

**Resolution Copper Project and Land Exchange
Environmental Impact Statement**

USDA Forest Service
Tonto National Forest
Arizona

August 6, 2019

Process Memorandum to File

Recreation Resource Analysis: Assumptions; Methodology Used; Relevant Regulations, Laws, and Guidance; and Key Documents

This document is deliberative and is prepared by the third-party contractor in compliance with the National Environmental Policy Act and other laws, regulations, and policies to document ongoing process and analysis steps. This document does not take the place of any Line Officer's decision space related to this project.

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Revision History

Date	Personnel	Revisions Made
08/06/18	Emily Newell	Process memorandum created
10/29/18	Emily Newell	Revisions to memorandum title, revision history table added, edits to purpose of process memorandum section, references and key documents section added
1/14/19	Emily Newell	Ready for project manager review
7/12/19	Donna Morey	Update process memorandum to draft environmental impact statement section
8/5/19	Emily Newell	Final check for consistency review
12/30/20	Chris Garrett	Final update for consistency prior to final environmental impact statement release

Purpose of Process Memorandum

In order to provide a concise and accessible summary of resource impacts, certain detailed information has not been included directly in the environmental impact statement (EIS). The purpose of this process memorandum is to describe additional supporting resource information in detail. The recreation section of chapter 3 of the EIS includes brief summaries of the information contained in this process memorandum. This process memorandum covers the following topics:

- Resource analysis area
- Analysis methodology
- Regulations, laws, and guidance
- Key documents and references cited

Detailed Information Supporting Environmental Impact Statement Analysis

Resource Analysis Area

The spatial analysis area for potential direct and indirect effects on recreation resources includes the following: the East Plant Site and subsidence area, West Plant Site, Magma Arizona Railroad Company corridor, filter plant and loadout facility, tailings storage facility, transmission line corridors, pipeline corridors, the Silver King Alternative (Alternative 4) and proposed pipelines and emergency slurry ponds, the Peg Leg Alternative (Alternative 5) and proposed pipeline, and the Skunk Camp Alternative (Alternative 6) and proposed pipeline. The analysis area also extends to Management Area 2F of the

Globe Ranger District of the Tonto National Forest; passages 15, 16, 17, and 18 of the Arizona National Scenic Trail (Arizona Trail); and Game Management Units 24A, 24B, and 37B, as shown in figure 3.9.2-1 in section 3.9.2 of the final EIS.

The temporal analysis area for direct and indirect effects is divided into three general phases: construction (mine life years 1 through 9), operations (years 6 through 45), and closure/reclamation (years 46 through 51 to 56).

Analysis Methodology

The analysis relies on existing data, knowledge of recreation resources in the area, mine layout and activities, and professional judgment. The analysis also considers design features of the mining plan of operations, and applicable mitigation measures identified in appendix J of the final environmental impact statement.

Recreation activities and the experiences they provide are interrelated and connected to other natural resources and resource uses. Therefore, changes in allowable uses and restrictions on other resources can affect recreational opportunities and use. Analyzing potential impacts on recreation resources also considers the potential to attain the desired Recreation Opportunity Spectrum (ROS) setting, should the proposed action be carried forward. This analysis was completed using the best available information, including private, State, and Federal agency information and recreation visitation numbers. Depictions of recreation resources on maps also use best-available information.

Analysis for the Arizona National Scenic Trail (Arizona Trail) addresses user experience on the affected passage of the trail for each alternative. The analysis considers those factors that provide the elements of a desired recreation experience such as noise, scenic views from the trail, and access to the trail. Because the exact numbers of users on the Arizona Trail are currently unknown, observations of Arizona Trail Association volunteers are presented as an approximation of use occurring on the Arizona Trail through the analysis area.

As a result of increasing population and increasing interest in natural resource-based outdoor recreation opportunities, the demands for outdoor recreation activities and opportunities are expected to continue to grow (U.S. Forest Service 2016). The popularity of motorized recreation and use of off-highway vehicles (OHVs) has rapidly grown over the past decade.

Although the analysis area (and the general vicinity of the Globe Ranger District) provides ample and varied recreational opportunities, there are few quantitative data for some of the more popular activities, particularly relative to the numbers and frequency of recreational vehicle use (driving for pleasure, OHV use) in the area. Quantification is used where available; knowledge of the area and professional judgment are used to provide qualitative assessments when measurable data are absent. It is assumed that the displacement of the public from the project footprint of the selected alternative would result in increased visitation to nearby lands within and beyond the Globe Ranger District, and other nearby Federal, State, and county lands.

Impacts that occur under more than one alternative are discussed under the first applicable alternative and are then referenced under other pertinent alternatives.

Recreation Opportunity Spectrum

The ROS classifies and manages recreation opportunities based on various criteria: physical setting, social setting, and managerial setting. Combining the criteria has resulted in six ROS classes: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban. Four of the six ROS classes occur within the analysis area and are described below.

- **Semi-Primitive Non-Motorized:** The area exists at least 0.5 mile from all roads and trails that have motorized use and is approximately 2,500 to 5,000 acres in size. The natural setting has subtle modifications such as primitive roads and trails. Structures are rare. Typical recreation activities in Semi-Primitive Non-Motorized class areas include hiking or horseback riding.
- **Semi-Primitive Motorized:** The area exists 0.5 mile from Level 3 or better roads and is approximately 2,500 to 5,000 acres in size. The natural setting may have moderately dominant alternations and has strong evidence of roads and motorized use of roads and trails. Typical recreational activities include OHV use, hiking, horseback riding, hunting and fishing.
- **Roaded Natural:** The area exists no more than 0.5 mile from roads and trails open to motorized use. The natural setting has been clearly modified but the modifications are congruous with the natural environment. Typical recreational activities include hiking, horseback riding, OHV use, trailer camping, hunting and fishing.
- **Urban:** The natural setting has been substantially urbanized and modified. Recreational opportunities could include resorts and information centers.

Regulations, Laws, and Guidance

Mining operations are subject to a wide range of Federal, State, and local requirements. Table 1 provides a summary of recreation laws, regulations, policies, and plans at the Federal, State, and local level.

Table 1. Relevant Laws, Regulations, Policies, and Plans

Laws, Ordinances, Regulations, and Standards	Description	Applicability
The Multiple-Use Sustained-Yield Act of 1960, as amended (16 United States Code (U.S.C.) 528)	Establishes the policy of Congress that national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.	Mining operations would reduce recreational availability on the Tonto National Forest.

Laws, Ordinances, Regulations, and Standards	Description	Applicability
The Wilderness Act of 1964 (16 U.S.C. 1131–1136), as amended by the Arizona Wilderness Act of 1984 (Public Law 98-406)	Designated certain national forest lands in the state of Arizona as wilderness and for other purposes.	Two designated wilderness areas are located within the analysis area considered for potential indirect and cumulative effects.
The National Trails System Act of 1968 (Public Law 90-543; 16 U.S.C. 1244(a)), as amended by the Arizona National Scenic Trail Act	Designates the scenic non-motorized trail through some of the most renowned mountains, deserts, canyons, and forests in Arizona; this act states, “Provide for . . . the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.”	Four Arizona Trail passages are located within the analysis area, stretching from the Tortilla Mountains in the south to the Superstition Mountains in the north.
The National Forest Management Act of 1976 (16 U.S.C. 1600)	Establishes standards for how the U.S. Forest Service (Forest Service) manages the national forests; requires the development of land management plans for national forests and grasslands; directs the Forest Service to develop regular reports on the status and trends of the nation’s renewable resources on all forest and rangelands.	The National Visitor Use Monitoring program typically occurs on a forest-wide level every year; this program provides the most relevant, reliable, and accurate data available on national forest visitation.
Executive Order 13195 of January 18, 2001	Directs Federal, State, and local government agencies to protect, connect, promote, and assist trails of all types throughout the United States, including national scenic trails.	Four Arizona Trail passages are located within the analysis area, stretching from the Tortilla Mountains in the south to the Superstition Mountains in the north.
Forest Service Manual 2353, “National Forest System Trails”	States that national trails are located so that they provide for maximum outdoor recreation potential and for conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which these trails pass. Management of each trail in the National Trails System addresses the nature and purposes of the trail and is consistent with the applicable land management plan.	Four Arizona Trail passages are located within the analysis area, stretching from the Tortilla Mountains in the south to the Superstition Mountains in the north.

Laws, Ordinances, Regulations, and Standards	Description	Applicability
Title 36 Code of Federal Regulations Part 212, referred to as the “Forest Service Travel Management Rule”	Requires that roads, trails, and areas open to motorized vehicle use be designated on all forest management lands.	The recreation setting varies throughout the analysis area, illustrated by the different ROS classifications that occur within the analysis area: Semi-Primitive Non-Motorized (5,576 acres), Semi-Primitive Motorized (21,226 acres), Roded Natural (10,213 acres), and Urban (10,180 acres).
Arizona 2017–18 Arizona Hunting Regulations issued by the Arizona Game and Fish Department	Establishes regulations for hunting and trapping in Arizona.	Hunting opportunities are available on public lands within the analysis area, including Arizona Game and Fish Department hunting units 24A, 24B, and 37B.
Recreation Permit Program (Arizona Revised Statutes Title 37)	Administered by the Arizona State Land Department, this program requires users to obtain a recreation permit to camp, hike, or travel on Arizona State Trust land that is designated as open for recreation.	Arizona State Trust land is present throughout portions of the analysis area, and it is not public land: it is land managed by the Arizona State Land Department to generate revenue for specific beneficiaries.
Pinal County Open Space and Trails Master Plan (Logan Simpson Design Inc. 2007)	This plan reflects the vision of county residents and identifies goals and objectives for the attainments of open space, trails, and regional parks within Pinal County.	Dispersed and developed recreation in the analysis area is managed in part by Pinal County.

Laws, Ordinances, Regulations, and Standards	Description	Applicability
The Tonto National Forest Land and Resource Management Plan (U.S. Forest Service 1985)	Describes existing management direction for resource use within National Forest System lands.	The Tonto National Forest Land and Resource Management Plan describes the purpose of Management Area 2F, Globe Ranger District – General Management Area as follows: to “manage for a variety of renewable natural resource with primary emphasis on wildlife habitat improvement, water quality maintenance, livestock forage production, and dispersed recreation.”
Bureau of Land Management (BLM) Handbook H-8320-1, Planning for Recreation and Visitor Services	Assists in the planning and management of recreation and visitor services on public lands and adjacent waters and planning guidance at the land use plan and implementation level.	BLM routes are located within the analysis area. The BLM Tucson Field Office is currently preparing a draft travel management plan to designate roads, trails, and areas for motor vehicle travel.
Secretarial Order 3373	Ensures that public access is an important value now and into the future as the BLM makes decisions involving the disposal or exchange of lands.	The analysis area includes land managed by the BLM and is applicable under Secretarial Order 3373.

Key Documents and References Cited for Recreation

The following list is meant to highlight key process or analysis documents available in the project record. It should not be considered a full list of all available documentation considered within this process memorandum or the EIS analysis.

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