



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

# TONIGHT'S AGENDA

Open house	5:00 to 5:30
Presentation	5:30 to 6:00
Workshop	6:00 to 7:30
Questions and Answers	7:30 to 8:00



*Resolution Copper Project and  
Land Exchange EIS*

# **ALTERNATIVE DEVELOPMENT WORKSHOPS**

Neil Bosworth – Forest Supervisor

Tom Torres – Deputy Forest Supervisor

Mary Rasmussen – Project Manager



## Tonight's Presentation

- ❑ Project Decision Framework
- ❑ Project Status and Scoping Results
- ❑ Alternatives Development Process
- ❑ Criteria for Screening Alternatives
- ❑ Purpose of Tonight's Workshop

## Resolution Copper Project and Land Exchange Environmental Impact Statement

# Project Purpose and Need

- ❑ The Tonto National Forest is preparing an Environmental Impact Statement (EIS) for the Resolution Copper Project and Land Exchange:
  - ❑ *To consider approval of a proposed plan of operations submitted by Resolution Copper, which would govern surface disturbance on Forest Service lands from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.*
  - ❑ *To exchange lands between Resolution Copper and the United States as directed by Section 3003 of the National Defense Authorization Act for 2015 (NDAA).*

## National Environmental Policy Act (NEPA)

- ❑ As part of NEPA process, the Forest Service is required to:
  - ❑ **Involve the public** to identify issues and concerns surrounding the proposed action (**scoping**)
  - ❑ **Develop technically feasible alternatives** to address the identified issues and concerns
  - ❑ **Analyze and compare foreseeable impacts under each alternative** to make an equitable and informed decision

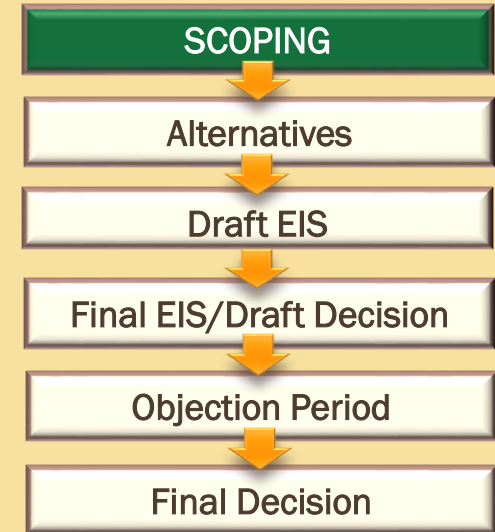
## Forest Service NEPA Process for EIS



## Resolution Copper Project and Land Exchange Environmental Impact Statement

# Public Scoping

- ❑ March 2016 – July 2016
- ❑ Five public meetings, 120-day comment period
- ❑ 133,653 letter submittals received
  - ❑ 99% Form Letters
  - ❑ 1,237 Unique Letters
  - ❑ 6,948 individual comments identified
- ❑ Scoping Report published and available for download  
March 10th at [www.ResolutionMineEIS.us](http://www.ResolutionMineEIS.us)



## Resolution Copper Project and Land Exchange Environmental Impact Statement

# Public Concern Topics

- ❑ Socioeconomic effects (both beneficial and adverse)
- ❑ Subsidence at Oak Flat
- ❑ Threats to public health and safety
- ❑ Impacts to surface and groundwater
- ❑ Impacts to tribal cultural resources
- ❑ Impacts to scenery resources and open spaces
- ❑ Impacts to biological resources, wildlife habitat
- ❑ Loss of recreational access and opportunities
- ❑ **Location of Tailings Storage Facility**





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# Specific Public Concerns

## ***Tailings Storage Facility Location:***

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

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# Specific Public Concerns

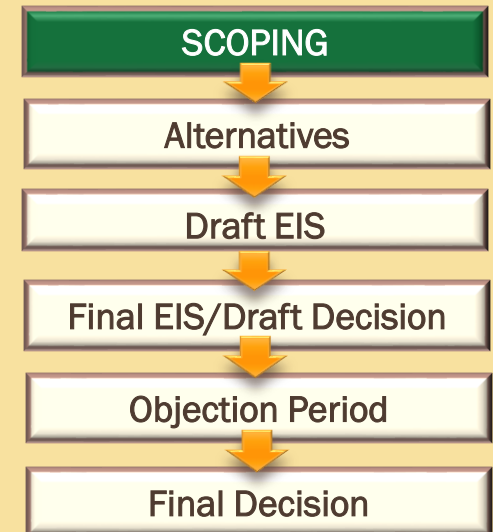
## ***Tailings Storage Facility Design:***

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

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## What do we do with the Scoping Comments in the EIS process?

- ❑ Establish the range of **issues** to be addressed in depth in the EIS analyses
- ❑ Identify suggestions for analysis, mitigation, or modification of the proposed action
- ❑ Develop **alternatives** that address issues identified during scoping

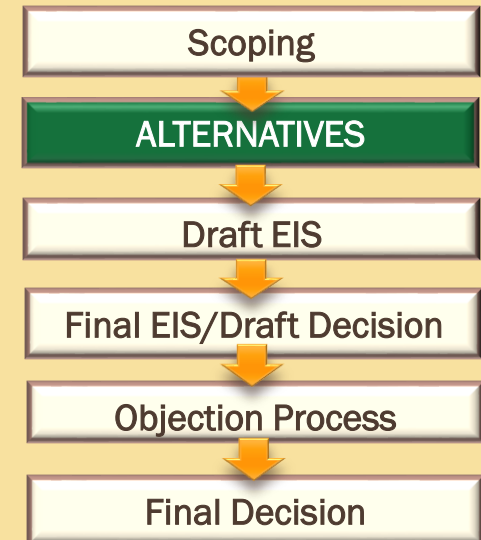


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## What are EIS Alternatives?

A mix of *strategies* that:

- ❑ Resolve or address key issues identified during scoping
- ❑ Meet the purpose of and need for the action
- ❑ Consistent with the basic policy objectives for management of the area



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### Alternatives for this EIS include:

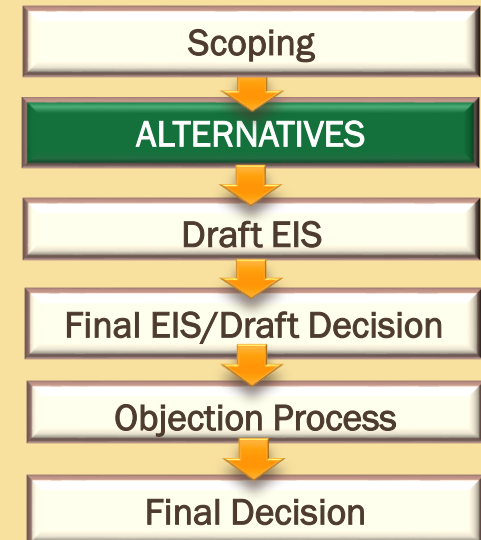
- ❑ **Proposed Action** – submitted mining plan of operations and land exchange
- ❑ **No-Action Alternative** – status quo, no mining proposal or land exchange: used to determine baseline conditions to compare effects
- ❑ **Other Reasonable Alternatives** – currently under development by the Forest Service with stakeholder input



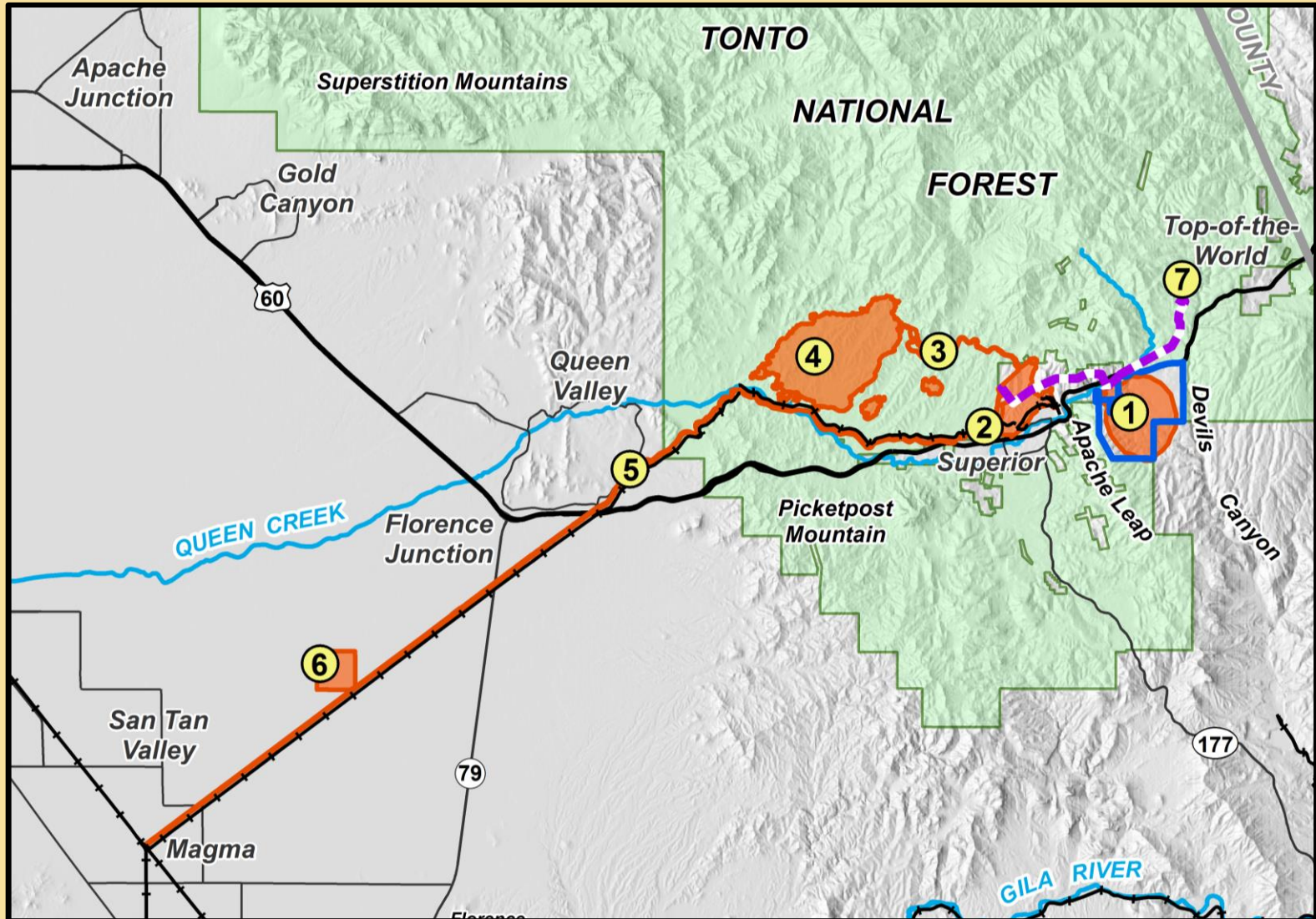
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# Proposed Action Alternative

- ❑ Four major components of the proposed mine:
  - ❑ **East Plant Site** (includes ore body and underground workings)
  - ❑ **West Plant Site** (ore processing facilities)
  - ❑ **MARRCO Corridor** (ore conveyance facilities)
  - ❑ **Tailings Storage Facility** (area for permanent disposal of mine-produced tailings)



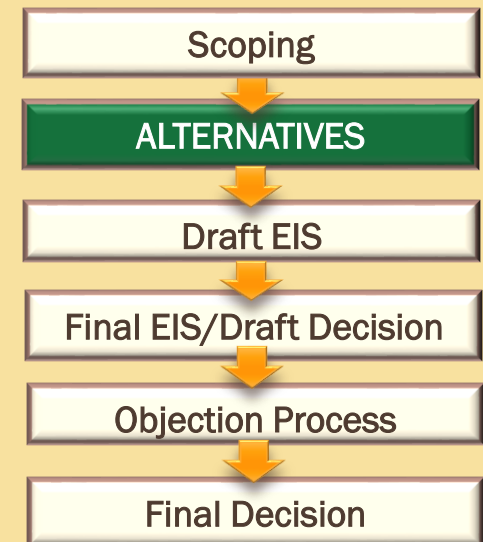
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## Developing Preliminary Alternatives

- ❑ Criteria for screening and evaluating alternatives include:
  - ❑ Meets the Purpose and Need
  - ❑ Technically feasible (engineering)
  - ❑ Economically viable (costs)
  - ❑ Environmental/Social factors (public input)

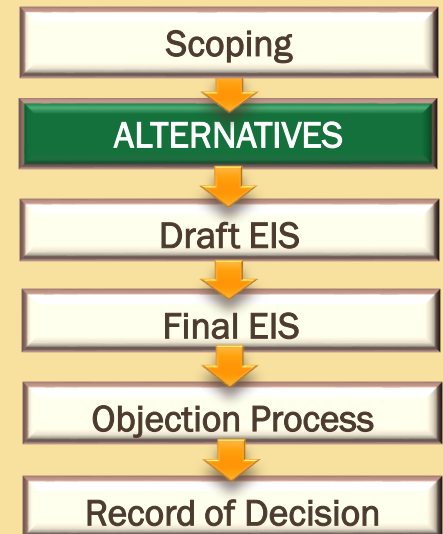




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# Preliminary Alternatives: Aspects of mining proposal under consideration

- ❑ Mining techniques
- ❑ Types of Tailings (slurry vs. dry stack)
- ❑ Tailings facility design/dam types
- ❑ Transportation options (alternate haul roads, use of rail)
- ❑ Relocation of filter or processing facilities
- ❑ **Tailings Storage Facility locations**



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## What is the Purpose of Tonight's Workshop?

- ❑ Public input from Scoping meetings and recurring themes led to the creation of 6 evaluation criteria
  - 1) Cultural Resources
  - 2) Proximity to Existing Communities
  - 3) Recreation
  - 4) Scenery
  - 5) Streams and Springs
  - 6) Wildlife Habitat

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## Purpose of Tonight's Workshop (cont)

- ❑ Obtain *your* input about *your* social and environmental values related to the tailings storage facility location
- ❑ Your participation during the interactive portion will help the Forest Service evaluate and compare alternative tailings facility locations

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## Interactive portion of workshop

- ❑ *How will this work?*
  - ❑ *Hand-held keypads will be distributed and you will have a chance to input your views to a series of questions*
  - ❑ *The Forest Service realizes that in many instances, all the options will be equally important. We still would ask you select 1 element*
  - ❑ *By participating, you are not eliminating the other options ... but identifying what you believe to be the most crucial element when considering alternate locations.*

# *Keypad Polling Workshop*

**Step 1 – Demographic Questions**

**Step 2 – Criteria Definitions (see handout page 2)**

**Step 3 – Criteria Rating**

**Step 4 – Criteria Paired Comparisons**

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# Cultural Resources

***Avoids known historic properties  
and traditional use areas.***

- ❑ Archaeological sites
- ❑ Historic properties (ranches, homesteads, mines)
- ❑ Regional “sense of place”
- ❑ Sites important to Native Americans
- ❑ Traditional resource collection areas (plants, rock, fuel wood, etc.)

**Cultural Resources**Proximity to Existing  
Communities

Recreation

Scenery

Streams and Springs

Wildlife Habitat

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# Proximity to Existing Communities

## *Avoids impacting existing communities and residences*

- ❑ Dust
- ❑ Loss of natural character of the landscape
- ❑ Noise
- ❑ Property values
- ❑ Public health and safety
- ❑ Water quality

Cultural Resources

Proximity to Existing  
Communities

Recreation

Scenery

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Wildlife Habitat

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# Recreation

## *Protects area recreation opportunities*

- ❑ Backcountry camping/wilderness
- ❑ Boyce Thompson Arboretum
- ❑ Hiking/Climbing/Equestrian
- ❑ Hunting
- ❑ Non-motorized trails (Arizona Trail, LOST Trail, etc.)
- ❑ Off-highway vehicle [OHV] routes
- ❑ Scenic driving / touring

Cultural Resources

Proximity to Existing  
Communities**Recreation**

Scenery

Streams and Springs

Wildlife Habitat



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# Scenery

## *Protects the area's scenic qualities*

- ❑ Clear skies (minimal dust or haze)
- ❑ Dark skies for nighttime viewing
- ❑ Minimize contrast to blend with existing landscape character
- ❑ Potential for concurrent reclamation to reduce impacts to scenery
- ❑ Views from existing residential areas
- ❑ Views from recreational sites
- ❑ Views from area highways

Cultural Resources

Proximity to Existing  
Communities

Recreation

**Scenery**

Streams and Springs

Wildlife Habitat

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# Streams and Springs

## *Protects perennial and intermittent streams and area springs*

- ❑ Degradation of water quality
- ❑ Loss of riparian vegetation
- ❑ Loss of species that depend on water
- ❑ Loss of unique areas on the National Forest
- ❑ Loss of water for irrigation or livestock

Cultural Resources

Proximity to Existing  
Communities

Recreation

Scenery

**Streams and Springs**

Wildlife Habitat

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# Wildlife Habitat

## *Protects wildlife habitat*

- ❑ Aquatic species and fish
- ❑ Availability and quality of wildlife habitat
- ❑ Game species
- ❑ Migratory birds
- ❑ Washes and riparian areas
- ❑ Wildlife corridors and movement

Cultural Resources

Proximity to Existing  
Communities

Recreation

Scenery

Streams and Springs

**Wildlife Habitat**



United States Department of Agriculture  
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**Questions?**