proyecto, por favor adjuntar una copia, especifique exactamente qué relación tiene esta información con el proyecto, y también indique qué parte del material (página o número de ilustración) le gustaría que tomáramos en cuenta.

Podrán presentarse comentarios escritos específicos por correo a Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468, por fax al 866-546-5718, o en persona (de lunes a viernes, 8:00 a.m. a 4:30 p.m., a excepción de días festivos) con el Sr. Neil Bosworth, Supervisor Forestal, Tonto National Forest, 2324 East McDowell Road, Phoenix, AZ 85006. Podrán hacer comentarios verbales al dejar un mensaje en 866-546-5718, o en persona en una de las reuniones públicas. Podrán enviarse comentarios electrónicamente con adjuntos enviándolos por correo electrónico en un documento Word (.doc), formato de texto enriquecido (.rtf), texto (.txt), y lenguaje de

marcación hipertexto (.html) a comments@ResolutionMineEIS.us También podrán presentarse comentarios por medio del sitio web del proyecto (www.ResolutionMineEIS.us/comments).

Solamente aquellos individuos o entidades (según lo define el 36 CFR Parte 218.2) que presenten de manera puntual y por escrito sus comentarios (según lo define el 36 CFR Parte 218.1) sobre el proyecto o la actividad propuesta durante este u otro período para comentarios del público, tal período siendo establecido por el Oficial Responsable, calificarán para presentar una objeción. Otros requisitos para presentar una objeción se definen por el 36 CFR Parte 218.25 (a)(3) e incluyen nombre, dirección, título del proyecto y firma u otra forma de verificación de identidad al serle solicitada y la identidad del individuo o entidad que fue el autor de los comentarios. Individuos que forman parte de una entidad deberán presentar sus propios comentarios a título personal para poder calificar como individuo que presenta una objeción. La puntualidad de un comentario será determinada según se describe en 36 CFR Parte 218.25 (a)(4). Es responsabilidad de quien envíe el comentario asegurarse de que se reciba de manera puntual. Comentarios recibidos en respuesta a este aviso, incluyendo nombres y direcciones de aquellas personas que comenten serán considerados como parte del registro público de este proyecto y estarán disponibles para inspección pública y serán revelados a solicitud de quien le interese bajo la Ley de Libertad de Información.

El Departamento de Agricultura U.S. (USDA) es un empleador y proveedor de igualdad de oportunidades

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Contact Information

Tonto National Forest Supervisor's Office
2324 E. McDowell Rd.
Phoenix, Arizona 85006
(602) 225-5200

Phoenix Interagency Fire Center
6335 S. Downwind Circle
Suite 101
Mesa, AZ 85212
(480) 457-1551
[Website](#)

Cave Creek Ranger District
40202 N. Cave Creek Rd.
Scottsdale, AZ 85262
(480) 595-3300

Globe Ranger District
7680 S. Six Shooter Canyon Rd.
Globe, Arizona 85501
(928) 402-6200

Mesa Ranger District
5140 E. Ingram St.
Mesa, Arizona 85205
(480) 610-3300

Tonto National Forest to Begin Resolution Copper Project and Land Exchange Environmental Impact Statement

Release Date: Mar 18, 2016

Notice Published in Federal Register on March 18, 2016

PHOENIX, March 18, 2016—For Immediate Release. The Tonto National Forest has published a Notice of Intent to prepare an Environmental Impact Statement (EIS) in the Federal Register, announcing the beginning of the EIS process for the proposed Resolution Copper mine and an associated land exchange.

The proposed mine is located on Tonto National Forest, private and state lands near Superior, Arizona. The Tonto National Forest is initiating the EIS to comply with Section 3003 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) and Forest Service regulations.

This EIS will analyze environmental effects of approval of the proposed General Plan of Operations submitted by Resolution Copper, which would authorize surface disturbance on National Forest lands from the proposed mining operations; and the transfer of 2,422 acres of public land, commonly known as Oak Flat, to Resolution Copper in exchange for eight parcels of land located throughout Arizona, totaling 5,344 acres. The EIS will develop and analyze alternatives, and disclose environmental effects associated with approval of the General Plan of Operations and administration of the land exchange.

The **Notice of Intent published in today's Federal Register** initiates the public involvement process, which guides the development of the EIS. Public open house meetings will be held to ask questions and learn more about public concerns with this project. The following meetings are scheduled:

▶ March 31, 2016, 5:00 – 8:00 p.m.

Queen Valley Recreation Hall, 1478 East Queen Valley Drive, Queen Valley, Arizona.

▶ April 4, 2016, 5:00 – 8:00 p.m.

Superior High School, Multi-purpose room, 100 Mary Drive, Superior, Arizona.

▶ April 5, 2016, 5:00 – 8:00 p.m.

Elks Lodge, 1775 East Maple Street, Globe, Arizona

▶ April 6, 2016, 5:00 – 8:00 p.m.

Southwest Regional Library, 775 North Greenfield Road, Gilbert, Arizona.

The public is invited to submit public comments during the initial 60-day scoping period. Comments may be submitted in a variety of ways including via email, through the project website, by mail, facsimile, and verbally by leaving a phone message. Written comments may be sent to: Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468, via email to:

Comments@resolutionmineeis.us, submitted via website at **www.resolutionmineeis.us**, sent via facsimile to 1-866-546-5718, or submitted by leaving a verbal message at 1-866-546-5718.

Further details about the project can be found at the project web page:

www.resolutionmineeis.us

Alerts & Warnings

- Peaks Fire Public Safety Area Closure Order 12-16-278
- Restriction and Closure Orders
- Juniper Fire Public Safety Closure Order 12-16-275R
- Fire Restrictions Order 12-16-277
- Pioneer Pass Closure Order Termination 12-16-274
- Expanded Juniper Fire Public Safety Closure Order
- Special Restrictions for Pioneer Pass Recreation Area
- Special Restrictions Occupation and Use Lower Salt River Area
- Jojoba and Yellow Cliffs Boat Ramp/Dock Closed
- ADEQ recommends limiting fish consumption at Bartlett Lake
- Temporary Highway 60 Closures at Devils Canyon for ADOT Road Work
- Rattlesnake Fishing Pier Closed Until Further Notice
- If You Fly, We Can't!
- Butcher Jones Trail Work
- Washington Park Area Camping Closure Order 12-15-257
- Bermuda Flat Rabies Alert
- Bald Eagle Protection Closure Order (Seasonal)

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2324 E. McDowell Rd.
Phoenix, Arizona 85006
(602) 225-5200

**Phoenix Interagency
Fire Center**
6335 S. Downwind Circle
Suite 101
Mesa, AZ 85212
(480) 457-1551
Website

Resolution Copper Project Comment Period Extended, Additional Meeting Scheduled

Release Date: May 20, 2016

PHOENIX, May 20, 2016—For Immediate Release. The Tonto National Forest has extended the public scoping period for the proposed Resolution Copper mine and associated land exchange Environmental Impact Statement (EIS). The EIS will analyze the environmental effects of: a mining proposal submitted to the Tonto National Forest by Resolution Copper Mining, LLC; the exchange of 2,422 acres of federal land near Oak Flat for 5,344 acres of privately held land elsewhere in Arizona; and any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

The proposed mine is located on Tonto National Forest, private and state lands near Superior, Arizona. The Tonto National Forest initiated the EIS to comply with Section 3003 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) and Forest Service regulations. The Notice of Intent to prepare an EIS was published on March 18, 2016, with a 60-day public scoping period listed. At the request of numerous individuals and organizations, the Forest has extended the public scoping period through July 18, 2016.

An additional public scoping meeting will be held on June 9, 2016, at the Central Arizona College San Tan Campus, located at 3736 E. Bella Vista Rd, San Tan Valley, Arizona 85143. The meeting will run from 5:00 p.m. to 8:00 p.m., with the presentation beginning at 5:30 p.m.

The public is invited to submit public comments during the initial scoping period, which has been extended through July 18, 2016. Comments may be submitted in a variety of ways including via email, through the project website, by mail, facsimile, and verbally by leaving a phone message. Written comments may be sent to: Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468, via email to: Comments@resolutionmineeis.us, submitted via the website at: www.resolutionmineeis.us, or by sending a facsimile or leaving a voicemail message at 1-866-546-5718.

Alerts & Warnings

- Peaks Fire Public Safety Area Closure Order 12-16-278
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- Bermuda Flat Rabies Alert
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6335 S. Downwind Circle
Suite 101
Mesa, AZ 85212
(480) 457-1551
Website

Forest still accepting public comments for Resolution Copper Mining project

Release Date: Jun 20, 2016

PHOENIX, June 20, 2016 — For Immediate Release. The Tonto National Forest Supervisor's decision to extend the public scoping period for the Resolution Copper Mining project and land exchange gives the public additional time to submit comments.

The public now has until July 18, 2016, to submit comments in one of the following ways:

- Email written comments to: comments@resolutionmineeis.us
- Send comments through the website:
<http://www.resolutionmineeis.us/comments>
- Leave a voicemail or send a fax to 1-866-546-5718
- Mail a comment to:

Resolution EIS Comments
PO Box 34468
Phoenix, AZ 85067-4468

The Tonto National Forest will use the public comments to help identify significant issues for analysis and potential project alternatives as the Forest begins preparing an Environmental Impact Statement (EIS) to consider and disclose the environmental effects from:

- Approval of the proposed plan of operations for mining activities on National Forest land.
- The exchange of land between Resolution Copper and the United States.

Resolution Copper has submitted a proposal to develop and operate an underground copper mine near Superior, Arizona. More information is available online at: <http://www.resolutionmineeis.us/>.

Alerts & Warnings

- Peaks Fire Public Safety Area Closure Order 12-16-278
- Restriction and Closure Orders
- Juniper Fire Public Safety Closure Order 12-16-275R
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Resolution Copper Project and Land Exchange Environmental Impact Statement

Public Meeting Announcement

Queen Valley

March 31, 2016

5:00 p.m. to 8:00 p.m.

5:30 p.m. presentation

Queen Valley Recreation Hall

1478 E. Queen Valley Drive

Queen Valley, Arizona

Superior

April 4, 2016

5:00 p.m. to 8:00 p.m.

5:30 p.m. presentation

Superior High School

100 Mary Drive

Superior, Arizona

Globe

April 5, 2016

5:00 p.m. to 8:00 p.m.

5:30 p.m. presentation

Elks Lodge

1775 East Maple St.

Globe, Arizona

Gilbert

April 6, 2016

5:00 p.m. to 8:00 p.m.

5:30 p.m. presentation

Southwest Regional Library

775 N. Greenfield Road

Gilbert, Arizona

The Tonto National Forest (TNF) is preparing an environmental impact statement (EIS) to consider and disclose the environmental effects from: 1) approval of a proposed plan of operations for mining activities on National Forest land; 2) the exchange of land between Resolution Copper and the United States; and 3) any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

The TNF is seeking comments from the public on the proposed project to help in determining the scope of the EIS environmental analysis. The Forest Service will use the public comments to identify significant issues for analysis and potential project alternatives. **The scoping comment period is from March 18, 2016 to May 17, 2016. Your comments will be most useful if received by the closing date of the scoping comment period.**

Please plan to attend one of the open house meetings to learn more about the proposed project and provide comments.

For More Information

Visit the website

www.ResolutionMineEIS.us

or call Mark Nelson,

Tonto National Forest, 602-225-5222

APPENDIX D

Communications



File Code: 1950
Date: March 14, 2016

Dear Interested Public:

On March 18, 2016, the Tonto National Forest issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Resolution Copper Project and Land Exchange. The EIS will analyze the environmental effects of: 1) a mining proposal submitted to the Tonto National Forest by Resolution Copper Mining, LLC; 2) the exchange of 2,422 acres of federal land near Oak Flat for 5,344 acres of privately held land elsewhere in Arizona; and 3) any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

The Tonto National Forest is seeking comments from the public to help in determining the scope of the environmental analysis. The 60-day scoping comment period will last from March 18 to May 17, 2016.

How to Submit Comments

- Submit a comment at www.ResolutionMineEIS.us
- Email written comments to: comments@ResolutionMineEIS.us
- Send written comments via postal mail to: Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468
- Send fax or voicemail to 866-546-5718
- Attend an open house public meeting

The open house meetings will be held from 5:00 to 8:00 p.m. with a formal presentation at 5:30 p.m., followed by a brief question and answer session.

1. March 31, 2016, 5:00 – 8:00 p.m. Queen Valley Recreation Hall, 1478 East Queen Valley Drive, Queen Valley, Arizona.
2. April 4, 2016, 5:00 – 8:00 p.m. Superior High School, Multi-purpose room, 100 Mary Drive, Superior, Arizona.
3. April 5, 2016, 5:00 – 8:00 p.m. Elks Lodge, 1775 East Maple Street, Globe, Arizona.
4. April 6, 2016, 5:00 – 8:00 p.m. Southwest Regional Library, 775 North Greenfield Road, Gilbert, Arizona.

For project details visit www.ResolutionMineEIS.us or contact Mark Nelson, Tonto National Forest, 602-225-5222.

Sincerely,

For NEIL BOSWORTH
Forest Supervisor

Enclosure: Resolution Copper EIS and Land Exchange Information brochure Forest Supervisor





United States Department of Agriculture Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Overview

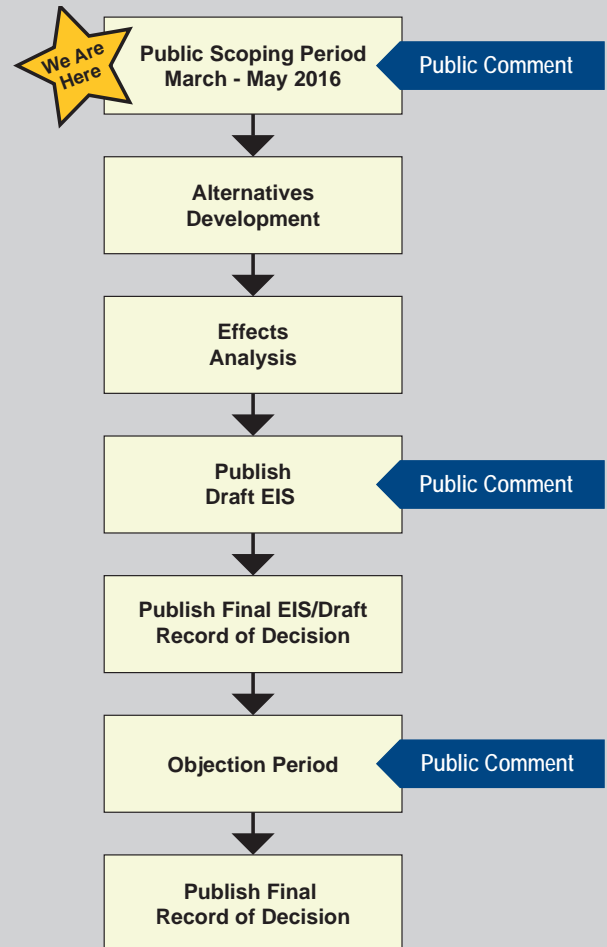
The Tonto National Forest (TNF) is preparing an environmental impact statement (EIS) to consider and disclose the environmental effects from: 1) approval of a proposed plan of operations for mining activities on National Forest land; 2) the exchange of land between Resolution Copper and the United States; and 3) any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

Resolution Copper submitted the General Plan of Operations (GPO) to the Forest Service in November 2013. The proposed GPO would authorize surface disturbance on Forest Service lands associated with development, mining, and processing of copper and molybdenum. In December 2014, Congress passed the Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2014 (NDAA). Section 3003 of this law authorizes and directs the Secretary of Agriculture to administer a land exchange, which will convey 2,422 acres of Forest Service land in the area of the proposed mine to Resolution Copper in exchange for 5,344 acres of private land on 8 parcels located elsewhere in eastern Arizona.

Approval of the proposed GPO would be a major federal action subject to the National Environmental Policy Act of 1969 (NEPA). Accordingly, the Forest Service will prepare an EIS to consider and publicly disclose the environmental effects of the proposed action. Section 3003 of the NDAA also requires the Secretary to prepare a single EIS prior to conveying the federal land, to be used as the basis for all decisions under federal law related to the proposed mine. The TNF is tasked with completion of the EIS.

The TNF is seeking comments from the public on the proposed project to help in determining the scope of the EIS environmental analysis. The Forest Service will use the public comments to identify significant issues for analysis and potential project alternatives. **The scoping comment period is from March 18, 2016 to May 17, 2016. Your comments will be most useful if received by the closing date of the scoping comment period.**

The NEPA Process



How to Submit Comments

Comments on the proposed project can be submitted in a variety of ways:

- Attend an open house public meeting
- Submit a comment at www.ResolutionMineEIS.us
- Email written comments to:
comments@ResolutionMineEIS.us
- Send written comments via postal mail to:
Resolution EIS Comments
P.O. Box 34468, Phoenix, AZ 85067-4468
- Send fax or voicemail to 866-546-5718

For More Information

Visit the website www.ResolutionMineEIS.us or call Mark Nelson, Tonto National Forest, 602-225-5222

Proposed Action

The Mining Proposal

- Expected to take 10 years to construct, have a 40 year operational life, followed by 5-10 years of reclamation
- Expected to mine approximately 50 billion pounds of copper, from a deposit located 5,000 to 7,000 feet underground
- Ore would be removed using an underground mining technique known as panel caving. Access to the ore body would be from vertical shafts in an area known as the East Plant Site, near Oak Flat. The ground surface above the ore body is expected to subside or drop because of the underground mining.
- Crushed ore would be transported underground to an area known as the West Plant Site for processing. The West Plant Site is the location of the old Magma Mine in Superior.
- Once processed, copper concentrate would be pumped as a slurry about 22 miles to a filter/loadout facility. The slurry pipelines follow an existing right-of-way known as the Magma Arizona Railroad Company (MARRCO) corridor. The MARRCO corridor would also include: an upgraded rail line, new water pipelines, new utility lines, several intermediate pump stations, and an estimated 30 new groundwater wells. From the filter/loadout facility, copper concentrate would be sent to market using rail or trucks.
- Tailings—the waste material left over after processing--would be pumped as a slurry 4.7 miles from the West Plant Site to a tailings facility. The tailings facility would eventually occupy about 4,400 acres of Forest land.
- Power to the project would be supplied by Salt River Project. Large 230-kV powerlines would be located along new and existing rights-of-way
- Access to the mine would be provided by existing roads. Magma Mine Road would eventually be relocated due to expected subsidence.

The Land Exchange

Section 3003 of the NDAA authorizes the exchange of specified federal lands if Resolution Copper offers to convey to the United States the specified non-federal land. Resolution Copper has formally offered to do so. The following summarizes the land parcels that will be exchanged.

The 2,422-acre Oak Flat parcel will be transferred from the Department of Agriculture to Resolution Copper.

The following parcels will be transferred from Resolution Copper to the Department of Agriculture:

- 110 acres near Superior, Arizona, known as the Non-Federal Parcel-Apache Leap South End, to be administered by the TNF
- 148 acres in Yavapai County, Arizona, known as the Non-Federal Parcel-Tangle Creek, to be administered by the TNF
- 147 acres in Gila County, Arizona, known as the Non-Federal Parcel-Turkey Creek, to be administered by the TNF
- 149 acres near Cave Creek, Arizona, known as the Non-Federal Parcel-Cave Creek, to be administered by the TNF
- 640 acres north of Payson, Arizona, known as the Non-Federal Parcel-East Clear Creek, to be administered by the Coconino National Forest

The following parcels will be transferred from Resolution Copper to the Department of the Interior:

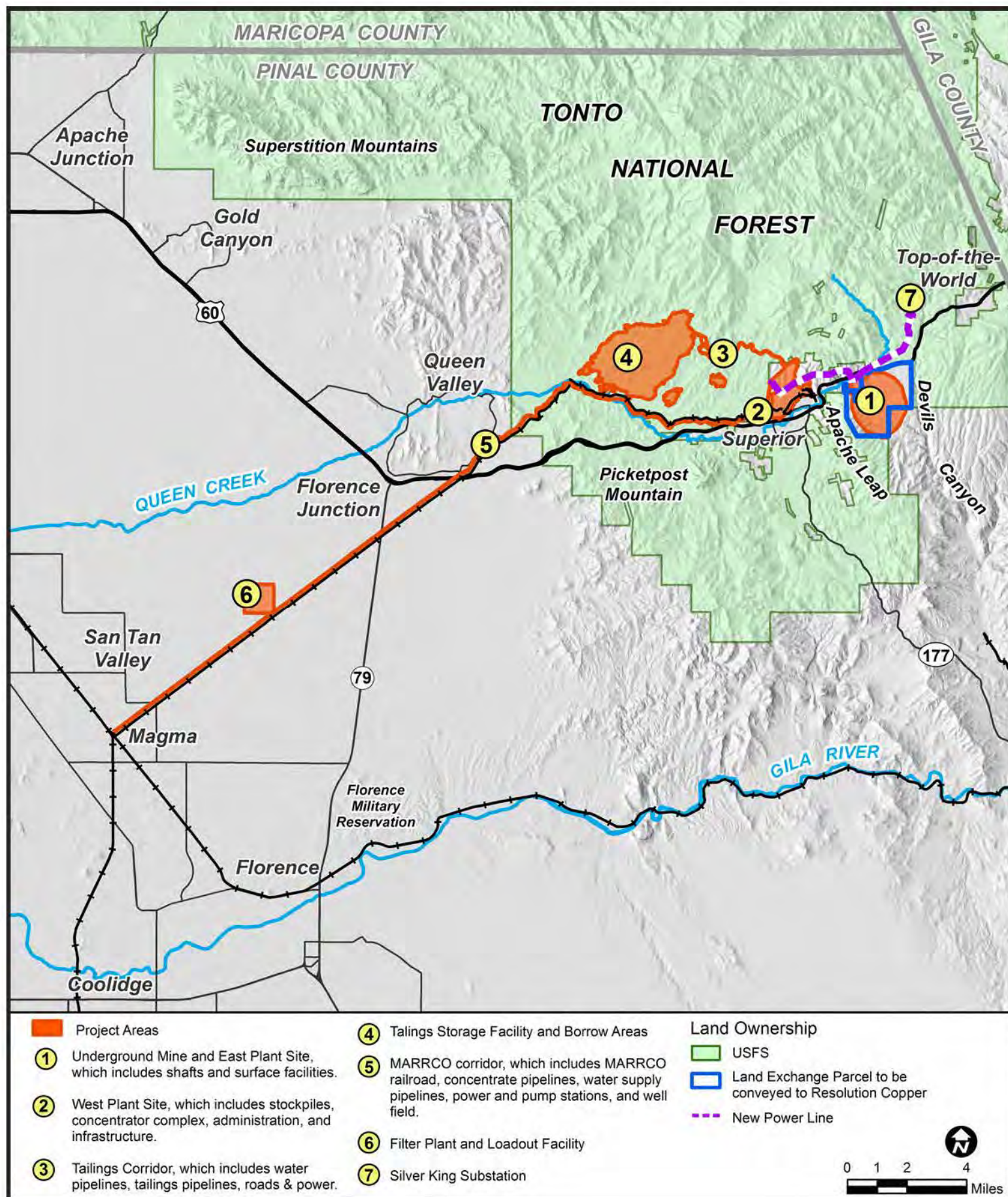
- 3,050 acres near Mammoth, Arizona, known as the Non-Federal Parcel-Lower San Pedro River, to be administered by the Bureau of Land Management (BLM) as part of the San Pedro Riparian National Conservation Area
- 940 acres south of Elgin, Arizona, known as the Non-Federal Parcel-Appleton Ranch, to be administered by the BLM as part of the Las Cienegas National Conservation Area
- 160 acres near Kearny, Arizona, known as the Non-Federal Parcel-Dripping Springs, to be administered by the BLM

Also as a requirement of the NDAA, if requested by the Town of Superior, Arizona, the following land will be transferred from the TNF to the Town of Superior:

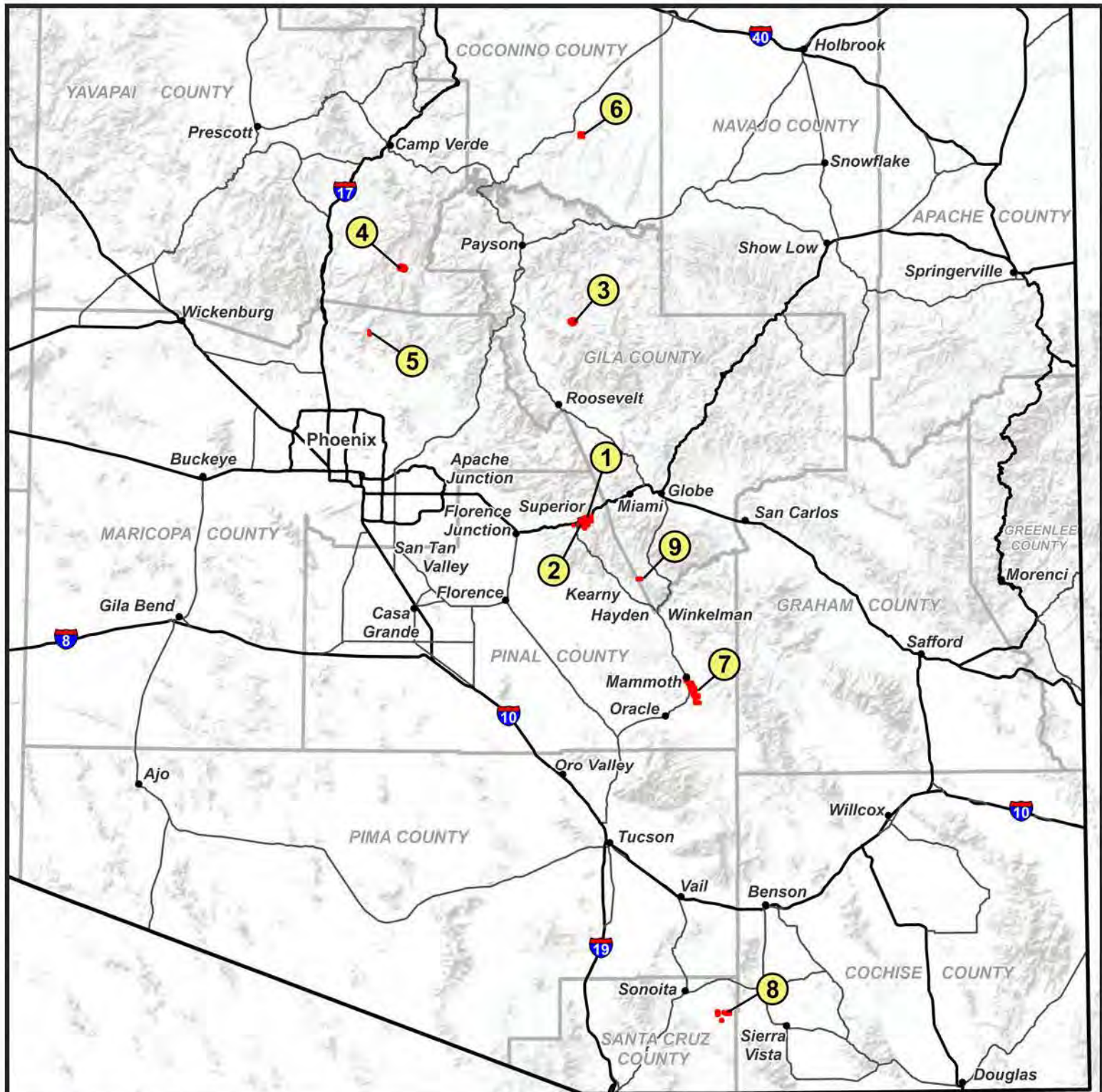
- 30 acres associated with the Fairview Cemetery
- 250 acres associated with parcels contiguous to the Superior Airport
- 265 acres of reversionary interest associated with the Superior Airport

At this time, the Town of Superior has not requested this land transfer.

Mining Proposal Components



Land Exchange Parcel Locations



Transfer From Federal Government to Resolution Copper

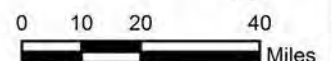
- ① Oak Flat (2,422 Acres)

Transfer From Resolution Copper to Forest Service

- ② Apache Leap South End (110 Acres)
- ③ Turkey Creek (147 Acres)
- ④ Tangle Creek (148 Acres)
- ⑤ Cave Creek (149 Acres)
- ⑥ East Clear Creek (640 Acres)

Transfer From Resolution Copper to Bureau of Land Management

- ⑦ Lower San Pedro River (3,050 Acres)
- ⑧ Appelton Ranch (940 Acres)
- ⑨ Dripping Springs (190 Acres)



Dear Interested Public:

On March 18, 2016, the Tonto National Forest issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Resolution Copper Project and Land Exchange [81 FR 14829]. The EIS will analyze the environmental effects of: 1) a mining proposal submitted to the Tonto National Forest by Resolution Copper Mining, LLC; 2) the exchange of 2,422 acres of federal land near Oak Flat for 5,344 acres of privately held land elsewhere in Arizona; and 3) any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

Numerous individuals and several organizations requested an extension of the public scoping period, as well as additional public scoping meetings. I have decided to accommodate these requests by extending the public scoping period through July 18, 2016 and holding one additional public scoping meeting on June 9, 2016.

Comments may be submitted by mail to Resolution EIS Comments, P.O. Box 34468, Phoenix, AZ 85067-4468; by email to Comments@resolutionmineeis.us; via the website at: www.ResolutionMineEIS.us , or via facsimile or voicemail message at [1-866-546-5718](tel:1-866-546-5718).

An additional public scoping meeting will be held on June 9, 2016, at the Central Arizona College San Tan Campus, located at 3736 E. Bella Vista Rd, San Tan Valley, Arizona 85143. The meeting will run from 5:00 p.m. to 8:00 p.m., with the presentation beginning at 5:30 p.m.

For additional project details, please visit www.ResolutionMineEIS.us or contact Mark Nelson, Tonto National Forest, [602-225-5222](tel:602-225-5222).

Sincerely,

NEIL BOSWORTH

Forest Supervisor



United States Department of Agriculture
Tonto National Forest

Resolution Copper Project and Land Exchange Environmental Impact Statement

Scoping Period Extension & Public Meeting Announcement

The Tonto National Forest (TNF) is preparing an environmental impact statement (EIS) to consider and disclose the environmental effects from: 1) approval of a proposed plan of operations for mining activities on National Forest land; 2) the exchange of land between Resolution Copper and the United States; and 3) any necessary amendments to the Tonto National Forest Land and Resource Management Plan.

The TNF held four public scoping meetings in March and April 2016 in Queen Valley, Superior, Globe, and Gilbert, Arizona to present the proposed project and receive public comment.

Based on requests from the public, the TNF has extended the scoping comment period to 120 days and will host an additional public meeting. The scoping period now ends on **July 18, 2016**.

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The TNF has scheduled an additional public scoping meeting to be held on:

Thursday, June 9, 2016

Central Arizona College
San Tan Campus
3736 E. Bella Vista Road
San Tan Valley, AZ

Open House: 5:00 p.m. to 8:00 p.m.
Presentation at 5:30 p.m.

To learn more about the proposed project, visit the project website at **www.ResolutionMineEIS.us** or call Mark Nelson, Tonto National Forest, 602-225-5222

[Return to Previous Location](#)

How to Submit Comments

Comments on the proposed project can be submitted in a variety of ways:

- Send written comments via postal mail to:
Resolution EIS Comments
P.O. Box 34468, Phoenix, AZ 85067-4468
- Attend an open house public meeting
- Submit a comment at www.ResolutionMineEIS.us
- Email written comments to:
comments@ResolutionMineEIS.us
- Send fax or voicemail to 866-546-5718
- **Your comments will be most useful if received by the closing date of the scoping comment period, July 18, 2016.**

Resolution EIS
P.O. Box 34468
Phoenix, AZ 85067-4468

APPENDIX E

Question and Answer Summary

RESOLUTION COPPER PROJECT AND LAND EXCHANGE SCOPING MEETING QUESTION SUMMARY

Public Meeting Locations:

Queen Valley 3/31/2016, Superior 4/4/2016,

Globe 4/5/2016, Gilbert 4/6/2016, and San Tan 6/9/2016

Total Questions: 180

Five Primary Categories: NEPA Process, Impact Analysis, Land Exchange, Mine Proposal, General

CATEGORY 1: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS

Agency Coordination: Which agencies will the Forest Service (“the Forest”) consult with regarding this project, and which agencies will be included as Cooperating Agencies?

The Forest will consult with federal, state, and local agencies during the NEPA process.

The list of Cooperating Agencies has not yet been finalized, but organizations who have agreed to be Cooperating Agencies include the Arizona Department of Water Resources, Arizona State Land Department, Arizona Game and Fish Department, Pinal County Air Quality Control Board, the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers. The Forest will also correspond with other local agencies.

Schedule: When will the NEPA process be complete?

The Forest estimates that it will take approximately 5 years to complete the Final Environmental Impact Statement (EIS) and issue a Record of Decision. However, this is a general time frame, and the EIS could take longer, given the amount of analysis and public and agency coordination that will be required for this project.

Alternatives Development: What are the alternatives to the proposed action, including the tailings facility location and mining process, and how will they be developed?

At this point in the EIS process, alternatives to the proposed action have not been developed. The Forest will conduct an intensive alternatives development process that responds to key issues identified during the scoping phase. Once those issues are determined, the Forest will develop reasonable and feasible alternatives to the proposed action that resolve, minimize, or reduce impacts to identified issues while meeting the purpose of and need for the proposed action. The Forest will look into alternative tailings facility locations and designs that are within its regulatory authority to approve, as well as different mining techniques, if different mining techniques address an issue and meet the project’s purpose and need.

A no-action alternative (no mining and no land exchange) will be analyzed in the EIS and will serve as a baseline against which to compare the proposed action and the other action alternatives. However, the Forest cannot legally choose to move forward with the no-action alternative in the Record of Decision because the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) legislatively authorized the land exchange, and Forest Service regulations for locatable minerals operations (36 Code of Federal Regulations [CFR] 228 Subpart A) do not provide the Forest with authority to prohibit the proposed mining operations.

Cumulative Effects: Will the EIS analyze the cumulative effects that the proposed mine would have when combined with other past, present, and reasonably foreseeable actions?

The EIS will include cumulative effects analysis. The Forest is currently compiling a list of past, present, and reasonably foreseeable actions that, when combined with the proposed action, may have cumulative impacts on the human and natural environment.

U.S. Forest Service Decision Space: What is the Forest's role in the project, and what is the extent of the agency's authority to approve, deny, or require modifications to the proposed mine?

As identified in T36 CFR 228 Subpart A, the Forest has the authority to either approve the proposed mine or to require modifications to the proposed mine's location, operation, and/or configuration to meet Forest Service regulations, as long as the modifications are feasible and within the Forest's regulatory authority. The Forest does not have the authority to categorically prohibit the proposed mining operations, including the disposal of mine tailings on Forest lands and other mine-related facilities such as power lines, water pipelines, and roads. However, the Forest does have the authority to require design modifications or other mitigation measures to reduce impacts to Forest surface resources. The Forest is also required to follow the NDAA and exchange the lands identified in the legislation 60 days following the Final EIS. Because the exchanged federal land will be privately owned following the EIS, the Forest will have no authority to regulate mining operations on Oak Flat.

How would legal challenges to the NDAA affect the Forest's responsibility to move forward with the land exchange and EIS process?

The Forest is obligated to follow the NDAA, which was passed by Congress and signed by the President in December 2014. The Forest cannot speculate on future laws and how they may modify or repeal the NDAA, but the Forest would be obligated to follow any applicable future laws.

Tribal Consultation: How will the Forest consult and correspond with Native American tribes, including the San Carlos Apache Tribe, regarding this project?

The Forest is consulting with Native American tribes on this project, as required under NEPA, Section 106 of the National Historic Preservation Act and the NDAA. Tribes who have engaged in consultation with the Forest so far are the: San Carlos Apache Tribe, White Mountain Apache Tribe, Tonto Apache Tribe, Yavapai-Apache Nation, Mescalero Apache Tribe, Salt River Pima-Maricopa Indian Community, Gila River Indian Community, Fort McDowell Yavapai Nation, Yavapai Prescott Indian Tribe, Hopi Tribe, and Pueblo of Zuni. Information is provided to the tribes via letter, email, telephone calls and face-to-face meetings. Government-to-government consultations are conducted by the Forest Supervisor.

What influence will the designation of Oak Flat as a Traditional Cultural Property (TCP) have on this process and the overall decision?

The designation of *Chi'chil Bildagoteel* (Oak Flat) as a TCP and its listing in the National Register of Historic Places (NRHP) requires the Forest, as the lead federal agency, to consider the effects of its decision on the TCP in the same manner as for any other historic property. This means that the Forest must determine in consultation with the State Historic Preservation Officer (SHPO) and any participating tribes whether the decision would have an adverse effect on the property, and if so must work with the SHPO and tribes to avoid, minimize, or mitigate those adverse effects as feasible. The TCP designation and listing in the NRHP does not mean that the *Chi'chil Bildagoteel* TCP cannot be damaged or destroyed by a federal undertaking, only that the federal agency must consider the effects of the proposed mine and the land exchange on the *Chi'chil Bildagoteel* TCP in the NEPA process.

Public Scoping: What is the Forest's public scoping plan for this project, including future public meeting locations and outreach?

The Forest is committed to soliciting an abundance of public input regarding the Resolution Copper Project and Land Exchange as a part of the NEPA scoping process. Over 300 members from the public attended four scoping meetings between March 31 and April 6, 2016.

Following several requests from stakeholder groups and members of the public, the Tonto Forest Supervisor extended the scoping period from 60 to 120 days. Additionally, a fifth scoping meeting was added and took place in San Tan Valley. The scoping period ended on July 18, 2016.

Questions and comments received during the scoping period will help the Forest determine the issues that will be analyzed in the EIS and aid in informing alternatives development.

If the Forest decides to hold additional public meetings, notices will be posted on the project website, and the Forest will individually notify persons on the project mailing list by U.S. mail or email.

General NEPA Process: How does the Forest work with Resolution Copper on this project, and how is the EIS funded?

Resolution Copper is the proponent for the project, and it developed the proposed plan of operations submitted to the Forest Service for approval. The Forest meets with Resolution Copper on a regular basis to discuss progress on the EIS, project logistics, and other matters. Resolution Copper will be excluded from internal deliberations of the Forest interdisciplinary team, and will not be involved with preparation of the EIS. However, the Forest will continue to meet with Resolution Copper throughout the NEPA process to discuss the status of the project.

The NDAA requires that Resolution Copper pay all costs associated with the EIS and land exchange process.

How does the Forest ensure that information used in the EIS is accurate, especially information provided by the project proponent or other outside sources?

Resolution Copper is providing the Forest with a large amount of environmental baseline data, which the Forest may use in the EIS. The Forest will review these data for adequacy with assistance from its NEPA consultant team. The Forest will determine whether the data are valid, and whether there is missing information (i.e., data gaps). If the validity of the data is uncertain or if data gaps are identified, the Forest may either request additional baseline data from Resolution Copper or engage the Forest NEPA consultant team to collect additional baseline data.

The Forest has resource specialists who are experts in their fields of study and follow professionally recognized analysis methods and standards for their respective resource. Each resource that is analyzed in the EIS will have an assigned resource specialist on the Forest's interdisciplinary team.

In addition, the Forest has hired an independent NEPA consultant team to strengthen the environmental analysis and supplement the expertise of the Forest resource specialists. Assessment of data validity and data gaps will be completed by highly qualified specialists in the appropriate resource area who follow professionally recognized and approved analysis methods and standards. For example, groundwater specialists have been assigned to review the groundwater baseline data, and cultural resource specialists have been assigned to review the archeological baseline data. The results of the Forest data validity and data gap analyses will be compiled into a series of reports, which will be made available to the public on the project website.

What will the appeal process be for this EIS?

The Forest Service no longer uses an appeal process for project-level NEPA analyses. The former appeal process has been replaced by the objection process, which is defined in Forest Service regulations at 36 CFR 218. The objection process provides for persons who have commented during a previous public comment period (via the project website, www.ResolutionMineEIS.com, or at a public meeting) to file an objection to the Draft Record of Decision at the time that the Final EIS is published. Objectors have 45 days after the Final EIS and Draft Record of Decision are published to submit objections. The objection reviewing officer for this project will be the Regional Forester. The Regional Forester must respond to the objections within 75 days after the Final EIS and Draft Record of Decision is issued (i.e. an initial 45-day objection review period, followed by an optional 30-day extension).

The NDAA requires that the land exchange be finalized 60 days after the Forest issues a Final EIS. In accordance with the 36 CFR 218 objection regulations, a Draft Record of Decision must be published in conjunction with the Final EIS, which will start the 45-day period for submittal of objections. The Forest currently plans to issue two Draft Records of Decision, one for the land exchange and one for the proposed plan of operations. To comply with both the 36 CFR 218 regulations and the NDAA, the Regional Forester will need to respond to objections to the land exchange Record of Decision within 15 days after the 45-day objection period ends. At that time, the lands specified in the NDAA will be exchanged. It is anticipated that responding to objections to the Draft Record of Decision for the proposed General Plan of Operations will require the full 75-day period allowed by the 36 CFR 218 regulations.

CATEGORY 2: IMPACT ANALYSIS

EIS Bounds of Analysis: What will the geographic and temporal bounds of analysis be in the EIS?

The geographic and temporal bounds of analysis will be determined specifically for each resource analyzed in the EIS. These resource-specific geographic and temporal bounds of analysis are not yet determined; however, the analysis will cover the geographic areas where direct, indirect and cumulative impacts would potentially occur during all phases of the mine, including mine construction, operation, closure, and reclamation. The geographic bounds of analysis will not be limited to the mine facilities that are proposed on Forest lands. Mine facilities that are proposed on private lands (such as the loadout facility near San Tan Valley) will also be included in the EIS's geographic bounds of analysis.

Air Quality: Will the mine's potential impacts to air quality be analyzed in the EIS?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on air quality. The results of this analysis will be documented in the EIS.

Biological Resources: Will the mine's potential impacts to biological resources be analyzed in the EIS?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on biological resources, such as wildlife, threatened and endangered species, vegetation, and riparian habitat, etc. The results of the analysis will be summarized in the EIS.

Cultural Resources: Will the mine’s potential impacts to cultural resources, including archaeological, historic, and TCPs, be analyzed in the EIS?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on cultural resources, including archaeological resources, historic resources, and TCPs such as *Chi’chil Bildagoteel* (Oak Flat). In addition, the Forest will consult with tribes and the SHPO in order to meet the National Historic Preservation Act Section 106 consultation requirements. The results of the analysis and Section 106 consultations will be summarized in the EIS.

Geology and Minerals: Will the mine’s impacts to geology, including subsidence, be analyzed in the EIS?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on geology, including any impacts that may be caused by ground subsidence. The results of the analysis will be summarized in the EIS.

Mine Related Noise and Lighting Impacts: Will potential impacts generated by the mine’s noise and nighttime lighting be analyzed in the EIS?

The Forest will conduct studies to analyze potential impacts from noise and light generated by the mine. The results of the analysis will be summarized in the EIS.

Public Health and Safety: Will the mine’s potential impacts to public health and safety be analyzed in the EIS, including a cumulative effects analysis of previous actions that have impacted public health and safety?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on public health and safety. As part of the analysis, the Forest will review and consider past, present, and reasonably foreseeable future actions that, when combined with the proposed action, may have a cumulative effect on public health and safety. The results of the analysis will be summarized in the EIS.

Public Health and Safety: Will the EIS include study of the area’s cancer rates and the potential to increase cancer rates in the Superior area?

The Forest is currently evaluating this issue and has not determined the extent to which potential increases in cancer rates in the Superior area will be analyzed in the EIS.

Recreation Resources: Will the mine’s potential impacts to recreation resources be analyzed in the EIS, including impacts to the Arizona National Scenic Trail?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on recreation, including potential impacts to the Arizona National Scenic Trail. The results of the analysis will be summarized in the EIS.

Socioeconomics: Will the mine’s potential socioeconomic impacts be analyzed in the EIS?

The Forest will review socioeconomic information provided by the proponent, and conduct its own independent socioeconomic analysis. The results of the analysis will be summarized in the EIS.

What are the geographic and temporal bounds of analysis for studying impacts to Socioeconomic Resources?

The specific geographic and temporal bounds of analysis for the Forest’s independent socioeconomic analysis have not yet been determined. However, the analysis will cover the geographic areas where direct, indirect and cumulative socioeconomic impacts would occur and will cover all phases of the mine, including mine construction, operation, reclamation and closure.

Water Resources: Will the mine's potential impacts to water resources be analyzed in the EIS?

The Forest will analyze the impacts that the proposed action and alternatives may have on water resources. The Forest will review water resource information provided by Resolution Copper, and conduct its own independent water resources analysis in cooperation with water resource regulatory agencies such as the Arizona Department of Water Resources, and U.S. Army Corps of Engineers. The results of the analysis will be summarized in the EIS.

What are the geographic and temporal bounds of analysis for water resources?

The specific geographic and temporal bounds of analysis for the Forest's water resources analysis have not yet been determined. However, the analysis will cover the geographic areas where direct and indirect impacts to water resources, including surface water and groundwater, would occur. The analysis will include the proposed water sources for mine operations, water transportation routes, groundwater extraction wells, and wastewater and stormwater treatment and discharge. Impact analysis will cover all mine phases, including mine construction, operation, reclamation, and closure.

What mitigation measures will be required to avoid, minimize, or reduce impacts to water resources?

The Forest will identify specific mitigations to avoid, minimize, or reduce impacts to Forest resources. In addition, the Arizona Department of Environmental Quality, Arizona Department of Water Resources, and U.S. Army Corps of Engineers have regulatory authority over groundwater and/or surface water resources, including on State and private lands. Additional permits may be required from these agencies to construct, operate, and reclaim the mine. These permits may identify additional mitigation and monitoring measures that the mine would be obligated to employ to avoid, minimize, and reduce impacts to water resources, including water quantity and water quality.

How will the current Central Arizona Project (CAP) groundwater recharge process be evaluated in the EIS?

The Forest is currently evaluating this issue, and has not determined the extent to which the current CAP groundwater recharge process will be analyzed in the EIS.

Visual Resources: Will the mine's potential impacts to visual resources be analyzed in the EIS?

The Forest will conduct studies to analyze the impacts that the proposed action and alternatives may have on visual resources. The results of this analysis will be documented in the EIS.

CATEGORY 3: LAND EXCHANGE

Schedule: What is the time frame for the land exchange?

The NDAA requires that the Forest exchange the lands identified in the NDAA 60 days after the Final EIS is complete. The Forest is required by law to comply with this schedule. The Forest estimates that it will take approximately 5 years to complete the EIS and sign a Record of Decision. However, this is a general time frame, and the EIS could take longer, given the amount of analysis and coordination that will be required for this project.

Valuation: How will the land value be assessed?

The Forest Service's Regional Office is managing the appraisal of land. According to the NDAA, the Forest Service and Resolution Copper shall select an appraiser to conduct appraisals of the federal land and non-federal land.

General Land Exchange: How is the land exchange legal?

The NDAA was passed by the U.S. Congress and signed by the President of the United States in December 2014.

Does the NDAA determine the final mine design?

The NDAA does not determine the final mine design, including the location and design of the mine tailings facility.

Will the public have the opportunity to comment on or review the appraisal and valuation of the exchanged lands?

Prior to completing the land exchange, the Forest Service will make the appraisals available for public review.

CATEGORY 4: MINE PROPOSAL

Facilities: Where will the mine facilities, including transmission lines, be located, and what is the electricity source for the mine?

The mine facilities, including transmission lines, power source, and water treatment facility, are identified in the General Plan of Operations that was submitted by Resolution Copper and is available on the Forest's website for the project. Power would be sourced from the Salt River Project and transmitted to the mine site via new transmission lines and substations that are identified in Section 3.5.1 of the General Plan of Operations.

Will the 560-acre privately owned filtration plant and loadout facility parcel adjacent to the MARRCO corridor be included in the EIS analysis?

Yes. Even though this parcel is privately owned by Resolution Copper, its proposed development is part of the overall development of the mine, and construction of the privately owned filtration plant is considered a "connected action" according to NEPA (see 40 CFR 1508.25 of the Council on Environmental Quality's regulations implementing NEPA).

What happens if the facilities and operations change after mine operations have already begun?

Minor changes to the facilities and operations at the mine would be handled administratively by the Forest. An example of a minor change would be altering the original plan for an 8-inch water pipeline to a 9-inch pipeline. Any changes that would result in significant surface disturbance would require Resolution Copper to submit a supplement or modification to the General Plan of Operations, and the Forest Service would initiate a new NEPA review process to analyze the proposed changes. An example a change that would cause a significant surface disturbance would be expanding the size of the tailings facility from how it was depicted in the final plan of operations that was analyzed in the EIS and approved in the Record of Decision.

Are there other existing mine facilities of this scale and technique that can be used for comparison purposes?

A number of mines around the world are currently operating and use a similar block-cave mining technique. Among them are the Henderson molybdenum mine in Colorado, Northparkes copper-gold mine in Australia, New Afton copper-silver-gold mine in Canada, Palabora copper mine in South Africa, and the Tongkuangyu copper mine in China, among others. However, the Resolution Copper mine would be one of the largest such underground mining operations anywhere — exceeded in overall size and production rates only by the existing El Teniente copper mine in Chile. The Forest will use any relevant and available information from these existing mines to inform the environmental impact analysis.

Tailings: Where are the alternative tailings sites located, and how is the tailings location decided?

The proposed General Plan of Operations identifies the proposed tailings facility location on Forest lands near Queen Valley, Arizona. This document, along with other maps and figures, is available on the Forest's website for the project. The Forest may consider an alternative tailings site or design to address issues raised during the scoping period. Alternative tailings sites have not yet been identified. The alternatives development process is scheduled to begin in early 2017.

How will the tailings facilities be designed to avoid, minimize, or reduce impacts to the human and natural environment?

Resolution Copper has proposed a tailings location and design; this is described in the proposed General Plan of Operations. The Forest will examine this proposal, consider issues raised during public scoping, and analyze alternatives that would reduce adverse effects on Forest resources. The EIS process may result in recommended changes to the design or location of the proposed tailings location and design. However, neither the final design nor the final location for the tailings facility is known at this time.

Reclamation: Who is responsible for reclamation of the mine site after operations have ended, and how will reclamation be funded?

Resolution Copper would be responsible for reclamation of the mine. The company would also be required to post reclamation bonds, which are designed to provide funding for reclamation in the event that the Resolution Copper fails to complete reclamation. The Forest would require a reclamation bond for mining-related disturbance that would occur on Forest land.

The Forest does not have authority to require reclamation bonds for mining-related disturbance that would occur on private or state lands associated with the project. In addition, because the Oak Flat parcel will be exchanged prior to mine development, the Forest will not have authority to require a reclamation bond for mining-related disturbance on the Oak Flat parcel. The State of Arizona has authority to require reclamation bonds on private, State, and Forest lands. The State bonding requirements for the various proposed mining operations and infrastructure are not currently known.

How will the mine site be reclaimed after mine operations have ended?

The proposed General Plan of Operations includes a proposed reclamation plan for disturbance on Forest lands. This document, along with other maps and figures, is available on the Forest's website for the project. The proposed reclamation plan will be analyzed during the NEPA process. Alternatives to the proposed reclamation plan that would reduce adverse effects on Forest Service surface resources may be developed and analyzed during the EIS process.

CATEGORY 5: GENERAL AND MISCELLANEOUS QUESTIONS

What is the Forest Service mission?

The USDA Forest Service mission is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations.

The mission of the Tonto National Forest is to meet recurring stewardship responsibilities for National Forest lands and resources by providing a continuing supply of quality water for National Forest and downstream needs; providing a quality mix of year-round outdoor recreation experience opportunities for personal enjoyment, ranging from developed recreation sites to wilderness experiences; archaeological investigation and interpretation; promoting quality wildlife and fish habitat, including preserving habitat for known Threatened and Endangered species; providing for grazing of domestic livestock; providing for the utilization of timber, minerals, and special land uses in a manner that is compatible with other resource production and use, while assuring wise management of cultural and visual resources; expanding public understanding of the environment and resource programs; and coordinating activities with interested City, County, State, and other Federal agencies as well as with individuals and groups.

Are copies of the pertinent documentation available for public access?

Pertinent documentation regarding the Resolution Copper Project and Land Exchange can be accessed by the public on the Forest's project website, <http://www.ResolutionMineEIS.us>.

What is molybdenum?

Molybdenum is a metal that is often extracted as a byproduct of copper production and is used to make steel alloys. Although molybdenum is not the primary target mineral of the Resolution Copper mine, the mine would also extract molybdenum that would be processed and sold.

When will the public access to the Oak Flat area be cut off? When does the area become unsafe?

Once mining commences, Resolution Copper intends to closely monitor the mining subsidence zone with equipment that senses ground movement. This monitoring data would inform the company about the safety of the area and when any ground subsidence begins in the Oak Flat area. The timing of the area closure would be determined by Resolution Copper and is unknown at this time.

Why does Resolution Copper not have to buy the Forest lands upon which they propose to construct mine facilities, such as the tailings facility?

Forest Service lands are managed for multiple uses including wildlife habitat, recreation, grazing, and in the case of the lands proposed for the tailings storage facility, mining operations. The proposed tailings facility would be administered in accordance with Forest Service regulations at 36 CFR 228 Subpart A. These regulations apply to "exploration, development, mining or processing of mineral resources and all uses reasonably incident thereto", which are conducted in accordance with the General Mining Law of 1872, as amended. These Forest Service regulations do not require Resolution Copper to buy the Forest lands that are proposed be used for the tailings facility.

In contrast, the Oak Flat campground is located on lands that were withdrawn from mineral entry under the General Mining Law of 1872, as amended. The 36 CFR 228 Subpart A regulations do not apply to the Oak Flat Campground, and the Forest Service cannot approve mining operations at that location. The legislated land exchange directed by the NDAA provides for transfer of the Oak Flat Campground to Resolution Copper to facilitate development of the mine. Once the land exchange is completed, the Forest Service will have no authority to regulate mining operations at Oak Flat.

APPENDIX F

Form Letter Comment Text

Table F-1. Form Letter Comment Text

Form Letter	Form Letter Text	Form Letter Sponsor
1	<p>Dear Resolution EIS Comments,</p> <p>I am extremely concerned and strongly opposed to the proposed land swap and destruction of Oak Flat. I also am concerned about the process.</p> <p>The significant and negative impacts of the project, the massive size of the mine, the style of the mining which will promote land subsidence, the impacts on water and wildlife, and the enormous tailings pile, all warrant a hard look by the Forest Service and the public. I ask that you add public meetings in Phoenix and Tucson. Many people who live in these areas value Oak Flat and have been involved in trying to save it. Please also consider additional meetings that accommodate the tribal needs.</p> <p>In the Draft Environmental Impact Statement, the Forest Service must consider the impacts to cultural values, wildlife, water, and air quality. It must also look at impacts to and loss of opportunities for hiking, climbing, birdwatching, camping, picnicking, and more. Real threats posed by the mine include land subsidence, the land physically dropping several feet; dewatering of nearby perennial waters such as Devil's (Gaan) Canyon; and a massive pile of heavy-metal-laden tailings on other parts of our national forest. The lands offered in this swap do not meet the standards of Oak Flat and cannot replace this culturally significant and biologically rich area. That must be considered, as well.</p> <p>Now that Oak Flat is listed on the National Historic Preservation Registry, the Forest Service has a special responsibility to consider the impacts and must give these important issues heightened scrutiny.</p> <p>I encourage the Forest Service to do everything possible to keep this swap from moving forward.</p> <p>Thank you for considering my comments.</p> <p>Sincerely,</p>	Sierra Club

Table F-1. Form Letter Comment Text (Continued)

Form Letter	Form Letter Text	Form Letter Sponsor
2	<p>I'm writing to submit scoping comments on the Resolution Copper Project and Land Exchange. Thank you for the opportunity to provide public comment.</p> <p>I'm very concerned that this project would destroy Apache sacred land and do a tremendous amount of damage to public lands that are very valuable and important to all Americans. I urge you to conduct a thorough analysis of this project and include a wide range of alternatives that could involve dramatic changes to the mine plan.</p> <p>Cultural. The Oak Flat area is sacred ground to the San Carlos Apache and other tribes. Great care should be taken to thoroughly survey the area prior to any decision on the mine and ensure that its priceless cultural resources are not destroyed forever.</p> <p>Water. Continuous groundwater pumping over the life of the mine threatens to dry up numerous springs in the area, as well as the perennial surface waters of Ga'an Canyon, which would destroy habitat for many species. A thorough and independent hydrological analysis of the area's aquifer and the groundwater/surface water relationship should be conducted before any decision is made on the mine, in order to determine precisely the impacts of the inevitable dramatic drawdown of the aquifer and its effects on riparian and aquatic habitat.</p> <p>Endangered species. Ocelot and Arizona hedgehog cactus are known to occur in the project area, and there could be other endangered species in harm's way. Thorough surveys should be conducted for those species and a number of others, including yellow-billed cuckoo and narrow-headed garter snake. Particular attention should be paid to springs and riparian areas that may harbor endemic species not yet documented.</p> <p>Tailings. The currently proposed site for tailings disposal lies directly upstream of the community of Queen Valley, placing it in grave danger in the event of a dam failure, spill or contamination leaking from the tailings. This site is simply not a suitable location for a massive tailings impoundment. The EIS should analyze a range of alternative sites for tailings.</p> <p>Subsidence. The currently proposed mine plan, with its reliance on the technology of block cave mining, is not suitable for the area. This technique will cause massive subsidence that will leave a crater two miles wide and at least 1,000 feet deep, rendering the land unstable, and therefore inaccessible, in perpetuity. This technique threatens to destabilize a wide area, including the culturally and historically sensitive Apache Leap as well as nearby Highway 60. The EIS should carefully analyze the wide-ranging impacts of subsidence, as well as alternatives to the block cave technique that do not cause subsidence and would instead leave the Oak Flat area intact for future generations.</p> <p>Socioeconomic. The EIS should analyze a wide range of potential impacts to surrounding communities, including public-health impacts from air and water pollution, negative economic impacts from the inevitable boom-and-bust cycle of the mining industry and its potential disruption and displacement of existing economic activity, and stresses on public services and infrastructure including transportation, schools and health-care facilities.</p> <p>Land exchange. Every effort should be made to independently assess the balance between the value of lands offered by the company for exchange and the many cultural, environmental, and economic values of the Oak Flat area. The value of the exchange lands currently being offered pales in comparison to the tangible and intangible value of Oak Flat, which is a priceless and irreplaceable resource for many reasons.</p> <p>Thank you again for taking the time to consider these comments. I urge you to think outside the box and do everything in your power to protect Oak Flat from this needlessly harmful proposal.</p>	Center for Biological Diversity

Table F-1. Form Letter Comment Text (Continued)

Form Letter	Form Letter Text	Form Letter Sponsor
3	<p>Dear Resolution EIS Comments,</p> <p>I am extremely concerned and strongly opposed to the proposed land swap and destruction of Oak Flat. I also am concerned about the process.</p> <p>Please extend the comment deadline on this proposed project. The significant and negative impacts of the project, the massive size of the mine, the style of the mining which will promote land subsidence, the impacts on water and wildlife, and the enormous tailings pile, all warrant an extended comment period to 120 days. I also ask that you add public meetings in Phoenix and Tucson. Many people who live in these areas value Oak Flat and have been involved in trying to save it. Please also consider additional meetings that accommodate the tribal needs.</p> <p>In the Draft Environmental Impact Statement, the Forest Service must consider the impacts to cultural values, wildlife, water, and air quality. It must also look at impacts to and loss of opportunities for hiking, climbing, birdwatching, camping, picnicking, and more. Real threats posed by the mine include land subsidence, the land physically dropping several feet; dewatering of nearby perennial waters such as Devil's (Gaan) Canyon; and a massive pile of heavy-metal-laden tailings on other parts of our national forest. The lands offered in this swap do not meet the standards of Oak Flat and cannot replace this culturally significant and biologically rich area. That must be considered, as well.</p> <p>Now that Oak Flat is listed on the National Historic Preservation Registry, the Forest Service has a special responsibility to consider the impacts and must give these important issues heightened scrutiny.</p> <p>I encourage the Forest Service to do everything possible to keep this swap from moving forward.</p> <p>Thank you for considering my comments.</p> <p>Sincerely,</p>	Sierra Club

Table F-1. Form Letter Comment Text (Continued)

Form Letter	Form Letter Text	Form Letter Sponsor
4	<p>Dear Forest Supervisor,</p> <p>As written, the Resolution Copper Mining Plan of Operation will result in the largest loss of recreational rock climbing in the history of the United States. Please study and evaluate mining alternatives that would involve no surface subsidence and minimal surface disturbance so that any future mining would be compatible with continued recreational and other uses of Oak Flat.</p> <p>A recent Headwaters Economics study shows that the economy in the Western States has outperformed the rest of the country in part because of their popular national parks, monuments, wilderness areas and other public lands. The Outdoor Industry Association also shows that outdoor recreation currently contributes more than twice as many dollars to Arizona's economy as the mining industry does. When considering the socioeconomic impacts of this mine to Arizona and the local economy, the Forest Service needs to also consider the negative impact on recreation and its sustainable source of revenue to the State of Arizona. Any economic benefits and/or impacts should be extended well into the future—extending well past mine closure and including perpetual management of the tailings impoundment, etc.</p> <p>As planned, the proposed mine will use between 20,000 and 40,000 acre feet of water annually. Please fully study what the impacts of that enormous water usage would be in view of Arizona's current drought situation.</p> <p>A study and plan detailing where water would be discharged after use and what contaminant levels would likely be in that post-mine water needs to be included in the EIS.</p> <p>Please fully study the hydrology and impacts of the mine operation on ground water sources at and near Oak Flat and the town of Superior. While sinking their #10 shaft, Resolution Copper conclusively demonstrated that their own hydrological studies of the area are woefully inadequate.</p> <p>It is improper for the U.S. Forest Service to initiate any environmental impact statement for the Resolution Copper mine until it can fully explain to the public exactly how the land exchange legislation will alter or modify the normal NEPA process for environmental impact statements.</p> <p>The geotechnical and hydrological study for the proposed Resolution Copper tailings site from the Resolution Copper mining plan of operation should not be separate. These are clearly connected actions and must be considered together in the same environmental impact statement. There can be no mine without a tailings site and there would be no tailings without the existence of the mine.</p> <p>Please fully study the environmental impacts of the proposed tailings site west of Superior. Include in that study the likelihood and consequences of contamination to groundwater at and around the tailing site as well as the possible impacts from a catastrophic tailings dam failure at that site.</p> <p>What could be the possible effects to air quality and the associated health effects resulting from the inevitable airborne distribution of finely divided tailings material?</p> <p>Sincerely,</p>	Unknown

Table F-1. Form Letter Comment Text (Continued)

Form Letter	Form Letter Text	Form Letter Sponsor
5	<p>Dear Supervisor Bosworth,</p> <p>I'm writing to submit scoping comments on the Resolution Copper Project and Land Exchange. Thank you for the opportunity to provide public comments. I urge you to think outside the box and do everything in your power to protect Oak Flat from this needlessly harmful proposal.</p> <p>I'm concerned this project would destroy sacred land and damage public lands that are very valuable and important to all Americans. Please conduct a thorough analysis of this project and include a wide range of alternatives that could involve dramatic changes to the mine plan.</p> <p>Cultural. The Oak Flat area is sacred to Native Americans. Please thoroughly survey the area prior to any mine decision to ensure that priceless cultural resources are not destroyed forever.</p> <p>Water. Groundwater pumping over the life of the mine threatens to dry up springs and the perennial surface waters of Ga'an Canyon, which would destroy habitat for many species. An independent hydrological analysis should be done before any permitting decisions are made.</p> <p>Endangered species. Ocelot and Arizona hedgehog cactus are known to occur in the project area, and there could be other endangered species in harm's way. Surveys should be conducted for a number of species, including yellow-billed cuckoo and narrow-headed garter snake.</p> <p>Tailings. The proposed site for tailings disposal lies directly upstream of the community of Queen Valley, placing it in grave danger in the event of a dam failure, spill or contamination leaking from the tailings. This site is simply not a suitable location for a massive tailings impoundment. The EIS should analyze a range of alternative sites for tailings.</p> <p>Socioeconomic. The EIS should analyze the public-health impacts from air and water pollution, its potential disruption and displacement of existing economic activity, and stresses on public services and infrastructure including transportation, schools and health-care facilities.</p> <p>Sincerely,</p>	Unknown

Table F-1. Form Letter Comment Text (Continued)

Form Letter	Form Letter Text	Form Letter Sponsor
6	<p>Dear Forest Supervisor Bosworth and the Resolution Copper EIS team,</p> <p>As the federal permitting process begins for the Resolution Copper Mine, I offer these formal scoping comments regarding the upcoming Draft Environmental Impact Statement. The Forest Service is obligated under the National Environmental Policy Act to select alternatives to Resolution Copper's current mine plan – alternatives that would vastly reduce the incredible environmental damage of the mine. While I support federal legislation to repeal the Oak Flat land exchange and would like to see this area preserved, it is essential that the Forest Service take a hard look at the following during the permitting process:</p> <ol style="list-style-type: none">1. Alternatives to block cave mining methods that would not leave a mile wide, 1,000 foot deep crater at Oak Flat.2. Alternatives to using conventional, wet-tailings design. Dry tailings management – when done right – is safer and uses far less water than aqueous tailings.3. Alternatives to mine dewatering methods. Instead of discharging mine water dozens of miles away, water should be reinjected locally to help preserve pre-mining hydrologic conditions and the springs and wildlife that depend on these water resources.4. Alternatives to the proposed tailings location. The current plan would destroy over seven square miles of undeveloped National Forest land. Other sites – particularly existing open pit mines at or near the end of their life – should be considered.5. Alternatives to conventional, high-carbon energy. The Resolution Copper Mine would become one of Arizona's largest consumers of electricity. It is essential that the Forest Service consider low and zero-carbon electricity sources for the mine, rather than the current plan which would rely largely on coal and gas-fired generation from the grid. <p>In addition to these engineering issues, the following must be assessed and quantified:</p> <ol style="list-style-type: none">1. Loss of, and amount of, sacred sites at Oak Flat using the best archaeological and anecdotal data available.2. The amount of years and annual costs of post-closure, perpetual environmental liabilities, particularly water treatment, tailings management, and other ongoing maintenance. The impacts of an inevitable failure of these ongoing and expensive activities must also be assessed.3. Loss of recreational opportunities, particularly rock climbing, hiking, and camping.4. The amount of water the mine will use consumptively each year, including from power generation, and a detailed assessment of the competition for future water supplies.5. Quantitative assessment of light, noise, and air pollution6. Analysis of cumulative impacts, such as increased regional development associated with the influx of mine workers and the impacts of such on local infrastructure and the environment. <p>Thank you for accepting these scoping comments,</p> <p>Sincerely,</p>	Earthworks
7	<p>Dear Mr. Bosworth, I care deeply about the area in the Tonto National Forest known as Oak Flat campground. This area will be completely destroyed by the Resolution Copper mine planned for this area. I will be personally affected by this mine and the associated land exchange and therefore I oppose this mine and land exchange. I hope the Forest Service will take my concerns about Oak Flat seriously. In the Environmental Impact Statement I expect the Forest Service to analyze the impacts to archaeological and cultural resources, wildlife, including threatened and endangered species, surface and ground water, air quality, as well as recreational and spiritual opportunities currently enjoyed at Oak Flat that will be lost forever. Living in the beautiful deserts of Arizona, I know the value of water and its importance to wildlife and wildlands. The Forest Service must do everything it can to protect the water resources found at and near Oak Flat.</p>	Protect Oak Flat
8	<p>"I oppose any mining by the Resolution Copper project, which would harm or destroy the land of Oak Flat - considered sacred and holy by the Apache tribe - and its natural resources."</p>	CREDO Action

Table F-1. Form Letter Comment Text (Continued)

Form Letter	Form Letter Text	Form Letter Sponsor
9	<p>I, xxxxxxx (name) request that the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) process identify potential impacts of mine operation to designated critical habitat (and current range habitat) of the endangered Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>). Specifically, analyze the effects of groundwater depletion, contamination of regional aquifers with waste material, aerial dispersal of fine particulates, and reduced connectivity between distinct biogeographical populations, on species recovery.</p> <p>Protect the water and wildlife at Oak Flat, Arizona. The extinction of endangered and threatened species is not worth any amount of money.</p>	Unknown
10	<p>I, xxxxxxx (name) request that the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) process identify potential impacts of mine operation to designated critical habitat (and current range habitat) of the threatened Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>). Specifically, analyze the effects of regional groundwater depletion, aerial dispersal of fine particulates, reduced plant cover and insect abundance, and interrupted connectivity between distinct biogeographical populations and other impacts on species recovery.</p> <p>Protect the water and wildlife at Oak Flat, Arizona. The extinction of endangered and threatened species is not worth any amount of money.</p>	Unknown
11	<p>I, xxxxxxx (name) request that the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) process identify potential impacts of mine operation to endangered Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) populations and habitat. Specifically, direct and downstream impacts to access to healthy stands of saguaro cactus and paniculate agaves, Sonoran desertscrub vegetation, semi-desert grassland and oak woodlands, cave habitat and migration corridors, and other impacts to species recovery.</p> <p>Protect the water and wildlife at Oak Flat, Arizona. The extinction of endangered and threatened species is not worth any amount of money.</p>	Unknown
12	<p>I, xxxxxxx (name) request that the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) process identify potential impacts of mine operation on the remaining population and habitat of endangered Gila chub (<i>Gila intermedia</i>). Specifically analyze the effects of continued water use for development purposes, habitat degradation due to improper land management in the watershed, erosion from roads or off bare ground, reduced abundance of aquatic invertebrates due to lowered water quality and quantity and other impacts on species recovery.</p> <p>Protect the water and wildlife at Oak Flat, Arizona. The extinction of endangered and threatened species is not worth any amount of money.</p>	Unknown
13	<p>I, xxxxxxx (name) request that the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) process identify potential impacts of mine operation to designated critical habitat (and current range habitat) of the endangered Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>). Specifically analyze the effects of regional groundwater depletion, aerial dispersal of fine particulates, the potential for reduced abundance of aquatic insects due to degraded water quality and quantity, and interrupted habitat connectivity between biogeographical populations, on species recovery.</p> <p>Protect the water and wildlife at Oak Flat, Arizona. The extinction of endangered and threatened species is not worth any amount of money.</p>	Unknown
14	<p>I, xxxxxxx (name) request that the Resolution Copper Project and Land Exchange Environmental Impact Statement (EIS) process identify potential impacts of mine operation to endangered Yuma Clapper rail (<i>Rallus longirostris yumanensis</i>) populations and habitat. Specifically, habitat loss owing to water diversion, direct and downstream impacts to water quality and quantity both for the duration of the mine's proposed operation as well as in case of acid mine drainage or catastrophic tailings failure, with particular attention to nesting habitat and prey availability, and other impacts to species recovery.</p> <p>Protect the water and wildlife at Oak Flat, Arizona. The extinction of endangered and threatened species is not worth any amount of money.</p>	Unknown

APPENDIX G

Comment Coding Structure Description and Comment Totals

Table G-1. Comment Coding Structure Description and Comment Totals

Issue Category		Comment Count
101	Code TBD / Pending	0
Comments that required a second read by another comment coder or comments without an existing Issue code were coded to Issue 101 as To Be Determined (TBD) and/or Pending. After a second read, comments coded to this category were either coded to an existing Issue code or were coded to a new Issue code. At the completion of coding, no comments remained under Issue 501.		
102	Support / Opposition	1057
Comments coded to Issue 102 discussed general support or opposition to the proposed action.		
110	NEPA Process	385
Comments coded to Issue 110 discussed the NEPA process.		
111	Public Involvement / Meetings	62
Comments coded to Issue 111 discussed the public involvement process or public meetings.		
112	Best Available Science	93
Comments coded to Issue 112 discussed the use of best available science during the EIS analysis of the proposed action.		
113	Alternatives	43
Comments coded to Issue 113 discussed the EIS alternatives development process and/or provided specific alternative suggestions for consideration in the EIS.		
115	Baseline EA	12
Comments coded to Issue 115 discussed on the "Resolution Copper Mining Baseline Hydrological and Geotechnical Data Gathering Plan of Operations Environmental Assessment."		
120	Socioeconomic Study	1011
Comments coded to Issue 115 discussed the need for a socioeconomic analysis in the EIS, requested the EIS use of existing socioeconomic studies, requested the EIS include new socioeconomic studies, and/or requested specific socioeconomic study analysis topics.		
130	Land Exchange	140
Comments coded to Issue 130 discussed in general terms the proposed land exchange.		
131	Land Exchange Valuation	65
Comments coded to Issue 131 discussed the land exchange valuation.		
132	Land Exchange Legislation	245
Comments coded to Issue 132 discussed the land exchange legislation.		
140	General Mine Operations	150
Comments coded to Issue 140 discussed the content of the mine general plan of operations and/or identified deficiencies in the general plan of operations.		
141	Tailings Facility	581
Comments coded to Issue 140 discussed the tailings storage facility and/or the proposed location of the facility.		
142	Subsidence Zone / Oak Flat	856
Comments coded to Issue 145 discussed subsidence zone impacts, mining technique at the subsidence zone, and/or the area known as Oak Flat.		
143	Mineral Processing / West Plant Site	21
Comments coded to Issue 143 discussed mineral processing and/or the West Plant Site.		
144	Groundwater Pumping	90
Comments coded to Issue 144 discussed groundwater pumping associated with the proposed action.		

Table G-1. Comment Coding Structure Description and Comment Totals (Continued)

Issue Category		Comment Count
145	MARRCO corridor	11
Comments coded to Issue 145 discussed the MARRCO corridor and/or mine facilities proposed for the MARRCO corridor.		
146	Loadout Facility	12
Comments coded to Issue 146 discussed the loadout facility and/or the proposed loadout facility location.		
150	General Analysis / Management	1550
Comments coded to Issue 150 discussed general EIS analysis topics not pertaining to other Issue codes, such as biological resources, water resources, air quality, and visual resources.		
160	Heritage Resources	174
Comments coded to Issue 160 discussed heritage resources.		
161	Apache Leap Special Management Area	2
Comments coded to Issue 161 discussed the Apache Leap Special Management Area.		
170	Recreation / Public Access	109
Comments coded to Issue 170 discussed recreation and public access.		
180	Public Health and Safety	47
Comments coded to Issue 180 discussed public health and safety.		
190	Transportation	57
Comments coded to Issue 190 discussed transportation.		
200	Mine Reclamation	100
Comments coded to Issue 200 discussed mine reclamation.		
210	Laws and Regulations	74
Comments coded to Issue 210 discussion laws and regulations pertaining the proposed action and EIS analysis of the proposed action.		
Rationale Category		Comment Count
501	Code TBD / Pending	0
Comments that required a second read by another comment coder or comments without an existing Rationale code were coded to Rationale 501 as To Be Determined (TBD) and/or Pending. After a second read, comments coded to this category were either coded to an existing Rationale code or were coded to a new Rationale code. At the completion of coding, no comments remained under Rationale 501.		
502	General Support	302
Comments coded to Rationale 502 discussed general support for the proposed action.		
503	General Opposition	695
Comments coded to Rationale 503 discussed general opposition to the proposed action.		
504	No Rationale	46
Comments coded to Rationale 504 did not include an identifiable rationale in the comment.		
505	Multiple Affected Resources / Reasons	239
Comments coded to Rationale 505 discussed multiple affected resources and/or provided multiple reasons for the expressed comments.		
506	Persons or Groups	107
Comments coded to Rationale 506 discussed a specific subset of persons or groups within the comment text.		
520	NEPA Process	259
Comments coded to Rationale 520 discussed in general terms the NEPA process related to the proposed action.		

Table G-1. Comment Coding Structure Description and Comment Totals (Continued)

Rationale Category		Comment Count
521	Mitigations	333
Comments coded to Rationale 521 discussed the use of mitigations in the EIS analysis and/or proposed specific mitigation measures for consideration in the EIS analysis.		
522	Connected Action	16
Comments coded to Rationale 522 discussed connected actions for consideration in the EIS analysis.		
533	Comment Process	32
Comments coded to Rationale 533 discussed the EIS public comment process and/or opportunities for additional public comment.		
534	Scoping Meetings	30
Comments coded to Rationale 534 discussed the EIS scoping meetings and/or scoping process.		
535	Other Permits / Regulations	236
Comments coded to Rationale 535 discussed other permits and/or regulations pertaining to the proposed action.		
536	Mining Withdrawal Area	5
Comments coded to Rationale 536 discussed the Oak Flat Picnic and Camp Ground (PLO 1229) mining withdrawal area.		
537	Alternatives	391
Comments coded to Rationale 537 discussed the alternatives development process and/or proposed specific alternatives for consideration in the EIS analysis.		
538	Mine Plan of Operations	135
Comments coded to Rationale 538 discussed the mine general plan of operations.		
539	Cumulative Impacts	29
Comments coded to Rationale 539 discussed cumulative impacts.		
540	Socioeconomics	565
Comments coded to Rationale 540 discussed in general terms socioeconomic concerns and topics associated with the proposed action.		
541	Multiplier	41
Comments coded to Rationale 541 discussed socioeconomic multipliers.		
542	Tax Dollars	148
Comments coded to Rationale 542 discussed tax dollars.		
543	Benefits (general)	245
Comments coded to Rationale 543 discussed in general terms the topic of socioeconomic benefits.		
544	Jobs	307
Comments coded to Rationale 544 discussed jobs.		
545	Study	48
Comments coded to Rationale 545 discussed existing and proposed socioeconomic studies for use in the EIS.		
546	Property Values	41
Comments coded to Rationale 546 discussed property values.		
547	Property Taxes	29
Comments coded to Rationale 547 discussed property taxes.		
548	Public Costs	101
Comments coded to Rationale 548 discussed public costs associated with the proposed action.		
549	Tourism	82
Comments coded to Rationale 549 discussed tourism.		

Table G-1. Comment Coding Structure Description and Comment Totals (Continued)

Rationale Category		Comment Count
550	Losses (general)	71
Comments coded to Rationale 550 discussed in general terms the topic of socioeconomic losses.		
551	Copper Demand / Uses	110
Comments coded to Rationale 551 discussed copper demand and copper uses.		
552	Social Impact Assessment	23
Comments coded to Rationale 552 discussed a social impact assessment process for the EIS analysis.		
560	Water Resources	324
Comments coded to Rationale 560 discussed in general terms water resources concerns and topics associated with the proposed action.		
561	Water Supply	162
Comments coded to Rationale 561 discussed community and public water supplies.		
562	Water Quality	259
Comments coded to Rationale 562 discussed water quality.		
563	Water Quantity	167
Comments coded to Rationale 563 discussed the water quantity needed to support the proposed action.		
564	Groundwater	161
Comments coded to Rationale 564 discussed groundwater.		
565	Surface Water	86
Comments coded to Rationale 565 discussed surface water.		
566	Wastewater	36
Comments coded to Rationale 566 discussed wastewater associated with the proposed action.		
567	Acid Mine Drainage	38
Comments coded to Rationale 567 discussed acid mine drainage.		
568	Groundwater Recharge	15
Comments coded to Rationale 586 discussed groundwater recharge.		
569	Pit Lake	5
Comments coded to Rationale 569 discussed the potential for formation of a pit lake.		
580	Cultural Resources	226
Comments coded to Rationale 580 discussed in general terms cultural resources concerns and topics associated with the proposed action.		
581	American Indian Religious Freedom Act	26
Comments coded to Rationale 581 discussed the American Indian Religious Freedom Act.		
582	Tribal Values	412
Comments coded to Rationale 582 discussed tribal values.		
583	NRHP – National Register Historic Properties	67
Comments coded to Rationale 583 discussed NRHP-listed resources and resources eligible for NRHP listing.		
584	Apache Leap	23
Comments coded to Rationale 584 discussed Apache Leap.		
585	Tribal Consultation	63
Comments coded to Rationale 585 discussed tribal consultation.		

Table G-1. Comment Coding Structure Description and Comment Totals (Continued)

Rationale Category		Comment Count
586	Regional History	23
Comments coded to Rationale 586 discussed the regional history of the project area and surrounding communities.		
600	Biological Resources	237
Comments coded to Rationale 600 discussed in general terms biological resources.		
601	Wildlife	129
Comments coded to Rationale 601 discussed in general terms wildlife concerns and topics associated with the proposed action.		
602	Riparian / Aquatic Resources	56
Comments coded to Rationale 602 discussed riparian and aquatic resources.		
603	Special Status Species	71
Comments coded to Rationale 603 discussed special status species.		
604	Plant Salvage	10
Comments coded to Rationale 604 discussed plant salvage.		
605	Invasive Species	5
Comments coded to Rationale 605 discussed invasive species.		
606	Bird Species	33
Comments coded to Rationale 606 discussed bird species.		
607	Fish	2
Comments coded to Rationale 607 discussed fish species.		
608	Plants	4
Comments coded to Rationale 608 discussed in general terms plants.		
620	Recreational Resources	342
Comments coded to Rationale 620 discussed in general terms recreational resource concerns and topics associated with the proposed action.		
621	Trails	38
Comments coded to Rationale 621 discussed trail resources (not including the Arizona National Scenic Trail).		
622	Rock Climbing	106
Comments coded to Rationale 622 discussed rock climbing resources.		
623	Boyce Thompson Arboretum	14
Comments coded to Rationale 623 discussed the Boyce Thompson Arboretum.		
624	Public Access	69
Comments coded to Rationale 624 discussed public access.		
625	Hunting	5
Comments coded to Rationale 625 discussed hunting resources.		
626	Arizona National Scenic Trail	24
Comments coded to Rationale 626 discussed the Arizona National Scenic Trail.		
640	Visual Resources	96
Comments coded to Rationale 640 discussed visual resource concerns and topics related to the proposed action.		
650	Public Health and Safety	285
Comments coded to Rationale 650 discussed public health and safety concerns and topics related to the proposed action.		
651	Wildfire	2
Comments coded to Rationale 651 discussed wildlife concerns and topics related to the proposed action.		

Table G-1. Comment Coding Structure Description and Comment Totals (Continued)

Rationale Category		Comment Count
660	Roads	44
Comments coded to Rationale 660 discussed road concerns and topics related to the proposed action.		
670	Air Quality	210
Comments coded to Rationale 670 discussed air quality concerns and topics related to the proposed action.		
680	Ranching / Grazing / Farming	14
Comments coded to Rationale 680 discussed ranching, grazing, and/or farming concerns and topics related to the proposed action.		
690	Noise and Vibration	43
Comments coded to Rationale 690 discussed noise and vibration concerns and topics related to the proposed action.		
691	Night Sky / Light Pollution	28
Comments coded to Rationale 691 discussed night sky and light pollution concerns and topics related to the proposed action.		
700	Trains	13
Comments coded to Rationale 700 discussed concerns with trains and/or issues surrounding use of trains in the proposed action.		
710	Traffic	41
Comments coded to Rationale 710 discussed traffic concerns and topics related to the proposed action.		
720	Climate Change	72
Comments coded to Rationale 720 discussed climate change concerns and topics related to the proposed action.		
730	Geology	114
Comments coded to Rationale 730 discussed geologic concerns and topics related to the proposed action, including but not limited to the subsidence zone.		
731	Mining Claims	9
Comments coded to Rationale 731 discussed mining claims concerns and topics related to the proposed action.		
740	Land Conservation	180
Comments coded to Rationale 740 discussed land conservation concerns and topics related to the proposed action.		
741	Public Lands	144
Comments coded to Rationale 741 discussed public land concerns and topics related to the proposed action.		
742	Land Ownership	41
Comments coded to Rationale 742 discussed land ownership concerns and topics related to the proposed action.		
750	Company History	69
Comments coded to Rationale 750 discussed company history concerns and topics related to the proposed action.		
760	Bond Structure / Amount	34
Comments coded to Rationale 760 discussed concerns and topics related to the proposed action bond structure and the monetary amount of bonds, including but not limited to mine reclamation bonds.		
770	Mine Reclamation	63
Comments coded to Rationale 770 discussed concerns and topics related to the mine reclamation.		
780	Cooperating Agency	9
Comments coded to Rationale 780 discussed the cooperating agency process and/or were requests for specific agencies to participate as cooperating agencies.		
790	Environmental Justice	13
Comments coded to Rationale 790 discussed environmental justice concerns and topics related to the proposed action.		