

Overview

On March 18, 2016, the Tonto National Forest issued a Notice of Intent to prepare an environmental impact statement for the Resolution Copper Project and Land Exchange.

Three separate but related components would be analyzed in the EIS:

- Approval of a proposed mine plan governing surface disturbance on NFS lands outside of the exchange parcels from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum that was submitted to the Tonto National Forest in November 2013
- Approval of an amendment to the Tonto National Forest Plan, if needed.
- Resolution Copper increased the offered parcel by an additional 32 acres of privately held land that is adjacent to the 110 acres presented in the NDAA as part of the Apache Leap Special Management Area. The additional land was provided to allow for a more contiguous parcel and for ease of surveying.

PURPOSE OF AND NEED FOR ACTION

1.1 Introduction

The U.S. Forest Service (Forest Service) is a land management agency under the U.S. Department of Agriculture. The Forest Service's 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 Tonto National Forest, a unit of the Forest Service located in south-central Arizona, prepared this environmental impact statement (EIS) to disclose the potential environmental effects of the Resolution Copper Project and Land Exchange (project). The project includes (1) the Southeast Arizona Land Exchange (land exchange), a congressionally mandated exchange of land between Resolution Copper Mining, LLC (Resolution Copper) and the United States; (2) approval of the "General Plan of Operations" (GPO)¹ for any operations on National Forest System (NFS) land associated with a proposed large-scale underground mine (Resolution Copper Project); and (3) amendments to the "Tonto National Forest Land and Resource Management Plan" (forest plan) (1985, as amended).

Resolution Copper is a limited liability company that is owned by Rio Tinto (55 percent) and



Historical Magma Mine workings and the smelter complex

BHP (45 percent). Rio Tinto is the managing member. In November 2013, Resolution Copper submitted a proposed GPO to the Forest Service for development and operation of a large-scale mine near Superior, Arizona (figure 1.1-1).² The proposed GPO sought authorization for surface disturbance on NFS lands for mining operations and processing of copper and molybdenum. The proposed mine would be located in the Globe and Mesa Ranger Districts. The Forest Service determined the proposed GPO to be complete in December 2014 (U.S. Forest Service 2014c). As

1. The GPO, as amended, is available online at and at the Tonto National Forest Supervisor's Office, 2324 East McDowell Road, Phoenix, AZ 85006.
2. The maps contained in this EIS are based on a variety of sources of electronic and geographic data. Every effort has been made to ensure the correctness of these data coverages; however, the U.S. Department of Agriculture Forest Service makes no warranty, expressed or implied, about the accuracy, reliability, completeness, or utility of geospatial data not developed specifically for the Resolution Copper Project and Land Exchange EIS.

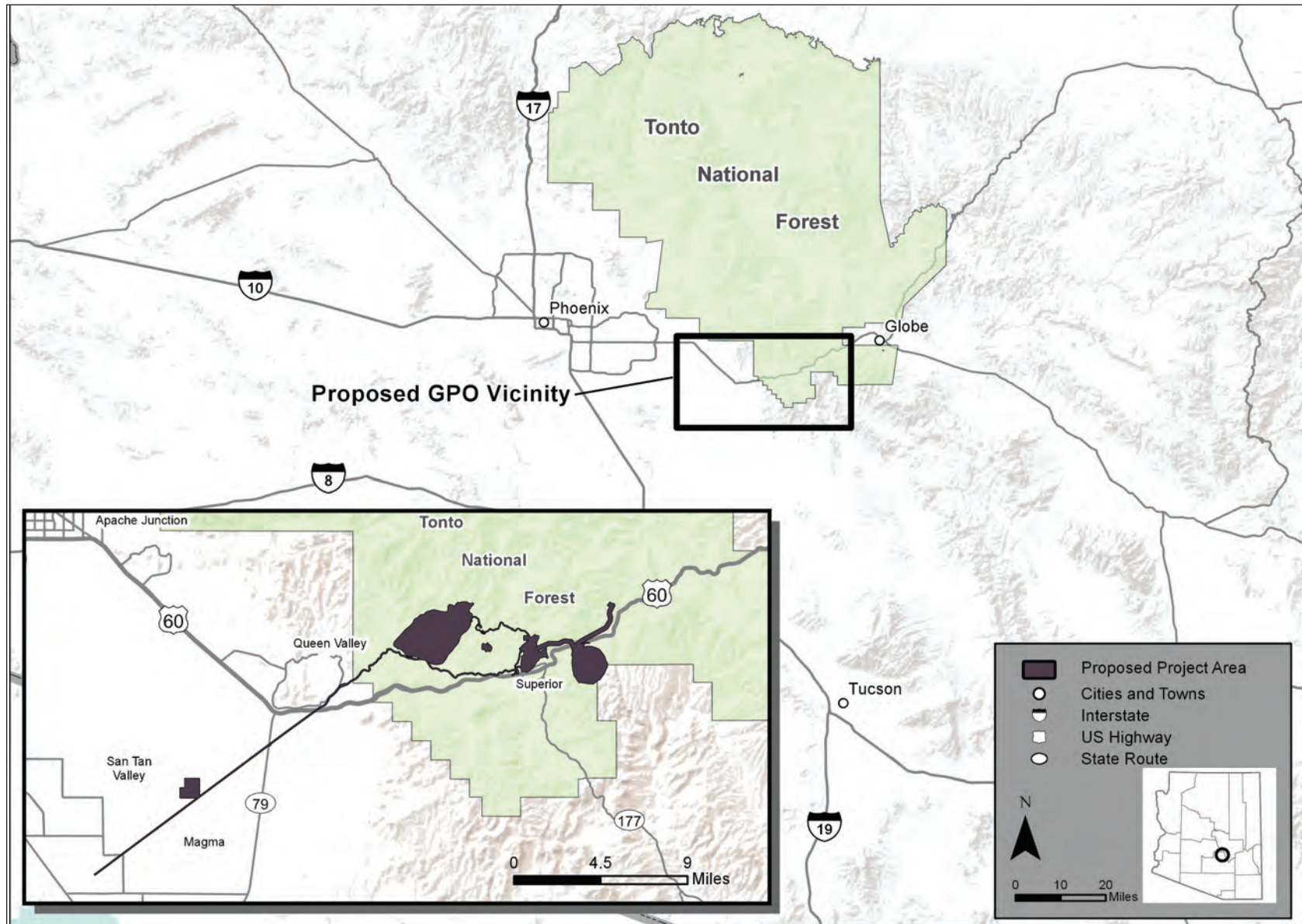


Figure 1.1-1. Resolution Copper Project vicinity map

proposed in the GPO, the mining portion of the project would occur on a mixture of private, State, and NFS lands.

However, in December 2014, Congress passed the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA). Section 3003 of this law (appendix A) authorizes and directs the Secretary of Agriculture to administer an exchange of NFS lands, which would convey 2,422 acres of NFS land in the area of the proposed mine to Resolution Copper in exchange for approximately 5,344 acres³ of private land on eight parcels located elsewhere in eastern Arizona (see section 1.4.2).

The offered private lands would be transferred from Resolution Copper to the United States, to be administered by the Forest Service and the U.S. Department of the Interior Bureau of Land Management (BLM). Upon completion of the land exchange, it is expected that one of the largest copper mines in the United States would be established on the exchange parcel, with an estimated surface disturbance of 6,951 acres⁴ (approximately 11 square miles). It would also be one of the deepest mines in the United States, with mine workings extending 7,000 feet beneath the surface.

Section 3003 of the NDAA explicitly requires the Secretary of Agriculture to prepare an EIS prior to conveying the Federal land. This EIS 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, including the granting of permits, rights-of-way, or the approvals for construction of associated power, water, transportation, processing, tailings, waste disposal, or other ancillary facilities.

Section 3003 of the NDAA requires this EIS to assess the effects of mining and related activities on such cultural and archaeological resources that may be located on the NFS lands conveyed to Resolution Copper, and identify measures that may be taken, to the extent

practicable, to minimize potential adverse impacts on those resources, if any. The Secretary of Agriculture is further directed to engage in government-to-government consultation with affected Indian Tribes regarding issues of concern to the affected tribes related to the land exchange and, following such consultation, consult with Resolution Copper and seek to find mutually acceptable measures to address affected tribes’ concerns and “minimize the adverse effects on the affected Indian Tribes resulting from mining and related activities on the Federal land conveyed to Resolution Copper” (see 16 United States Code [U.S.C.] 539p(c)(3)).

1.1.1 Document Structure

The Tonto National Forest prepared this EIS in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This EIS discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives.

This document has four volumes: volume 1, which contains an executive summary and chapters 1, 2, and the first portion of chapter 3; and volume 2, which contains the remainder of chapter 3 and chapters 4–8. Appendices are presented in volumes 3 and 4. The general contents of each volume follow.

1.1.1.1 Volume 1

- *Executive Summary*: Provides a brief overview of the contents of chapters 1 through 3 of the EIS.
- *Chapter 1. Purpose of and Need for Action*: Focuses on the underlying need to which the lead agency (Forest Service) is responding in proposing the action and alternatives, the

3. Resolution Copper increased the offered parcel by an additional 32 acres of privately held land that is adjacent to the 110 acres presented in the NDAA as part of the Apache Leap Special Management Area. The additional land was provided to allow for a more contiguous parcel and for ease of surveying.

4. This acreage includes a number of different facilities. See section 2.2.4 for full details.

framework in which decisions would be made, and the significant issues associated with the proposed action.

- *Chapter 2. Alternatives, Including the Proposed Action:* Describes the proposed action and four additional action alternatives considered in detail. These alternatives were developed based on significant issues raised by the public, Forest Service resource specialists, and other agencies. The no action alternative is included in the range of alternatives considered in detail. The chapter concludes with a summary that compares the environmental consequences of each alternative, based on the effects disclosed in chapter 3.
- *Chapter 3. Affected Environment and Environmental Consequences:* Describes the affected environment and the environmental consequences associated with the proposed action and the alternatives. The resources described under the affected environment headings represent baseline environmental conditions, incorporating past and present actions. Environmental consequences are the potential direct and indirect effects of each alternative on the affected environment. Reasonably foreseeable future actions (RFFAs) are considered in combination with the effects of each alternative to define the potential for cumulative effects. Any required mitigation measures are assessed, along with their effectiveness to reduce or offset impacts. Irreversible and irremediable commitments of resources, the relationship between short-term uses and long-term productivity of the environment, and adverse environmental impacts that cannot be avoided are disclosed for each resource as well as in a section at the end of chapter 3. Chapter 3 provides the analyses for the comparison summary presented in chapter 2.

1.1.1.2 Volume 2

- *Chapter 3. Affected Environment and Environmental Consequences:* Continuation of Chapter 3 sections.

- *Chapter 4. Consulted Parties:* Identifies the Native American tribes, organizations, and Federal, State, and local government agencies and other parties consulted during the development of the EIS.
- *Chapter 5. List of Preparers:* This chapter lists the individuals who, under the supervision of the Forest Service, contributed to the preparation of the document and includes their organization, education, years of experience, and project role.
- *Chapter 6. Literature Cited:* Provides a list of literature cited in this document.
- *Chapter 7. Glossary; Acronyms and Abbreviations:* Provides definitions of terms used in this document.
- *Chapter 8: Index:* Indicates where keywords can be found within the document.

1.1.1.3 Volumes 3 and 4

- Each part of the appendix provides detailed information in support of the analyses and conclusions reported in the EIS. Volumes 3 and 4 contain the following appendices:
 - Appendix A: Section 3003 of the NDAA
 - Appendix B: Existing Conditions of Offered Lands
 - Appendix C: Draft Practicability Analysis in Support of Clean Water Act 404(B)(1) Alternatives Analysis
 - Appendix D: Draft Resolution Copper Project Clean Water Act Section 404 Conceptual Compensatory Mitigation Plan
 - Appendix E: Alternatives Impact Summary
 - Appendix F: Alternatives Considered but Dismissed from Detailed Analysis

- Appendix G: Further Details of East Plant Site, West Plant Site, MARRCO Corridor, and Filter Plant and Loadout Facility Infrastructure
- Appendix H: Further Details of Mine Water Balance and Use
- Appendix I: Summary of Effects of the Land Exchange
- Appendix J: Mitigation and Monitoring Plan
- Appendix K: Summary of Content of Resource Analysis Process Memoranda
- Appendix L: Detailed Hydrographs Describing Impacts on Groundwater-Dependent Ecosystems
- Appendix M: Water Quality Modeling Results for Constituents of Concern
- Appendix N: Summary of Existing Groundwater and Surface Water Quality
- Appendix O: Draft Programmatic Agreement Regarding Compliance with the NHPA on the Resolution Copper Project and Southeast Arizona Land Exchange

Additional project documentation, including more detailed analyses of project area resources, may be found in the project planning record, located at the Tonto National Forest Supervisor's Office, 2324 East McDowell Road, Phoenix, Arizona 85006.

1.2 Background

The area around Superior, Arizona, has a long mining history, starting with sporadic production of silver and gold from claims in the 1870s. The Silver King Mine, a few miles north of Superior, was the richest silver mine in Arizona, producing over 6 million dollars' worth of silver between 1877 and 1886. In 1902, George Lobb, Sr., a former level boss at the Silver King Mine, sold his group of claims to the



Main Street, Superior, ca. 1920, is paved but still without sidewalks. Photo courtesy of the Superior Sun.

Lake Superior and Arizona Mining Company and laid out the townsite which was named Superior. Later, William Boyce Thompson acquired the former Silver Queen mining property and organized the Magma Copper Company in 1910. The merger of Lobb's Golden Eagle claims with Thompson's Silver Queen claims allowed development of the Magma Copper Company mine. The original concentrator was built in 1914, and in 1915, the Magma Arizona Railroad went into operation to transport high-grade ore and concentrates to connect with the Phoenix & Eastern Railroad near Webster (later Magma Junction) and on to a smelter in Hayden. By 1920, the mine had increased in size and production to support construction of a smelter in Superior. The smelter began operating in 1924, including a roaster plant and a 300-foot stack. The highway through Queen Creek Gorge, providing direct travel between Superior and Globe, was completed by the Arizona Highways Department at about the same time.

The Magma Mine boomed in the late 1920s, producing more than 40 million pounds of copper in 1929. The Magma Mine survived the Great Depression on reduced workers' hours but returned to full production during World War II. Dewatering of the mine workings was required to allow access and production from the deeper underground shafts. Superior became one corner of Arizona's "Copper Triangle"—which stretched between the towns of Superior and Globe/Miami to the north and Hayden/Winkelman to the southeast—and which is the general location of more than 30 historical and active copper mines (figure 1.2-1). Mines and smelters in the area included ASARCO's Ray Mine, the Hayden Smelter, the Christmas Mine north of Winkelman, and a number of large open-pit mines in the Globe/Miami area (see figure 1.2-1).

The Magma Mine operated consistently until copper prices fell in the 1980s but reopened in the late 1980s before closing for good in 1996. In addition to substantial surface facilities in Superior, the Magma Mine left approximately 220,000 feet (42 miles) of underground workings.

Exploration from those underground workings led to the discovery of the Resolution deposit—deeper than the historic Magma Mine and a few miles south. The Resolution deposit is not exposed at the surface but lies between 4,500 and 7,000 feet below the surface. Existing workings from the Magma Mine have been repurposed to allow exploration of and access to the copper deposit.

According to the available geological data, the ore body is one of the largest undeveloped copper deposits in the world with an estimated copper resource of 1.787 billion metric tonnes at an average grade of 1.54 percent copper.

The portion of the copper deposit explored to date is located primarily on NFS lands. The ore body likely extends underneath a 760-acre area of NFS land identified in the NDAA as the "Oak Flat Withdrawal Area." The Oak Flat Withdrawal Area was withdrawn from mineral entry in 1955 by Public Land Order 1229; consequently, the GPO does not propose to extract minerals from or conduct mining operations on these lands.

However, for more than 10 years, Resolution Copper pursued a land exchange to acquire adjacent lands northeast of the copper deposit. In December 2014, Congress authorized a land exchange pending completion of the EIS; the exchange parcel to be conveyed to Resolution Copper includes not only the Oak Flat Withdrawal Area but also the NFS lands above which the copper deposit is located. This collective 2,422-acre area of land is known as the "Oak Flat Federal Parcel."

The land ownership of the project area includes surface land administered by the Forest Service or BLM with Resolution Copper–controlled unpatented mining and/or mill site claims; Resolution Copper–owned private land; lands where Resolution Copper controls the patented mining claims; as well as lands with unpatented lode claims not controlled by Resolution Copper. Additional information on claims can be found in section 3.2.3.2.

The land surface overlying the copper deposit is located in an area that has a long history of use by Native Americans, including the Apache, O'odham, Puebloan, and Yavapai people currently represented by the following federally recognized tribes: Fort McDowell Yavapai Nation, Gila River Indian Community, Hopi Tribe, Mescalero Apache Tribe, Pueblo of Zuni, Salt River Pima-Maricopa Indian Community, San Carlos Apache Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, and Yavapai-Prescott Indian Tribe. The Forest Service maintains formal and informal consultations with these tribes and other interested and affected parties to better understand the historical, cultural, and religious importance of the area.

1.3 Purpose of and Need for Action

The purpose of and need for this project is twofold:

1. To consider approval of a proposed mine plan governing surface disturbance on NFS lands outside of the exchange parcels from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.

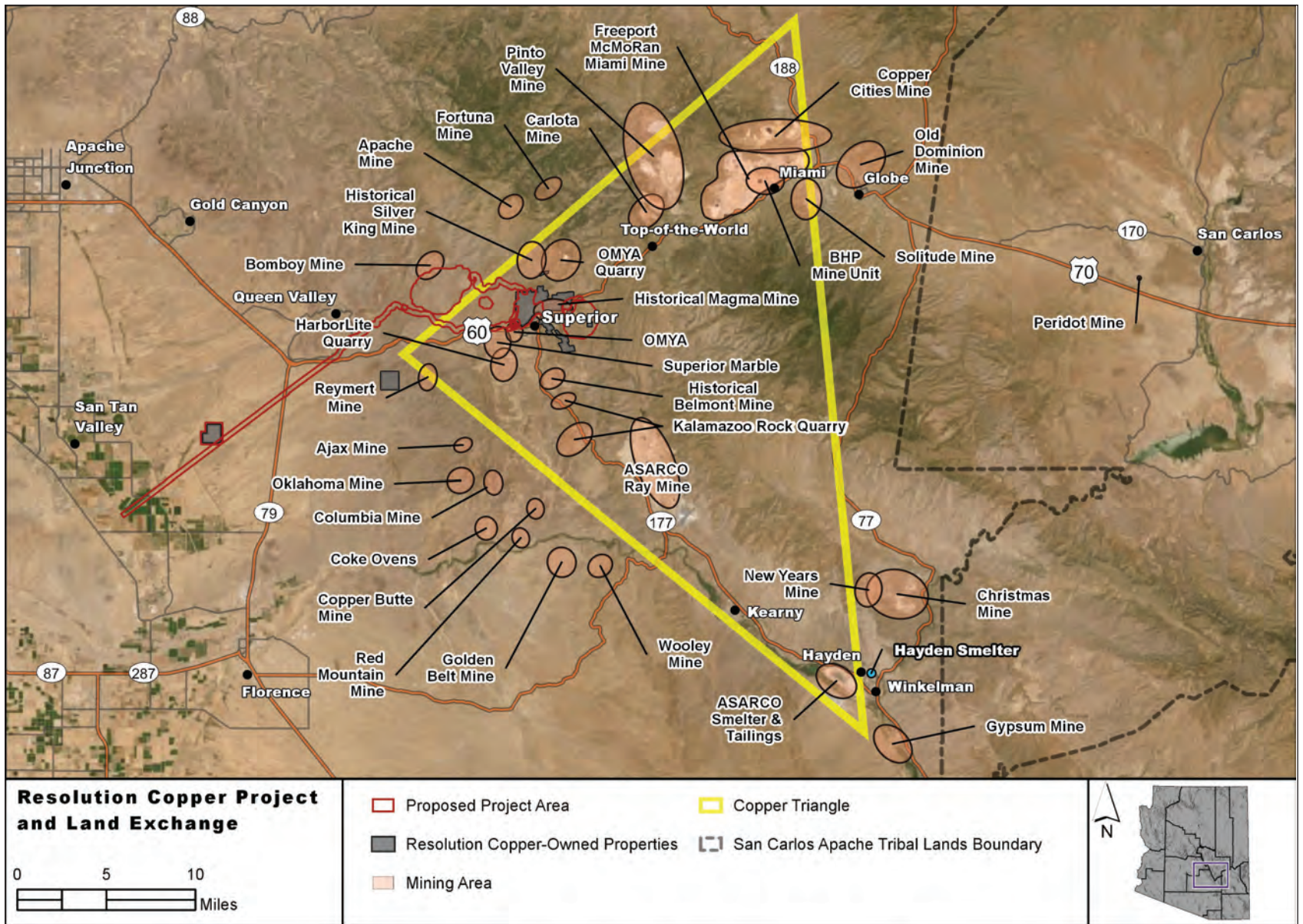


Figure 1.2-1. The Copper Triangle map

2. To consider the effects of the exchange of lands between Resolution Copper and the United States as directed by Section 3003 of the NDAA.

The role of the Forest Service under its primary authorities in the Organic Administration Act, Locatable Minerals Regulations (36 Code of Federal Regulations [CFR] 228 Subpart A), and the Multiple-Use Mining Act is to ensure that mining activities minimize adverse environmental effects on NFS surface resources and comply with all applicable environmental laws. The Forest Service may also impose reasonable conditions to protect surface resources. Through the Mining and Mineral Policy Act, Congress has stated that it is the continuing policy of the Federal Government, in the national interest, to foster and encourage private enterprise in

- the development of economically sound and stable domestic mining, minerals, and metal and mineral reclamation industries; and
- the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help ensure satisfaction of industrial, security, and environmental needs.

The Southeast Arizona Land Exchange and Conservation Act was included in a large public lands package containing 68 bills which was amended to the NDAA during the 113th Congress. The NDAA was signed into law by President Obama on December 19, 2014. Under the Southeast Arizona Land Exchange and Conservation Act, Resolution Copper would receive 2,422 acres of Federal land at the site of the future underground copper mine in exchange for 5,376 acres of privately owned conservation and recreation lands throughout Arizona after the completion of a final EIS (FEIS). While the mine itself would be located on private land after the exchange is completed, ancillary mining operations would need to occur on NFS land, and possibly other Federal and non-Federal land, outside of the exchange parcel.

1.4 Proposed Action

The proposed action consists of (1) approval of a mining plan of operations on NFS land associated with a proposed large-scale mine, which would be on private land after the land exchange, (2) the NDAA-directed land exchange between Resolution Copper and the United States, and, if needed, (3) amendment of the forest plan.

It should be noted that the proposed action is one of several alternatives considered in the draft EIS (DEIS). The proposed action should not be confused with the preferred alternative. The preferred alternative is identified in the executive summary and chapter 2 and is the agency's preference for implementation based on the alternatives evaluated and the current analysis.

1.4.1 General Plan of Operations

The following is a brief summary of the mining proposal components. A detailed description of the GPO can be found in section 2.2.2.2. The complete GPO is available on the project website, www.ResolutionMineEIS.us.

Resolution Copper proposes to conduct underground mining of a copper-molybdenum deposit located 4,500 to 7,000 feet below the ground surface within the exchange parcel. Resolution Copper estimates that the mine would take approximately 10 years to construct, would have an operational life of approximately 41 years (mine years 11 to 51), and would be followed by 5 to 10 years (mine years 52 to 57 or 62) of reclamation activities.

The mining operation would include the following facilities and activities analyzed in the EIS, which would be conducted on a mixture of NFS, private, and State lands:

- The mining itself would take place under the Oak Flat Federal Parcel, which is to be transferred to Resolution Copper

pursuant to Section 3003 of the NDAA. Mining would use an underground mining technique known as panel caving. Resolution Copper would use this process to construct a network of shafts and tunnels below the ore body. They would access the tunnels from vertical shafts in an area known as the East Plant Site. The panel caving technique fractures ore with explosives; gravity moves the ore downward, and then Resolution Copper removes it from below the ore deposit. As the ore moves downward and is removed, the land surface above the ore body also moves downward or “subsides.” Analysts expect a “subsidence” zone to develop near the East Plant Site; there is potential downward movement to a depth between 800 and 1,115 feet. Resolution Copper projects the subsidence area to be up to 1.8 miles wide at the surface.

- An area known as the East Plant Site would be developed adjacent to the Oak Flat Federal Parcel. The East Plant Site is the location of the Magma Mine #9 Shaft and #10 Shaft and associated surface mining support facilities. 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. Existing roads would provide access to the mine. Magma Mine Road would eventually be relocated as a result of the expected subsidence.⁵
- Resolution Copper would crush the mined ore underground and then transport it underground approximately 2.5 miles west to an area known as the West Plant Site. There, operations would process the ore to produce copper and molybdenum concentrates. The West Plant Site is the location of the old Magma Mine processing and smelter facilities in Superior. Portions of the West Plant Site would be located on NFS lands and would be subject to Forest Service regulatory jurisdiction. A flotation process would process the ore; no heap leach processing is proposed.
- The molybdenum concentrate would then be dried, bagged, and transported to market from the West Plant Site.
- Resolution Copper would then pump the copper concentrate as a slurry through a 22-mile-long pipeline to a filter plant and loadout facility located near Magma Junction near San Tan Valley, Arizona. They would then filter the copper concentrate and send it to off-site smelters via rail cars or trucks.
- The copper concentrate slurry pipeline corridor 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 water pipelines, power lines, pump stations, and a number of wells for groundwater pumping and recovery of banked Central Arizona Project (CAP) water. A portion of the MARRCO corridor is located on NFS, Arizona State Land Department (ASLD), and private lands and would be subject to corresponding regulatory jurisdiction.
- Several pipelines would transport the tailings as slurry produced at the West Plant Site for 4.7 miles to a tailings storage facility. The tailings storage facility would gradually expand over time and eventually reach about 4,900 acres in size. The proposed tailings storage facility is on NFS lands and would be subject to Forest Service regulatory jurisdiction.
- The Salt River Project (SRP) would supply all power to the mine. Portions of the proposed electrical infrastructure would be on NFS land and would be subject to Forest Service regulatory jurisdiction. The Forest Service can approve SRP’s construction and operation of new power lines on NFS lands by either a special use permit or as part of the GPO. As analyzed in the EIS, access to the power lines would use existing roads.
- Reclamation would be conducted to achieve post-closure land use objectives, including closing and sealing the mine shafts,

5. A full description of subsidence can be found in section 2.2.2.2.

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. A bond conditioned on compliance is required prior to approval of a mining plan of operations. In determining the amount of the bond, consideration would be given to the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations.

- Water for the process would come from a variety of sources. Resolution Copper would recycle (1) filtrate from the filter plant, (2) reclaimed water from the tailings storage facility, and (3) recovered water from the concentrator complex, back into the mining process. They would obtain additional water from dewatering of the mine workings, possible direct delivery of CAP water, and pumping of water from a well field along the MARRCO corridor. The State of Arizona would authorize the water pumped from the well field either as banked CAP water or as groundwater under a mineral extraction withdrawal permit.

1.4.2 Land Exchange

Following Section 3003 of the NDAA, the Federal Government would convey 2,422 acres of specified NFS lands at Oak Flat to Resolution Copper if Resolution Copper offers to convey approximately 5,376 acres⁶ of private lands to the United States. Table 1.4.2-1 provides a brief summary of the land exchange parcels. A detailed description of the land exchange parcels can be found in section 2.2.2.1 and appendix B. The complete text of Section 3003 of the NDAA is provided in appendix A.

1.4.2.1 Appraisal

The exchange of Federal lands is subject to a formal appraisal for all tracts of land included in an exchange. Additionally, the NDAA requires

that exchanged private lands be of equal value to the Federal lands. The NDAA requires the joint selection of an appraiser who is determined by both parties (the Federal Government and Resolution Copper) to be qualified to complete appraisals supporting the exchange. The appraisals are completed under the direction of the Forest Service.

If an appraisal indicates that the value of the Federal lands exceeds the value of the private lands, Resolution Copper must either provide more private land or provide cash to the Federal Government to make up the difference. If a cash payment is used to equalize the values, that money would be placed in a special account to be used for acquisition of additional NFS land in Arizona or New Mexico. An additional provision of the NDAA requires Resolution Copper to make annual payments to the Federal Government during mine production in the event that the appraisal undervalues the copper resource on the lands Resolution Copper is acquiring.

1.4.3 Forest Plan Amendment

Forest plans provide broad, program-level direction for management of NFS lands and resources. As directed by Forest Service regulations at 36 CFR 219.13 forest plans can be amended as needed to accommodate situations in specific project decisions or to reflect changes in social, economic, or ecological conditions.

A consistency review between the GPO and the current forest plan indicates that approval and eventual implementation of the GPO would result in changed conditions that are inconsistent with existing forest plan direction. Approval of the GPO would therefore require a project-specific forest plan amendment to modify one or more plan components, i.e., standards and guidelines. The scope and scale of the necessary forest plan amendment would be narrow in scope and scale, i.e., limited to the GPO project area; and limited to the substantive rule provisions at §219.10 that are directly related to the amendment.

6. Resolution Copper increased the offered parcel of 5,344 acres by an additional 32 acres of privately held land. See table 1.4.2-1.

Table 1.4.2-1. Summary of land exchange parcels

| Parcel Land Ownership | Description of Parcels to Be Exchanged |
|---|---|
| Parcels transferred from the United States to Resolution Copper | 2,422 acres near Superior in Pinal County, Arizona, known as the Oak Flat Federal Parcel , to become private lands |
| Parcels transferred from Resolution Copper to the Secretary of Agriculture, for land to be administered by the Forest Service | 142 acres* near Superior in Pinal County, Arizona, known as the Apache Leap South End Parcel , to be administered by the Tonto National Forest |
| | 148 acres in Yavapai County, Arizona, known as the Tangle Creek Parcel , to be administered by the Tonto National Forest |
| | 147 acres in Gila County, Arizona, known as the Turkey Creek Parcel , to be administered by the Tonto National Forest |
| | 149 acres near Cave Creek in Maricopa County, Arizona, known as the Cave Creek Parcel , to be administered by the Tonto National Forest |
| Parcels transferred from Resolution Copper to the Secretary of the Interior, for land to be administered by the BLM | 640 acres north of Payson in Coconino County, Arizona, known as the East Clear Creek Parcel , to be administered by the Coconino National Forest |
| | 3,050 acres† near Mammoth in Pinal County, Arizona, known as the Lower San Pedro River Parcel , to be administered by the BLM as part of the San Pedro Riparian National Conservation Area |
| | 940 acres† south of Elgin in Santa Cruz County, Arizona, known as the Appleton Ranch Parcel , 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 Dripping Springs Parcel , to be administered by the BLM |

*Resolution Copper increased the offered parcel by an additional 32 acres of privately held land adjacent to the 110 acres presented in the NDAA as part of the Apache Leap Special Management Area. The additional land was provided to allow for a more contiguous parcel and for ease of surveying.

† Final cadastral surveys have not been finalized for either the Lower San Pedro River Parcel or the Appleton Ranch Parcel as of July 2019.

A review of all components of the 1985 forest plan, as amended through 2017, was conducted to identify the need for amendment due to the effects of the project, including both the land exchange and the proposed mine plan. Specific findings on the effects of the forest plan amendment are summarized under the environmental consequences section for each resource in chapter 3.

Summarily, the outcomes of the 1985 forest plan consistency review indicate that amendments would be needed under any alternative to reconcile the Visual Quality Objective (VQO) and recreation opportunity spectrum (ROS) management classes for two standards and guidelines in Management Areas 2F and 3I (table 1.4.3-1). Information specific to the 184 forest plan components that were identified as applicable are detailed in Shin (2019).

The plan components that would need to be amended to comply with the existing 1985 forest plan are described in table 1.4.3-1.

1.5 Decision Framework

Given the purpose and need, the deciding official(s) reviews the proposed action, the other alternatives, and the environmental consequences in order to make the following decisions.

1.5.1 Forest Service

As the lead agency tasked with completion of a single EIS, the Forest Service has management responsibility for the following:

- The NFS lands that would be affected by the proposed GPO
- Executing the land exchange that was mandated by Congress
- Approve necessary amendments to the forest plan (see section 1.4.3).

Table 1.4.3-1. Forest plan amendments for the Resolution Copper Project and Land Exchange

| Forest Plan Section | 1985 Forest Plan Page Number | Existing Forest Plan | Proposed Forest Plan Amendment |
|--|------------------------------|--|--|
| Section 4. Management Direction Management Prescriptions – Globe Ranger District (Management Area 2F) | 85 | Manage for VQOs ranging from “Retention” to “Maximum Modification” according to the following guidelines: Retention = 8%, Partial Retention = 24%, Modification = 34%, and Maximum Modification = 34%. | Manage for VQOs ranging from “Retention” to “Maximum Modification” according to the following guidelines: Retention = 9%, Partial Retention = 35%, Modification = 31%, Maximum Modification = 21%, and Not Rated = 4%. |
| Section 4. Management Direction Management Prescriptions – Globe Ranger District (Management Area 2F) | 86 | Manage ROS Classes (see appendix E of the forest plan) according to existing inventory as follows: Semi-Primitive = 35%, Semi-Primitive Motorized = 39%, Roaded Natural = 24%, Rural = 1%, and Urban = 1%. | Manage ROS Classes (see appendix E of the forest plan) according to existing inventory as follows: Semi-Primitive = 17%, Semi-Primitive Motorized = 55%, Roaded Natural = 23%, Rural = 2%, and Urban = 3%. |
| Section 4. Management Direction Management Prescriptions – Mesa Ranger District (Management Area 3I) | 112 | Manage for VQOs ranging from “Retention” to “Maximum Modification” according to the following guidelines: Retention = 15%, Partial Retention = 40%, Modification = 35%, and Maximum Modification = 10%. | Manage for VQOs ranging from “Retention” to “Maximum Modification” according to the following guidelines: Retention = 23%, Partial Retention = 45%, Modification = 27%, Maximum Modification = 2%, and Not Rated = 3%. |
| Section 4. Management Direction Management Prescriptions – Mesa Ranger District (Management Area 3I) | 113 | Manage ROS Classes (see appendix E of the forest plan) according to existing inventory as follows: Primitive = 1%, Semi-Primitive = 42%, Semi-Primitive Motorized = 36%, Roaded Natural = 21%. | Manage ROS Classes (see appendix E of the forest plan) according to existing inventory as follows: Semi-Primitive = 26%, Semi-Primitive Motorized = 48%, Roaded Natural = 26%, Rural = 0%, and Urban = 0%. |

1.5.1.1 General Plan of Operations

The Forest Supervisor, Tonto National Forest, is the deciding official and has discretion to determine whether changes in the proposed GPO would be required prior to approval.

Regulations 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 plans to conduct mining operations on or otherwise use NFS lands in conjunction with mining. Compliance with other laws and regulations, such as State of Arizona water and air regulations, the Endangered Species Act (ESA), Clean Water Act (CWA), and National Historic Preservation Act (NHPA), also frames the proposed mining activities.

The Forest Supervisor would use analysis in this EIS along with supporting documentation to make the following decisions regarding the proposed GPO:

1. 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 228 Subpart A before approving a final GPO. The Forest Service decision may be to authorize use of the surface of NFS lands in connection with mining operations under the GPO composed of elements from one or more of the alternatives considered. The alternative(s) that is/are selected for approval in the final ROD must minimize adverse impacts on NFS surface resources to the extent feasible.
2. Whether to approve amendments to the forest plan, which may be required to approve the final GPO.
3. Whether to approve a special use permit for SRP to authorize construction and operation of power lines on NFS lands.

The Forest Supervisor would then release a draft ROD in conjunction with the FEIS that would address these three decisions. The draft

ROD would be subject to 36 CFR 218, “Project-Level Pre-decisional Administrative Review Process” and 36 CFR 219, “Planning-Level Pre-decisional Administrative Review Process.”

Once objections to the draft ROD are resolved, the Forest Supervisor would issue a final ROD. Resolution Copper may have an opportunity to appeal the decisions as set forth at 36 CFR 214, “Post decisional Administrative Review Process for Occupancy and Use of National Forest System Lands and Resources.”

The remaining step would be approval of a final GPO, which may require Resolution Copper to modify the proposed GPO to align it with (1) the description of the selected alternative in the final ROD, and (2) changed conditions mandated by Section 3003 of the NDAA. Additionally, the Forest Supervisor, Tonto National Forest, 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.

1.5.1.2 Land Exchange

With regard to the land exchange, the Tonto National Forest Supervisor, has no decision authority due to the constraints imposed by the NDAA. The Forest Supervisor does have a responsibility to (1) address concerns of affected Indian Tribes and see mutually acceptable resolution of concerns with Resolution Copper; (2) ensure that title to the non-Federal lands offered in the exchange is acceptable in accordance with Section 3003(c)(2)(A) of the NDAA; and (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 in accordance with Section 3003(c)(5)(B)(i) of the NDAA.

Environmental effects resulting from the land exchange on private, State, and NFS lands are analyzed in the EIS. Although the Forest Service no longer would have regulatory jurisdiction for those lands, Resolution Copper would still be required to comply with applicable Federal and State environmental laws, which address air quality, hazardous waste management, mine safety, mine reclamation, and other aspects of the proposed mine.

1.5.2 Bureau of Land Management

The NDAA-directed land exchange would transfer ownership of approximately 4,150 acres of Resolution Copper private lands to the BLM. As with the Forest Service, the BLM has no decision authority with respect to the land exchange.

The BLM would incorporate and administer the land acquired for the Lower San Pedro River Parcels into the San Pedro National Conservation Area no later than 2 years after the date on which the land is acquired. The San Pedro Riparian National Conservation Area Resource Management Plan would be updated to reflect the acquired land.

The BLM would incorporate and administer the land acquired for the Dripping Springs Parcel into the Las Cienegas National Conservation Area in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA), laws (including regulations) applicable to the Las Cienegas National Conservation Area, and applicable land use plans.

For purposes of this analysis, the Forest Service has identified an alternative that includes siting mine facilities on BLM-administered land, rather than on NFS lands as proposed by Resolution Copper (see section 2.2.7 for a description of Alternative 5 – Peg Leg). If the Forest Service were to select Alternative 5 – Peg Leg, the Forest Service’s selection of that alternative would not authorize surface use of any BLM-managed public lands. In order to use the public lands identified in Alternative 5 – Peg Leg, Resolution Copper would be

required to obtain surface use authorization under the applicable BLM regulations. BLM would require the submittal of a separate mining plan of operations to determine whether unnecessary or undue degradation would occur (43 CFR 3809.11(a)). BLM would then issue a separate ROD from the Forest Service to approve mine-related actions on BLM-administered lands and would need to conduct any administrative review processes required under BLM regulations; this would include review of conformance with any current management plans. The BLM ROD would not necessarily be issued at the same time as the Forest Service ROD. Additional tribal and public involvement might also be required to satisfy BLM regulations if the Alternative 5 – Peg Leg alternative were selected. To date, Resolution Copper does not have any pending requests for surface use authorization before BLM.

1.5.3 U.S. Army Corps of Engineers

Selection of some, but not all, of the alternatives would require the U.S. Army Corps of Engineers (USACE) to issue a permit under Section 404 of the Clean Water Act, which regulates discharge of dredged and fill within waters of the U.S. The USACE previously evaluated drainages and wetlands in portions of the Superior Basin associated with this project and found these aquatic features were not subject to the USACE’s jurisdiction under current rules. For drainages to be under the jurisdiction of the USACE, they must have a “significant nexus” to a traditionally navigable water. In 2012, the USACE determined that the drainages within the Superior Basin do not have a significant nexus to the closest traditionally navigable water, which is the Gila River between Powers Butte and Gillespie Dam. Ultimately, this determination means that a tailings storage facility sited within these areas in the Superior Basin (Alternative 2, 3, or 4; see section 2.2) would not need a Section 404 permit, whereas other alternatives would require one (Alternative 5 or 6).

Because Congress directed that the EIS serves to support all Federal decisions related to the proposed mine, if Alternative 5 or 6 were ultimately selected, the USACE would rely on this EIS to support issuance of a Section 404 permit. In accordance with the Clean Water

Act, Section 404(b)(1) guidelines (40 CFR 230), the USACE may only permit the least environmentally damaging practicable alternative in light of cost, logistics, and technology. A draft Practicability Analysis has been prepared for the range of alternatives originally considered for this project using the criteria in the Section 404(b)(1) guidelines and has been included with this EIS as appendix C. This document will be refined during this EIS process and used by USACE to select a least environmentally damaging practicable alternative and support USACE's permitting decision.

A permittee is also required to compensate for the loss of waters of the U.S. in accordance with 33 CFR 332. Appendix D of this EIS contains Resolution Copper's draft Conceptual Compensatory Mitigation Plan.

Based on the analysis in this EIS and supporting documentation, the USACE's public interest review, and the determination of the least environmentally damaging practicable alternative in the Section 404(b)(1) alternatives analysis, the USACE would determine whether to do one of the following:

1. Issue Resolution Copper a CWA Section 404 individual permit for the discharge of dredged and/or fill material into waters of the U.S.; or
2. Issue Resolution Copper a CWA Section 404 individual permit with modifications or special conditions; or
3. Deny the CWA Section 404 individual permit.

The USACE would issue a public notice during the DEIS comment period and would consider all comments received in response to the public notice, the DEIS, and public hearings (if applicable) as part of the public interest review. Following issuance of the FEIS, the USACE would prepare a ROD, separate from the Forest Service, regarding the Section 404 permit. The USACE's administrative appeals process allows the applicant to appeal a denied permit or a proffered permit that the applicant has declined. Details on this process are contained in 33 CFR 331, "Administrative Appeals Process."

1.5.4 Required Permits, Licenses, and Authorizations

Other permits, licenses, and authorizations would be required for the mine to be operational. Additional Special Use Permits and rights-of-way may also be needed for power lines built by SRP, access roads, or other features. The EIS would not determine if a permit through another agency would be approved but would disclose impacts for resources analyzed. Table 1.5.4-1 provides the permits and licenses commonly required for this type of project; it is not meant to be a comprehensive list of all possible permit(s), license(s), or authorization(s) needed. A list of existing Resolution Copper permits and licenses currently held for ongoing operations is shown in table 1.4.2 of the GPO.

1.5.5 Financial Assurance for Closure and Post-closure Activities

The Forest Service mission of promoting healthy and resilient forests and grasslands is a key component for ensuring that the lands and resources the Forest Service manages are available for future generations. Mineral development on NFS lands is a temporary use of those lands, although some uses like tailings storage facilities are permanent and remain part of the landscape in perpetuity. Reclamation of mining sites is an integral part of all mine plans considered by the Forest Service, as is the requirement that adequate fiscal resources be available to ensure that reclamation can be conducted.

The primary authority for the Forest Service to require financial assurance is contained in the locatable mineral regulations (36 CFR 228 Subpart A). These include the requirement for a plan of operations to include provisions for reclamation: "The plan of operation shall include . . . measures to be taken to meet the requirements for environmental protection. . . ." (36 CFR 228.4). The regulations include specific requirements for financial assurance: "Any operator required to file a plan of operations shall, when required by the authorized officer, furnish a bond conditioned upon compliance with 228.8(g), prior to approval of such plan of operations" (36 CFR 228.13). The amount of financial

Table 1.5.4-1. Permits, licenses, and authorizations required for the Resolution Copper Project

| Type of Permit | Permitting Agency | Permit Use |
|---|---|---|
| Aquifer Protection Permit (APP) | Arizona Department of Environmental Quality | <p>An APP is required for any activity that discharges a pollutant to an aquifer, or to the land surface so that there is a reasonable probability that the pollutant would reach an aquifer.</p> <p>General APPs are available for some impoundments and facilities, as long as they have characteristics specified by Arizona regulations (like lining). Resolution Copper currently holds a number of general APPs for wash bays (type 3.02 permits), wastewater treatment discharges (type 3.03 permits), and rock stockpiles (type 2.02 permits).</p> <p>Resolution Copper also currently holds an Individual Industrial Reclaimed Water APP, which allows conveyance of treated water to the New Magma Irrigation and Drainage District (NMIDD) for agricultural application (alfalfa, barley, Bermudagrass, cotton, sorghum, turf, and wheat). A similar permit would be required during operations for any treated water discharged to NMIDD.</p> <p>Resolution Copper also holds an area-wide APP that authorizes the closure of existing APP-regulated facilities at the West Plant Site under a compliance schedule, and an individual APP for a non-municipal solid waste landfill, which is approved to accept construction and demolition debris, non-hazardous mine refuse, vegetative waste, non-tire rubber products, solid waste petroleum-contaminated soil, metal-contaminated soil, empty containers, and nonfriable and friable asbestos-containing material.</p> <p>For operations, Resolution Copper would require an Individual APP that would encompass all mining and processing activities with the potential to discharge, most notably the tailings storage facility. The specific project components requiring permitting through the Individual APP are not yet determined.</p> |
| Special Waste Facility Generator | Arizona Department of Environmental Quality | Resolution Copper is authorized to handle wastes designated as “special wastes” by the State. |
| Drinking Water Division Monitoring Assistance Program | Arizona Department of Environmental Quality | Public water system for serving potable groundwater to Resolution Copper employees. |

continued

Table 1.5.4-1. Permits, licenses, and authorizations required for the Resolution Copper Project (cont'd)

| Type of Permit | Permitting Agency | Permit Use |
|--|---|--|
| Arizona Pollutant Discharge Elimination System (AZPDES) Permit | Arizona Department of Environmental Quality | <p>The State of Arizona has received jurisdiction (also known as "primacy") to administer Section 402 of the Clean Water Act, which is accomplished through the AZPDES program. Section 402/AZPDES regulates any discharges of pollutants to waters of the U.S., including potential pollutants in stormwater runoff.</p> <p>Any direct discharge of a pollutant into a water typically requires an individual AZPDES permit. Resolution Copper currently holds an AZPDES permit to discharge treated mine site stormwater runoff (Outfall 001) and treated seepage pumping and mine dewatering effluent (Outfall 002) to Queen Creek. The discharge must be in accordance with effluent limitations, monitoring requirements, and other conditions in the Standard Arizona Pollutant Discharge Elimination System Permit Conditions.</p> <p>The Arizona Department of Environmental Quality (ADEQ) has also issued a multi-sector general permit, which covers stormwater discharges from common industrial activities. Typically, a permittee would apply for coverage under the Multi-Sector General Permit (MSGP) program, and develop a Stormwater Pollution Prevention Plan (SWPPP) detailing how stormwater would be handled to reduce the potential for pollutants, including sediment. Resolution Copper currently is authorized under the MSGP for stormwater discharges from both the West Plant Site and East Plant Site. During operations, stormwater discharges from mine facilities most likely would take place under the MSGP program.</p> <p>Temporary stormwater discharges may also be covered under the construction general permit, which has similar requirements as the MSGP program. Certain temporary discharges (such as pump testing of a well) may also be covered under the de minimis permit program. The specific AZPDES permits required for construction and operation would be determined by ADEQ.</p> |
| Clean Water Act Section 401 Water Quality Certification | Arizona Department of Environmental Quality | The State must certify, waive, or deny an application for a USACE permit for discharge of dredged or fill material to waters of the U.S. To certify, the State must find that the activities proposed under the 404 permit would not result in a violation of State surface water quality standards. The 401 certification may specify conditions, including reporting requirements. |
| Solid Waste Plan Approval | Arizona Department of Environmental Quality | Required to meet the requirements of 40 CFR 257, along with other requirements set forth in State statutes (e.g., compliance with location restrictions, recording of a restrictive covenant). |
| Hazardous Waste Management Program | Arizona Department of Environmental Quality | Governs the management of hazardous waste (including transport and disposal). Requirements differ somewhat, depending on the volume and nature of hazardous waste generated; however, in general, it requires inspection, training, and contingency/emergency planning. |
| Drinking Water Registration and Regulations | Arizona Department of Environmental Quality | Systems (including nontransient, noncommunity systems) must register with ADEQ and meet substantive requirements. Requires inspection, sampling/analysis, contingency/emergency planning, reporting, and notification. |

continued

Table 1.5.4-1. Permits, licenses, and authorizations required for the Resolution Copper Project (cont'd)

| Type of Permit | Permitting Agency | Permit Use |
|---|---|--|
| Groundwater Permits | Arizona Department of Water Resources | <p>Groundwater pumping and use is regulated heavily within Active Management Areas (AMAs), which are areas of intensive water use, originally identified in the Arizona Groundwater Management Act of 1980. The locations of pumping for dewatering (Shafts 9 and 10) and the future makeup water supply (Desert Wellfield) lie within the East Salt River valley subbasin of the Phoenix AMA. Within the AMA, pumping groundwater requires a valid groundwater right, or a valid withdrawal permit.</p> <p>Resolution Copper currently holds several groundwater rights: Type 2 Non-Irrigation Grandfathered Rights/Type II Mineral Extraction Rights, and a dewatering withdrawal permit. Similar rights or permits would be required for any dewatering that occurs during operations.</p> <p>Resolution Copper would be required to permit any wells associated with the Desert Wellfield, which would lie within the MARRCO corridor. Notices of Intent to Drill would be required for any well installation, to ensure proper construction and documentation. Any further permits or rights required would depend on whether water pumped was legally considered recharged or banked water, or regular groundwater. This would be determined by the Arizona Department of Water Resources.</p> |
| Special Land Use Permit | Arizona State Land Department | Resolution Copper holds several permits for geotechnical and hydrological data gathering, installation of surface water monitoring equipment, and groundwater monitor well installation and access. These permits may or may not be required during operations. |
| Right-of-Way Permit | Arizona State Land Department | Allows water and electrical supply lines to be placed within a right-of-way. Permit would be issued after the Arizona Corporation Commission approves the electrical supply alignment. |
| Arizona Mined Land Reclamation Plan Approval | Arizona State Mine Inspector | Applies to reclamation activities at the site. Requires certification, plan updates, annual reporting, and financial assurance. Resolution Copper currently holds a plan authorizing the reclamation of surface disturbances at the East and West Plant Sites. |
| Certificate of Environmental Compatibility | Arizona Corporation Commission, Line Siting Committee | Ensures compliance with Arizona Revised Statutes (ARS) 40-360 and regulates the placement of electrical transmission lines. |
| Agriculture Land Clearing Permit | Arizona Department of Agriculture | Authorizes disturbance and clearing of State-protected native plants, as required under the Arizona Native Plant Law. |
| Right-of-Way Encroachment Permit | Arizona Department of Transportation | Authorizes work within the State right-of-way, such as highways, driveways, grading, fence removal or replacement, surveying, and geotechnical investigation. |
| Final Mining Plan of Operations (after publication of the FEIS and approval of the ROD) | U.S. Forest Service | A final mining plan of operations would be required to be approved by the Forest Supervisor. Approval of the final mining plan provides the authorization to conduct activities on NFS lands. The final mining plan must reflect requirements specified in the ROD, including mitigation, monitoring, reporting, requirements of all applicable permits and authorizations, and is accompanied by posting of a bond or other financial assurance. |

continued

Table 1.5.4-1. Permits, licenses, and authorizations required for the Resolution Copper Project (cont'd)

| Type of Permit | Permitting Agency | Permit Use |
|---|--------------------------------------|--|
| Baseline Hydrologic and Geotechnical Data Gathering Activities Plan of Operations | U.S. Forest Service | To collect hydrologic, geochemical, and geotechnical data in order to provide baseline information on these aspects of the environment over an area being considered at the Near West site. These activities are complete. |
| Special Use Permit | U.S. Forest Service | The existing Special Use Permit authorizes Resolution Copper to construct and maintain a water pipeline corridor from the water treatment plant to an irrigation canal operated by the NMIDD. Future activity within the MARRCO corridor potentially could be covered under the final mining plan of operations, rather than a special use permit. |
| Mining Plan of Operations and Record of Decision | Bureau of Land Management | In the event Alternative 5 – Peg Leg is selected, Resolution Copper's GPO would be denied with respect to the facilities proposed on NFS lands that are identified to be placed on BLM-managed public lands, State lands, or private lands. To use BLM-managed public lands, Resolution Copper would need to obtain surface use authorization from BLM in accordance with BLM's surface management regulations 43 CFR subpart 3809. BLM would then issue a separate ROD from the Forest Service to approve mine-related actions on BLM-administered lands, and would need to conduct any post-decision administrative review processes required under BLM regulations. |
| Right-of-Way Application | Bureau of Land Management | In the event Alternative 5 – Peg Leg is selected, Resolution Copper's GPO would be denied with respect to rights-of-way proposed on NFS lands that are identified to be placed on BLM-managed public lands, State lands, or private lands. To use BLM-managed public lands for right-of-way purposes, Resolution Copper would need to obtain surface use authorization from BLM for any right-of-way that crosses BLM-managed public lands. |
| Project-specific (Individual) Section 404 Clean Water Act Permit | U.S. Army Corps of Engineers | This permit is required for the discharge of dredged or fill material into waters of the U.S. This permit may only be applicable to certain alternatives (see section 1.5.3). Individual Section 404 permits typically incorporate a Habitat Mitigation and Monitoring Plan that details the mitigation that would be implemented to compensate for lost aquatic resources. |
| Biological Opinion | U.S. Fish and Wildlife Service | The Biological Opinion is issued by the U.S. Fish and Wildlife Service at the completion of consultation under Section 7 of the Endangered Species Act. The Biological Opinion ensures that the Tonto National Forest's approval of the revised mining plan of operations would not jeopardize the continued existence of a threatened or endangered species or adversely modify designated critical habitat. Biological Opinions may authorize "take" of a protected species, and would detail the conservation measures committed to by Resolution Copper, as well as other reasonable and prudent measures (and associated terms and conditions) that must be taken by Resolution Copper. Failure to comply with requirements specified in the Biological Opinion could require reconsultation and could also result in civil and criminal penalties. |
| Hazardous Waste Identification Number | U.S. Environmental Protection Agency | Authorizes facilities to generate and transport off-site hazardous waste in quantities in excess of 100 kilograms per month (or those that generate acute hazardous waste in quantities exceeding 1 kilogram per month). Requires specific employee training, inspections, and contingency planning. |
| Radio License | Federal Communications Commission | Required for current use of communication network; would be required during operations. |
| Hazardous Materials Certificate of Registration | U.S. Department of Transportation | Resolution Copper is certified and would be required to keep certification current during operations as required by the U.S. Department of Transportation hazardous materials program procedures in 49 CFR 107, Subpart G. |

continued

Table 1.5.4-1. Permits, licenses, and authorizations required for the Resolution Copper Project (cont'd)

| Type of Permit | Permitting Agency | Permit Use |
|--|---|---|
| Hazardous Materials Transportation Permit | U.S. Department of Transportation | Governs the transport of hazardous materials as defined by the U.S. Department of Transportation. Requires specific employee training and security and contingency planning. |
| Air Quality Control Permit | Pinal County Air Quality Control District | Resolution Copper currently holds an air quality control permit that pertains to the historical mining (reclamation) and development and exploratory mining exploration facilities operated by Resolution Copper. A similar air quality permit would be required for the full operations. Pinal County Air Quality Control District (PCAQCD) may also issue dust permits for construction, earthwork, and land development. The Skunk Camp alternative may also fall within the jurisdiction of Gila County for air quality permitting. Gila County relies on ADEQ to issue air permits within the county. Consolidating all air permitting under one authority is likely; it has not yet been determined whether this would be PCAQCD or ADEQ. |
| Meteorological and Ambient Air Monitoring Plan | Pinal County Air Quality Control District | Resolution Copper collects meteorological and air quality monitoring data under a plan approved by PCAQCD. Data collection would continue during operations, but possibly under a separate plan. |

assurance is also addressed by regulation: “In determining the amount of the bond, consideration would be given to the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations” (36 CFR 228.13b).

Reclamation and financial assurance requirements are summarized in Forest Service guidance (U.S. Forest Service 2004), which notes that while in the past long-term maintenance, monitoring, and interim management have not been included in bonding or financial assurance estimates, it is now accepted practice to include these items. The Forest Service guidance notes that: “A basic premise of the estimate is that the operator is not available to complete the reclamation and the Forest Service would need to do the reclamation work” (U.S. Forest Service 2004) However, funding of long-term maintenance and monitoring has always posed a logistical problem, because of the long time frames that would be required. In 2015, the Forest Service issued guidance for establishment of long-term trusts for future large mines, with the intent of eliminating the growing mine-related liabilities on NFS lands (U.S.

Forest Service 2015). The guidance allows the Forest Service to accept trust accounts from operators of large mines by establishing a trust with the Forest Service as a benefactor to address long-term liabilities such as water treatment, dam maintenance, and care and maintenance of infrastructure, which may be required for many years (or centuries) beyond a planned or unplanned mine closure. Use of a long-term trust is one method that will be considered to provide fiscal resources to ensure maintenance and monitoring that extend beyond the closure of the mine.

More detail on financial assurances specific to individual resources can be found in Section 3.3, Soils and Vegetation; and Section 3.7.2, Groundwater and Surface Water Quality.

1.6 Public Involvement

The Forest Service sought public input during several phases of the EIS process. A summary of public involvement is outlined in this section.

1.6.1 Scoping

The purpose of the scoping process is to obtain input from agencies and members of the public on the extent of the proposed project, the range of alternatives, and the content of the issue analysis in the EIS. The Forest Service’s public participation and public scoping efforts are described in detail in the “Resolution Copper Project and Land Exchange Environmental Impact Statement Scoping Report” (U.S. Forest Service 2017f).

The public scoping period commenced on March 18, 2016, with the Forest Service publication of the Notice of Intent (NOI) to prepare an EIS in the Federal Register. The Forest Service planned for a 60-day public scoping period from March 18, 2016, to May 17, 2016. Numerous individuals and several organizations requested an extension of the public scoping period, as well as additional public scoping meetings. The Forest Supervisor, Tonto National Forest, accommodated these requests by extending the public scoping period through July 18, 2016, resulting in a total overall scoping period of 120 days. The “Notice of Extension of Public Scoping Period for the Resolution Copper Project and Land Exchange EIS” was published in the Federal Register on May 25, 2016.

Tonto National Forest staff held five scoping meetings in the project area that provided the public with an opportunity to ask questions, learn about the proposed project, and provide comments on issues and concerns that should be addressed in the EIS and alternatives that should be valued (table 1.6.1-1).

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 and Tonto National Forest line officers and program managers.

Cooperating agency scoping was conducted through a kick-off meeting and through comments submitted by cooperating agencies and tribes during the public scoping comment period. Additional detail on scoping conducted during tribal consultation can be found in section 1.6.4.

Table 1.6.1-1. 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 – Southeast Regional Library | April 6, 2016 | 88 |
| San Tan, Arizona – Central Arizona College | June 9, 2016 | 50 |

Scoping comment submittals on the Resolution Copper Project and Land Exchange EIS were analyzed and categorized using a standard Forest Service process called “content 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, and (4) present those concerns in a way that facilitates the Forest Service’s consideration of comments. All comments were treated evenly and were not weighted by number, organizational affiliation, “status” of the commenter, or other factors. Consideration was on the content of a comment, rather than on who wrote it or the number of submitters who agreed with it.

In total, 133,653 submittals were collected during public scoping, 141 of which were identified as duplicate submittals. Of the non-duplicate submittals received, 131,592 submittals or 98.56 percent were identified as form letters, 683 submittals or 0.51 percent as form letters with additional comments, and 1,237 or 0.94 percent as unique submittals. Approximately 99.89 percent of submittals were from individuals, with

the remaining submittals from non-governmental organizations (NGOs), and governments (table 1.6.1-2).

The contents of the comments received during scoping are summarized in the project record.⁷ The scoping comments were used to develop the issues (see Section 1.7, Issues), alternatives (see Chapter 2, Alternatives, Including the Proposed Action), and mitigation strategies that form the EIS analysis.

1.6.2 Project Update and Alternatives Development Workshop

As part of the EIS process, the Forest Service is required to investigate alternatives to various aspects of the proposed action described in section 2.2.4. During the alternatives development process,⁸ the Forest Service hosted two in-person public workshops and one online workshop to (1) update the public on the status of the EIS process, (2) describe the alternatives development process, and (3) solicit input on the criteria being used to evaluate alternative tailings storage facility locations. The in-person workshops were held in Superior, Arizona, on March 21, 2017, and in Gilbert, Arizona, on March 22, 2017. The online workshop was available on the project website from March 23, 2017, through April 5, 2017. Workshop attendees were asked to provide input regarding the relative importance of a variety of environmental and social criteria regarding the location of the tailings storage facility. The public responses showed Environmental Impacts and Tailings Storage Location as their primary concern, with protection of streams and springs having the highest concern. The Forest Service used the information gathered to inform the evaluation and comparison of alternative tailings storage facility locations during the alternatives development process.

7. See “Resolution Copper Project and Land Exchange Environmental Impact Statement Scoping Report” (U.S. Forest Service 2017f); “Resolution Copper Project and Land Exchange Environmental Impact Statement Public Concern Statements” (U.S. Forest Service 2017e); “Resolution Copper Project and Land Exchange Environmental Impact Statement Final Summary of Issues Identified Through Scoping Process” (SWCA Environmental Consultants 2017b).

8. See “Resolution Copper Project and Land Exchange Environmental Impact Statement Alternatives Evaluation Report” (SWCA Environmental Consultants 2017a).

Table 1.6.1-2. Distribution of submittals by sender type

| Sender Type | Submittal Count |
|--------------|-----------------|
| Individual | 133,368 |
| NGO | 66 |
| Government | 78 |
| Total | 133,512 |

1.6.3 Cooperating Agencies

The Council on Environmental Quality (CEQ) regulations (40 CFR 1508.5) define a cooperating agency as any Federal agency (other than the lead agency) and any State or local agency or Indian Tribe with jurisdictional authority or special expertise with respect to any environmental impact involved in a proposal. Nine cooperating agencies with jurisdictional authority and/or applicable special expertise cooperated in the development of this EIS (table 1.6.3-1).

The cooperating agencies assisted with EIS preparation in a number of ways, including providing research and baseline data information, reviewing scientific reports, identifying issues, assisting with the formulation of alternatives, and reviewing preliminary DEIS content and other EIS materials.

1.6.4 Tribal Consultation

Federal agencies consult on a government-to-government basis with federally recognized Native American tribes having traditional interests in and/or ties to the lands potentially affected by a proposed action and alternatives. The Forest Service is conducting ongoing consultation with 15 tribes, in accordance with the NDAA and the Forest Service Handbook (FSH) Section 1509.13, Chapter 10, “Consultation with

Table 1.6.3-1. Cooperating agencies participating in the EIS process

| Agency | Resource Area of Expertise |
|--|---|
| Arizona Department of Environmental Quality | Special expertise and jurisdiction under the authority of Arizona Revised Statutes (ARS) Title 49, having jurisdiction to manage environmental resources within the state of Arizona, including protection of air and water resources; aquifer protection; drinking water protection; solid and hazardous waste generation and control; and environmental economics and policy. |
| Arizona Department of Water Resources | Special expertise in water resources and ensuring technical accuracy and conformance with laws, regulations, and policies within the Arizona Department of Water Resources' special expertise. |
| Arizona Game and Fish Department | Jurisdiction over wildlife in the state of Arizona. Special expertise with wildlife including endangered, threatened, and special status species, recommendations for mitigation, and assistance with data evaluation and review relative to the department's State Trust responsibilities and jurisdiction. |
| Arizona State Land Department | Jurisdictional responsibilities and special expertise in matters related to management of, and potential impacts on, State Trust land. |
| Arizona State Mine Inspector | Jurisdictional responsibilities and special expertise in matters related to protecting the lives, health, and safety of miners and the health and safety of the general public. The Arizona State Mine Inspector is also responsible for oversight of mine closure and reclamation on State and private lands. |
| Bureau of Land Management | Jurisdiction over lands managed by BLM or parcels that would transfer to BLM ownership. BLM would review the land exchange proposal under 43 CFR 2200. BLM may review and decide on a request for surface use authorization from Resolution Copper, if one is ultimately submitted under the applicable BLM regulations. |
| Pinal County Air Quality Control Division | Special expertise and jurisdiction to regulate air-polluting activities identified in the Pinal County Air Pollution Control District Code of Regulations and further identified in ARS Title 49, Article 3. |
| U.S. Army Corps of Engineers | Special expertise pertains to protection of waters of the U.S., and preservation of USACE-constructed public works. <i>Would assist with NEPA review only at this time; if waters of the U.S. would be affected, then the agency would have regulatory jurisdiction under CWA regulations.</i> |
| U.S. Environmental Protection Agency | Jurisdiction over a number of Federal environmental laws, including the Clean Air Act, the Clean Water Act, and the Safe Drinking Water Act. The U.S. Environmental Protection Agency (EPA) reviews and comments on EISs pursuant to its authority under NEPA, 42 U.S.C. 4371 et seq., Clean Air Act Section 309, 42 U.S.C. 7609, and pursuant to CEQ's "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act" at 40 CFR 1500–1508. EPA's participation in this EIS does not imply endorsement of the project or preferred alternative and does not abridge the independent review of the EIS, which EPA conducts pursuant to NEPA and Section 309 of the Clean Air Act, 42 U.S.C. 7609. |
| Arizona State Parks (Arizona State Historic Preservation Office) | Declined status as a cooperating agency; however, they have a consulting role under Section 106 of the NHPA. |

Indian Tribes and Alaska Native Corporations” (U.S. Forest Service 2016b). Content discussed in government-to-government consultations is confidentially protected under Subtitle B, “Cultural and Heritage Cooperation Authority,” Sections 8101–8107(5) of Public Law (PL) 110–234, which authorizes the Secretary of Agriculture to protect the confidentiality of certain information, including information that is culturally sensitive to Indian Tribes.

Government-to-government consultation for this land exchange process and EIS process was initiated with a formal letter from Forest Supervisor Neil Bosworth to tribes in August 2015 and April 2016. The Forest Service held meetings and continues to seek tribal input via written correspondence, telephone calls, and in-person meetings. Details of the government-to-government consultation process are summarized in Chapter 4, Consulted Parties.

1.7 Issues

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. Issues help set the scope of the actions, alternatives, and effects to consider in our analysis (FSH 1909.15.12.4) (U.S. Forest Service 2012a).

Comments submitted during the scoping period were used to formulate issues concerning the proposed action. Issues are statements of cause and effect, linking environmental effects to actions (FSH 1909.15.12.41) (U.S. Forest Service 2012a). The EIS ID team separated the issues into two groups: significant and non-significant. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues as identified by CEQ regulations include issues that are outside the scope of the proposed action; already decided by law, regulation, forest plan, or other higher level decision;

irrelevant to the decision to be made; or conjectural and not supported by scientific or factual evidence.

The CEQ NEPA regulations state that the EIS should “identify and eliminate from detailed study the issues which are not significant, or which have been covered by prior environmental review (Sec. 1506.3).” A list of non-significant issues and reasons regarding their categorization as non-significant may be found in the project record.⁹

While completing the EIS analysis, some factors and issues formulated during scoping were modified to accurately analyze the resource impacts. Appendix E, Table E-1, Alternatives Impact Summary, documents the issues and issue factors used or modified during the EIS analysis.

The following issue summaries represent brief synopses of the 14 major project issues that were developed from input provided by agencies, tribes, stakeholders, and the public during scoping for this EIS. Many of the identified primary issues were then subdivided into detailed sub-issues in an effort to more fully and accurately capture the concerns expressed. The complete listing of primary issues and sub-issues is included in Appendix E, Table E-1, Alternatives Impact Summary, as well as in the “Resolution Copper Project and Land Exchange Environmental Impact Statement: Final Summary of Issues Identified Through Scoping Process” (Issues Report), available at <https://www.resolutionmineeis.us/documents/usfs-tonto-issues-report-201711>.

1.7.1 Issue 1 – Tribal Values and Concerns

Tribes are concerned about current and future adverse effects on area resources from the Resolution Copper Project, as well as other ongoing mining, transportation, energy transmission, pipeline, and other developments in and around the Superior region. These affected resources may include physical resources such as access routes, air, groundwater and surface water, plant and animal life, and landscapes, as well as less tangible attributes such as sense of place; sense of historical,

9. See “Resolution Copper Project and Land Exchange Environmental Impact Statement FINAL Summary of Issues Identified Through Scoping Process” (U.S. Forest Service 2017f).

spiritual, and tribal identity; opportunities for solitude; and opportunities to continue traditional cultural practices and ceremonies.

1.7.2 Issue 2 – Socioeconomics

Construction and operation of the Resolution Copper Project would result in substantial economic and “quality of life” changes—both beneficial and adverse—in the greater Superior area. A large influx of workers to the area would lead to greater demands for housing and capacity pressures on local schools, hospitals, and other medical service providers, as well as on municipal infrastructure such as roads, water and sewer systems, and electrical and communications systems. Conversely, this same influx of workers would contribute to greater retail spending on goods and consumer services in the area and to increased tax revenues to local, county, and state governments. Residential and commercial property values may increase for some but decline for those whose properties are considered negatively affected by proximity to mine facilities (such as the tailings storage area). Some qualities of rural life may be diminished through increased traffic and a possible decrease in local recreational opportunities.

1.7.3 Issue 3 – Environmental Justice

Economic benefits may not be experienced by all sectors of society equally; historically, minority and low-income communities (including tribal communities) in a given area tend to accrue less benefit from large-scale land development and mining projects than the population of the area as a whole. In addition, it is possible that minority and low-income communities may be disproportionately affected by adverse environmental effects, potentially including greater risks to human health and safety.

1.7.4 Issue 4 – Cultural Resources

Construction and operation of the mine would profoundly and permanently alter the National Register of Historic Places (NRHP)-listed *Chi’chil Bildagoteel* (Oak Flat) Historic District Traditional Cultural

Property (TCP) through anticipated large-scale geological subsidence. Linear facilities, including new pipelines, power lines, and roads, as well as other facilities such as electrical substations, would also be constructed in support of mine operations. In addition, development of the proposed tailings storage facility at any of the four proposed or alternative locations would permanently bury or otherwise destroy many prehistoric and historic cultural artifacts, potentially including human burials. Disturbance of known or unknown cultural resources is an impact that is important to many tribes, regardless of whether data recovery is undertaken.

1.7.5 Issue 5 – Public Health and Safety

Construction and ongoing operation of the mine may have a variety of adverse effects on public health and safety. These concerns have focused principally on possible risks of breach or other failure of the tailings facility embankment; emissions and negative effects on air quality; possible seepage from or other contamination related to the tailings facility fouling local groundwater supplies; the potential for hazardous material/chemical spills; conflicts between mine-related haul truck and employee vehicles and residential traffic (including pedestrians); possible safety issues resulting from the anticipated subsidence in the Oak Flat area; and potentially increased risk of wildfire from mine operations.

1.7.6 Issue 6 – Water Resources

Potential effects on groundwater and surface water resources from construction, operation, closure, and reclamation of the Resolution Copper Mine is a multi-faceted and complex issue. In many ways, groundwater and surface waters are interconnected, and depletions and geochemical or other alterations of one are likely to affect the other, as well as to affect water-dependent resources such as vegetation and wildlife.

This issue is further complicated by the highly complex geological setting in which the Resolution Copper Mine would be constructed,

which would be permanently altered by large-scale ore removal and geological subsidence. The resulting 7,000-foot-deep area of fractured rock and approximately 1.8-mile-wide subsidence crater at the surface of Oak Flat, together with ongoing mine dewatering, would be likely over time to result in measurable reductions in flows in Devil's Canyon and Queen Creek and the long-term loss of some seeps and springs in the Superior area.

In addition, a tailings storage facility at either the proposed (Near West) location or at any of the three alternative sites (Silver King, Peg Leg, and Skunk Camp) would, through necessary stormwater management and seepage control practices, reduce the amount of surface water available in that particular watershed. The tailings storage facility also presents risks to the watershed through the potential for contaminants from metals or chemicals in tailings seepage to escape controls and enter groundwater and/or downstream surface waters, thereby potentially threatening riparian areas and other wildlife habitats, human uses, and waters provided to livestock.

1.7.7 Issue 7 – Biological Resources

Mine development has the potential to adversely affect local flora and fauna, including through direct injury or mortality; habitat alteration and loss; habitat fragmentation; reduction in water available to the ecosystem; disturbance by vehicular traffic, increased noise, and increased light; potential exposure to toxic chemicals or other hazardous substances; introduction and/or propagation of noxious or invasive plant species; and curtailed reproduction, pollination, seed dispersal, and other biological processes.

1.7.8 Issue 8 – Air Quality

Construction, ongoing ore recovery and processing, and other related activities at the mine and along transportation and utility corridors would increase dust, airborne chemicals, and transportation-related (mobile) emissions in the area, which has the potential to result in exceedances of one or more established air quality standards.

1.7.9 Issue 9 – Long-term Land Suitability

The mining proposed in the GPO is expected to cause large-scale surface subsidence in the Oak Flat area, eventually resulting in a subsidence crater up to 1.8 miles in diameter at the surface and between 800 and 1,115 feet deep. In addition, mine-related ground disturbance from clearing vegetation, grading, and stockpiling soils or equipment or other materials has the potential to compact soils, accelerate erosion, and reduce soil productivity. Damage, disturbance, contamination, or removal of soil may result in a long-term loss of soil productivity, physical structure, and ecological function across the proposed mine site as well as on lands downgradient of mine facilities.

1.7.10 Issue 10 – Recreation

Mine development in the Oak Flat area, including within the anticipated subsidence area and, ultimately, at Oak Flat Campground, would eliminate numerous recreational opportunities in this part of the Tonto National Forest. Much of the area would be fenced off and no longer accessible to hikers, rock climbing enthusiasts, cyclists, equestrians, campers, hunters, and other recreational users of these former public lands.

Mine-related linear facilities such as pipelines, power lines, and development within the MARRCO corridor may also sever connectivity of existing roads and trails and further limit recreational access. In addition, construction of a large tailings storage facility somewhere in the greater Superior area is now being evaluated in ongoing environmental and technical studies; ultimately, this facility may be located on either NFS, BLM, or private lands. Wherever constructed, the area of such a facility would be closed to all recreational uses, resulting in displacement of existing recreation in that area to other locations.

1.7.11 Issue 11 – Scenic Resources

Construction and operation of the Resolution Copper Mine would, as a result of anticipated geological subsidence at the East Plant Site, permanently alter the topography and scenic character of the Oak Flat

area. Development of a proposed tailings storage facility at any of the four alternative locations now being considered would ultimately result in a new and permanent landform approximately 3,200 to 5,800 acres in area (depending on the alternative) and several hundred feet higher than the current landscape, thus forever altering the existing viewsheds. New utility lines and construction of other mine facilities and infrastructure at the West Plant Site, East Plant Site, and filter plant and loadout facility would alter existing viewsheds, although some of these facilities may be removed and the associated areas reclaimed following mine closure.

1.7.12 Issue 12 – Transportation and Access

Transportation of personnel, equipment, supplies, and materials related to mine development, operation, and reclamation would increase traffic in and around the town of Superior. Increased mine-related traffic on local roads and highways has the potential to impact local and regional traffic patterns, levels of service, and planned transportation projects and users of NFS roads. Increased mine-associated rail traffic along the MARRCO corridor also has the potential to impact traffic patterns in the local area.

Mine development is likely to result in permanently altered, added, or decommissioned NFS roads or to temporarily restrict access to NFS roads and lands, which could impact recreational users, visitors, and permittees.

1.7.13 Issue 13 – Noise and Vibration

Development, operation, and reclamation of the mine would result in an increase in noise and vibration in the immediate vicinity of mine facilities. Activities that could increase noise and vibration include blasting, underground conveyance of ore, processing operations, operations at the filter plant and loadout facility, and, in the Oak Flat area, episodic land subsidence events. Increases in traffic associated with worker commuting, material delivery, and mine product shipment could also contribute to an overall increase in noise and vibration on area roads and highways.

1.7.14 Issue 14 – Land Ownership and Boundary Management

Changes in land ownership could have impacts as a result of the loss of public lands from the land exchange and mine proposal, including impacts on recreational access and to ranching in the area resulting from changes in easements, rights-of-way, fencing, and/or livestock access, or through special land or resource conservation agreements. Effects on current boundary management of Federal, State, and private lands in the area may include removal or other loss of survey markers, corner monuments, fences, and similar features, particularly in the area of the proposed or alternative tailings storage facility locations.

1.8 Other Proponent-Related Activities on National Forest System Lands

The Tonto National Forest has reviewed and approved multiple other analyses and NEPA documents completed in support of the project. A list of additional projects that have been analyzed can be found in table 1.4-1 of the GPO.

1.8.1 Plan of Operations for Baseline Hydrological and Geotechnical Data-Gathering Activities

Several plans of operation for the copper deposit have been processed during the exploration and development phases to authorize surface-disturbing activities. Currently, Resolution Copper is conducting development drilling in accordance with the approved “Pre-feasibility Plan of Operations,” which was authorized in 2010 (U.S. Forest Service 2010c).

In 2013, Resolution Copper submitted the proposed “Plan of Operations for Baseline Hydrological and Geotechnical Data Gathering Activities” (Resolution Copper 2016e). The purpose of this proposal was to collect hydrological, geochemical, and geotechnical data at the location of

a potential tailings storage site. The hydrologic, geochemical, and geotechnical data are being used to support detailed design of the facility and the environmental analysis contained in this EIS.

Baseline activities affected approximately 75 acres located on public lands managed by the Tonto National Forest approximately 4.5 miles west of Superior, Arizona. Activities included construction of temporary access roads and drilling/trenching sites; improvement of existing access roads; and installation of groundwater monitoring wells, geotechnical bore holes, and trenches.

1.8.2 Apache Leap Special Management Area

The Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (NDAA) (Section 3003(g)) designated Apache Leap a special management area for the purpose of preserving the natural character of Apache Leap, allowing traditional uses by Indian Tribes, and protecting and conserving the cultural and archaeological resources of the area. The Forest Service designated the 839-acre Apache Leap Special Management Area (SMA) and developed a management plan to adopt long-range direction for managing natural and cultural resources and human uses of the area (pursuant to terms set forth in the NDAA).

In December 2017, the Tonto National Forest finalized the environmental review process and the management plan. The plan establishes a comprehensive framework for managing the Apache Leap SMA, with an emphasis on the preservation of the three primary purposes outlined in the previous paragraph.

The forest plan was amended on December 26, 2017, to include the Apache Leap SMA as a designated management area and to incorporate

plan components specific to the Apache Leap SMA that follow NFS land management planning regulations adopted in 2012.

As related to the Resolution Copper Project and Land Exchange, the NDAA Section 3003(g)(4)(B) specifically authorized the following activities in the Apache Leap SMA:

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