



United States Department of Agriculture
Tonto National Forest

Resolution Copper Project and Land Exchange
Environmental Impact Statement

*Resolution Copper Project and
Land Exchange EIS*

PUBLIC SCOPING MEETING

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WHY ARE WE HERE?

✕ Scoping

- + Initial phase of EIS process
- + Together, we “scope” issues related to proposed mine and land exchange
- + We want to understand your concerns

✕ Your comments will help us

- + Define issues for study in EIS
- + Identify alternatives to address issues
- + Identify mitigations to lessen or avoid adverse effects

OUR COMMITMENT TO YOU

- ✗ **Listen** to your concerns
- ✗ **Consider** each public comment
- ✗ Conduct **open** and **transparent** process
- ✗ Complete **independent** and **objective** analysis
- ✗ **Work** to address your concerns within the bounds of our authority



Arizona Hedgehog Cactus, Oak Flat area

OUR REQUEST

- ✖ Express your concerns freely and openly
- ✖ Provide comments to help us develop a comprehensive EIS
- ✖ Be patient... the EIS process will take years to complete... this is only the beginning...



US Forest Service

Caring for the Land
and Serving People



A BIT MORE DETAIL...

- ✖ Our Team
- ✖ EIS Process
- ✖ Land Exchange
- ✖ Proposed Mine
- ✖ Example Issues
- ✖ Questions



Benson Spring, proposed tailings facility area

NATIONAL ENVIRONMENTAL POLICY ACT (1969)

NEPA IS...

- ✗ Formal structured process to federal decision-making
- ✗ Requires federal agency to analyze and disclose effects
- ✗ Provides for public involvement in federal decisions
- ✗ Requires development and analysis of alternatives to a proposed federal action

NEPA IS NOT...

- ✗ A voting process or other measure of relative support or opposition to a proposed action
- ✗ Does not provide a federal agency with decision-making authority
- ✗ Does not overrule other federal laws

NEPA- MORE INFORMATION

- ✖ Internet resources:

Council on Environmental Quality

<http://www.whitehouse.gov/administration/eop/ceq>

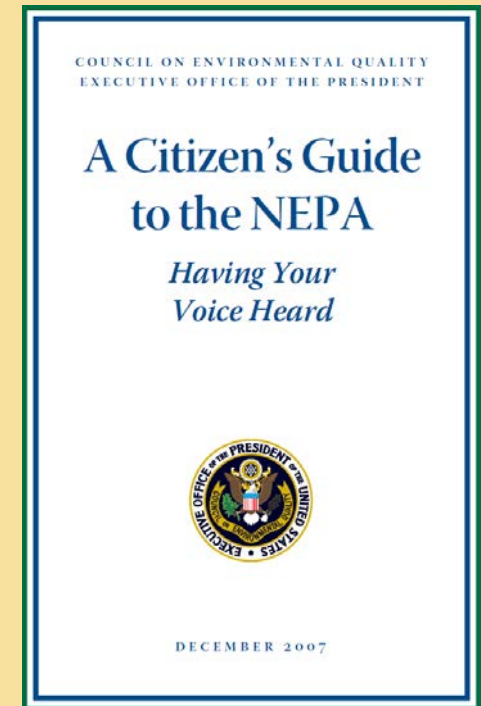
Forest Service NEPA Policy

<http://www.fs.fed.us/emc/nepa/>

- ✖ Written resources

- ✖ Visit with our EIS Team

- ✖ Call or visit a Forest Service office



PURPOSE OF THE FEDERAL ACTION

1. To consider approval of a proposed plan of operations submitted by Resolution Copper, which would govern surface disturbance on Forest Service lands from mining operations that are reasonably incident to extraction, transportation, and processing of copper and molybdenum.
2. To exchange lands between Resolution Copper and the United States as directed by Section 3003 the National Defense Authorization Act for 2015 (NDAA).

THE PROPOSED ACTION:

To approve the proposed plan of operations as submitted by Resolution Copper and to complete the land exchange as directed by Congress under Section 3003 of the NDAA

- ✘ The proposed action is the starting point for the EIS process
- ✘ We will develop and analyze alternatives to the proposed action
 - + Must address issues identified through scoping
 - + Must meet the purpose of the federal action

THE PROPOSED ACTION:

APPROVAL OF PROPOSED PLAN OF OPERATIONS

- ✘ 4,400 acres of FS disturbance
- ✘ Primary use of FS land would be for tailings disposal
- ✘ Other uses would include various surface infrastructure

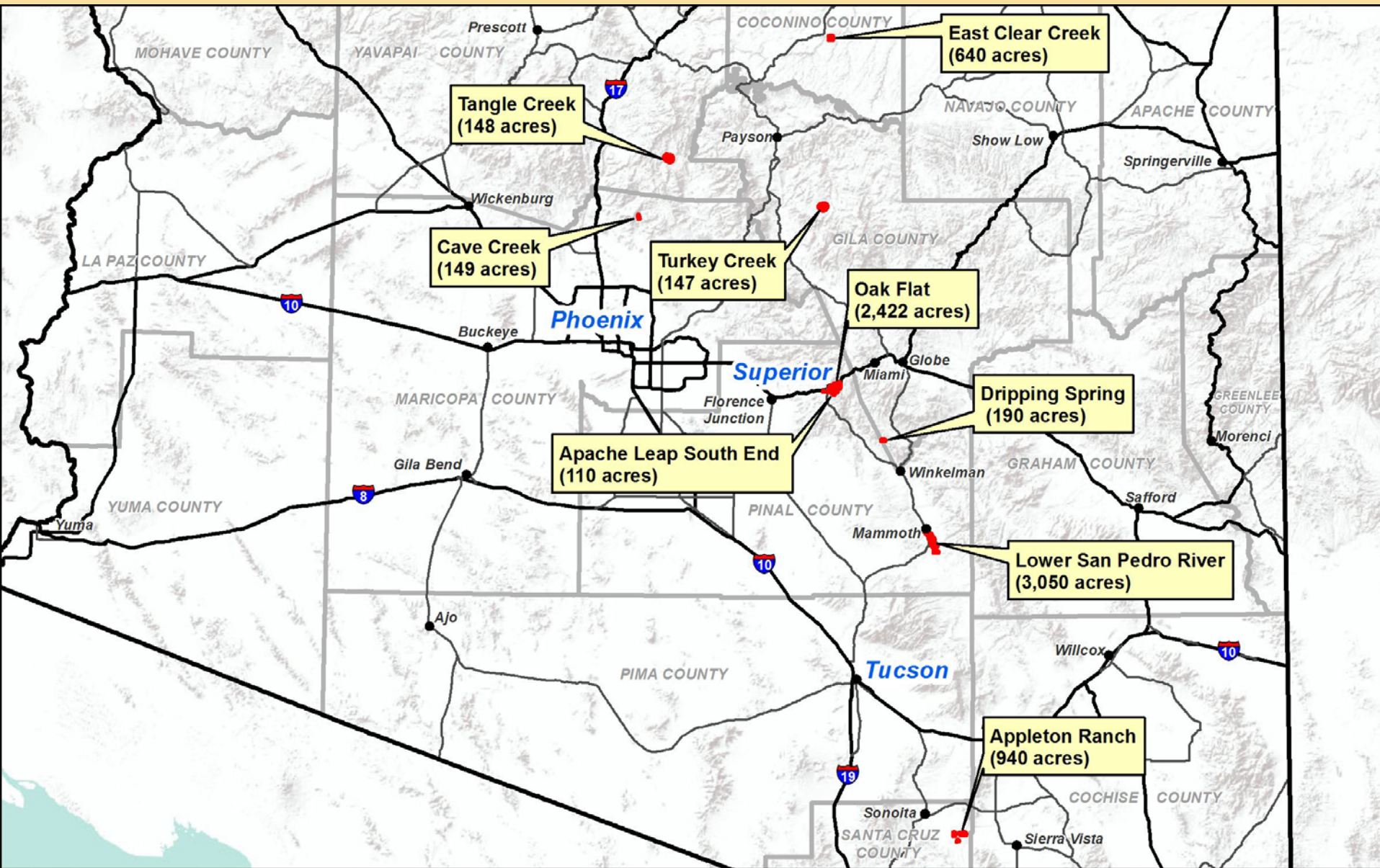
ADMINISTRATION OF LAND EXCHANGE

- ✘ Oak Flat parcel will become private (2,422 acres)
- ✘ Eight parcels located elsewhere in AZ will become federal land (5,344 acres)

LAND EXCHANGE

- ✗ Federal law authorizes and directs the land exchange
- ✗ Requires completion of an EIS prior to exchanging the land
 - ✗ Land exchange
 - ✗ Plan of operations
- ✗ Mandates government appraisal of lands
 - ✗ Appraisal will be made public when completed
- ✗ Requires Forest Service to consult with affected tribes
 - ✗ Seek to identify mutually acceptable measures to address tribal issues

LAND EXCHANGE PARCELS



Resolution's Proposed Mine

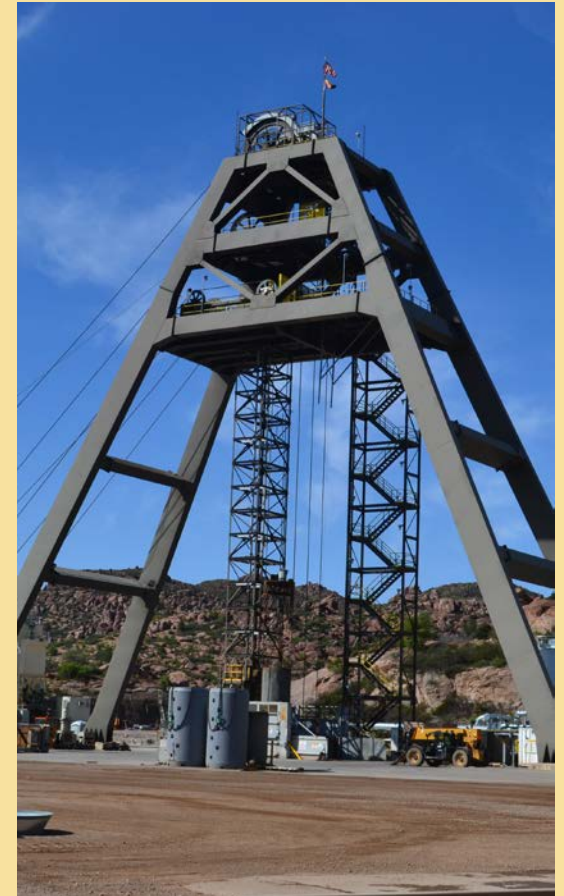
- ✗ Forest Service, private and state land
- ✗ Construction: 10 years
- ✗ Operations: 40 years
- ✗ Reclamation: 5–10 years
- ✗ 25 million tons of copper
 - ✗ US consumes about 1.8 million tons of copper per year
 - ✗ About 1/3 of US consumption
 - ✗ Copper important to our daily life
- ✗ Deposit located 5,000–7,000 feet underground
- ✗ Ore mined using panel caving method (i.e. block caving)



Sample of Copper Ore
from Resolution
Deposit
(5,232 ft. depth)

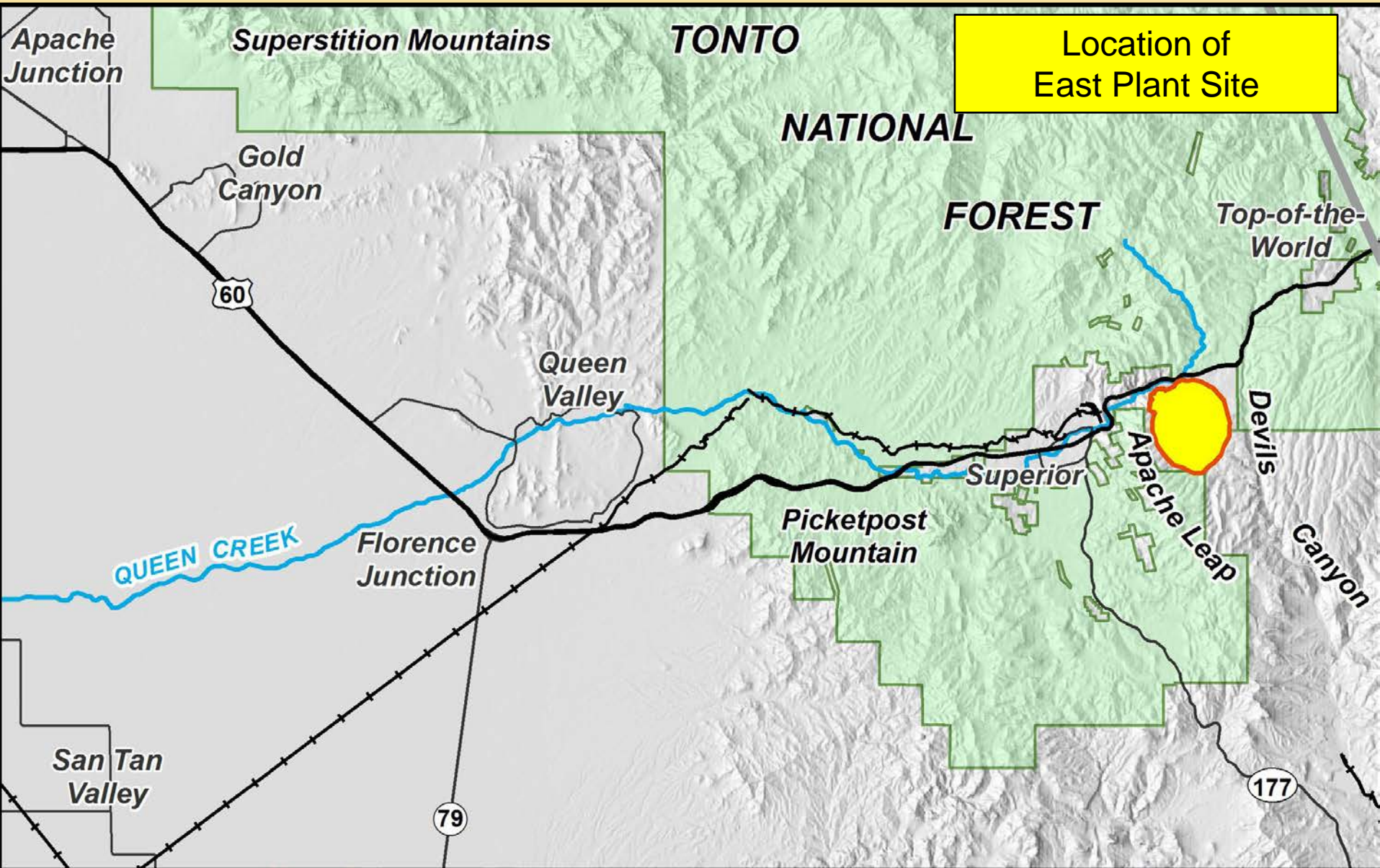
Resolution's Proposed Mine (cont.)

- ✗ Accessed by six vertical shafts at East Plant Site
- ✗ Crushed ore transported underground for processing at West Plant Site
- ✗ Flotation process, producing copper and moly concentrates
- ✗ Almost no waste rock
- ✗ Tailings piped to tailings disposal site on Forest Service land

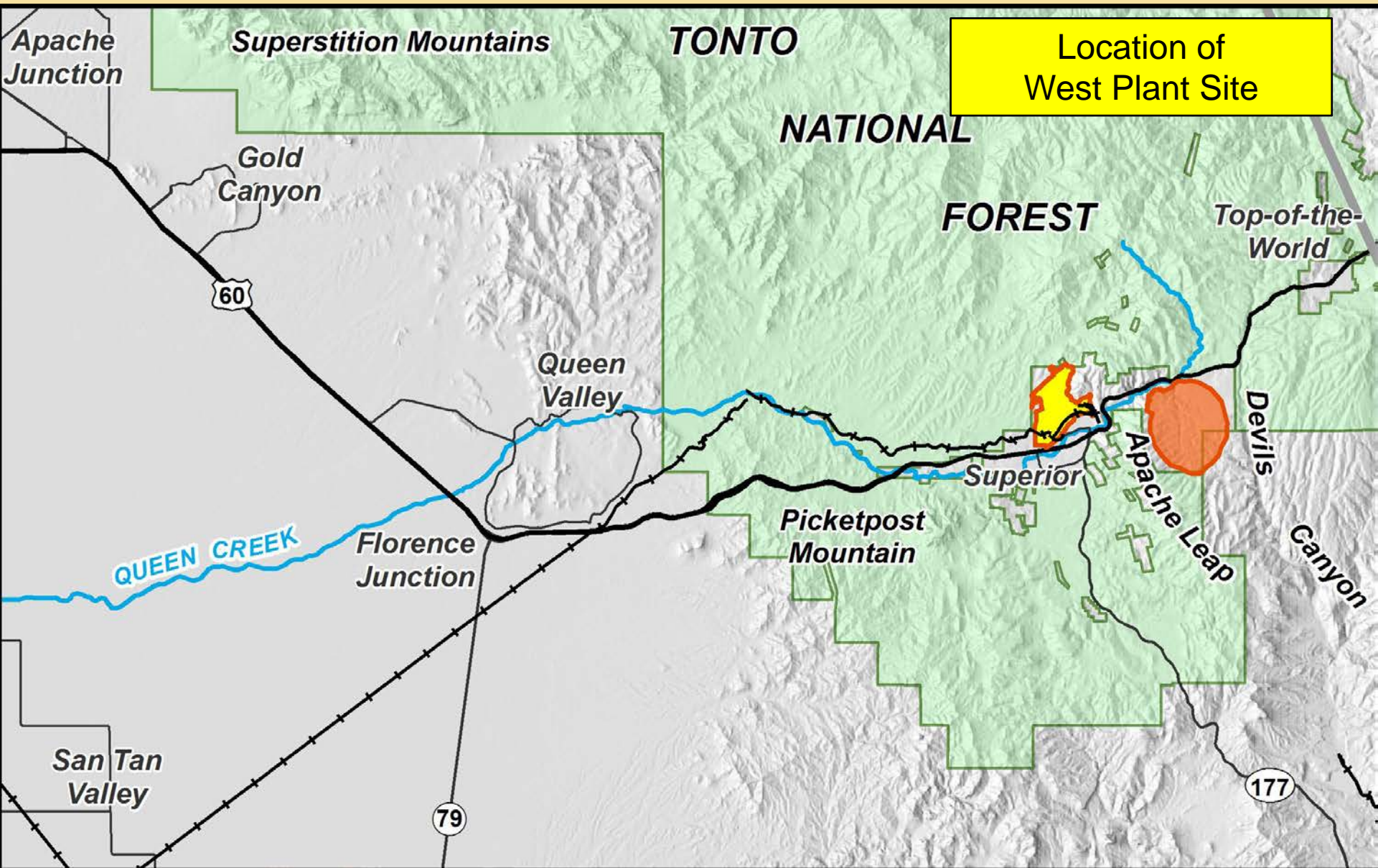


Mine Shaft
East Plant Site

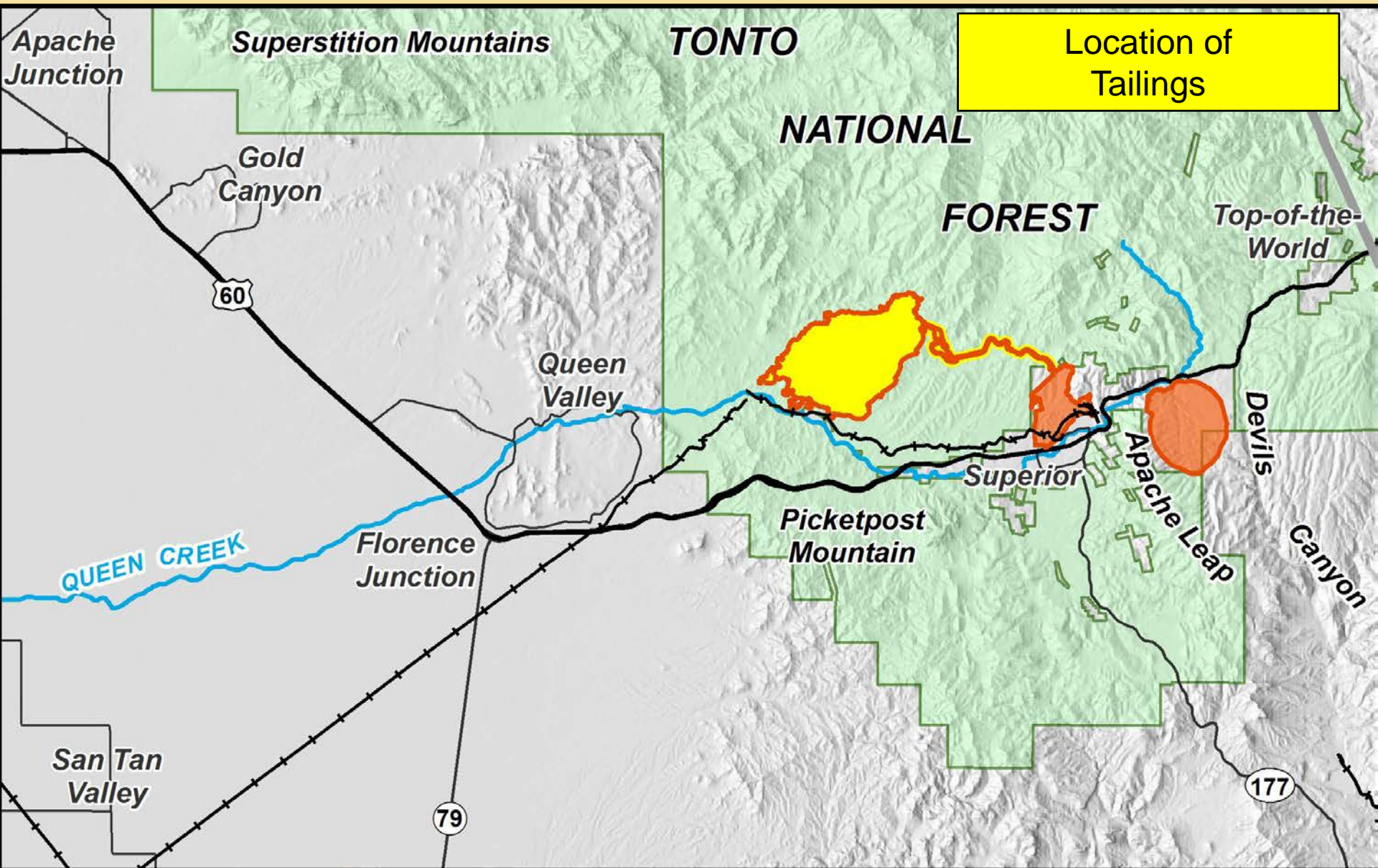
Location of Major Operational Facilities



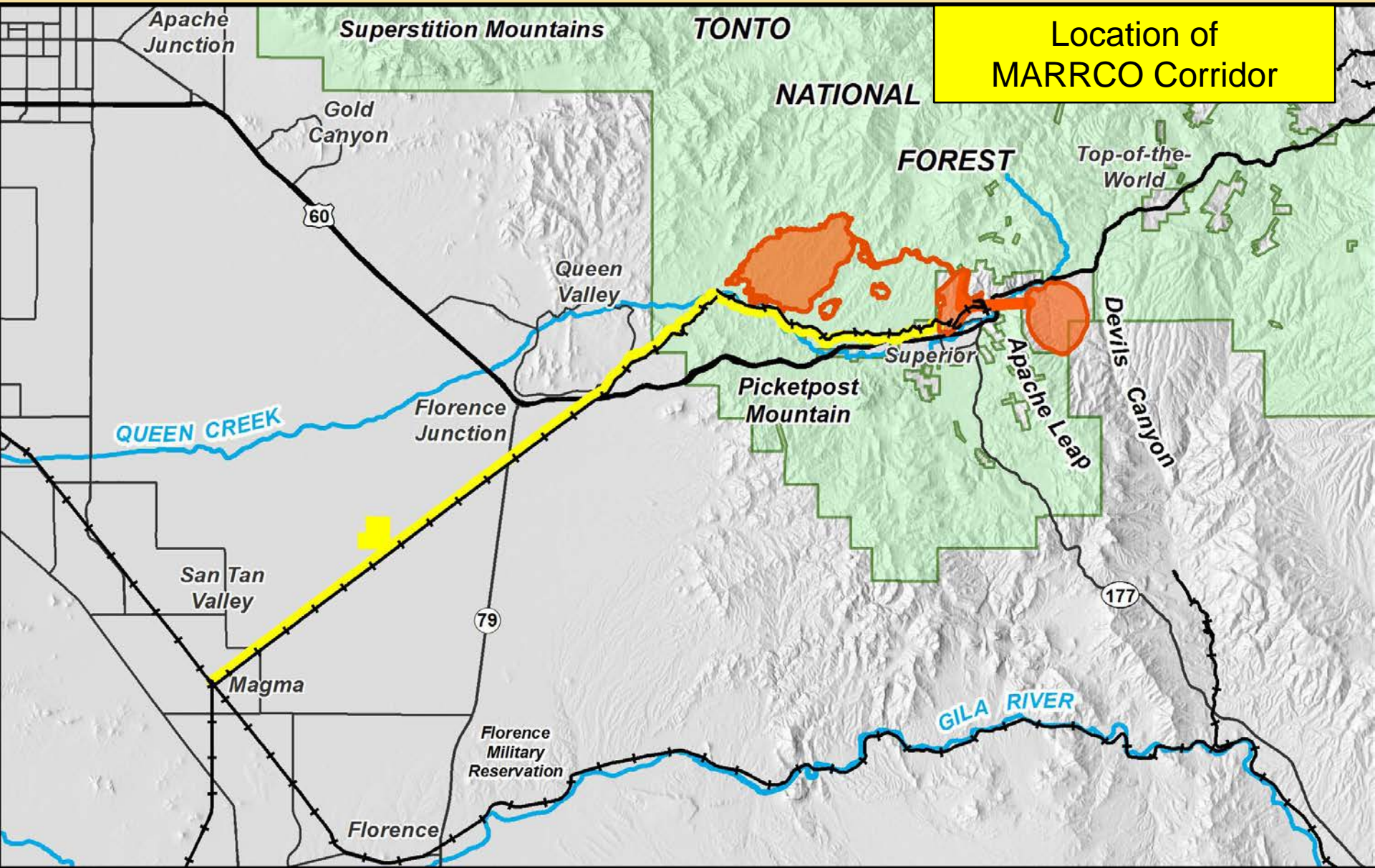
Location of Major Operational Facilities



Location of Major Operational Facilities



Location of Major Operational Facilities



Location of Filter Plant

Central Arizona College
San Tan Campus

San Tan Valley

Proposed Filter Plant Location

South End MARRCO Corridor

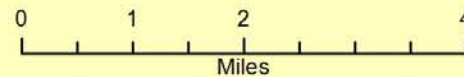
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Proposed Filter Plant Location

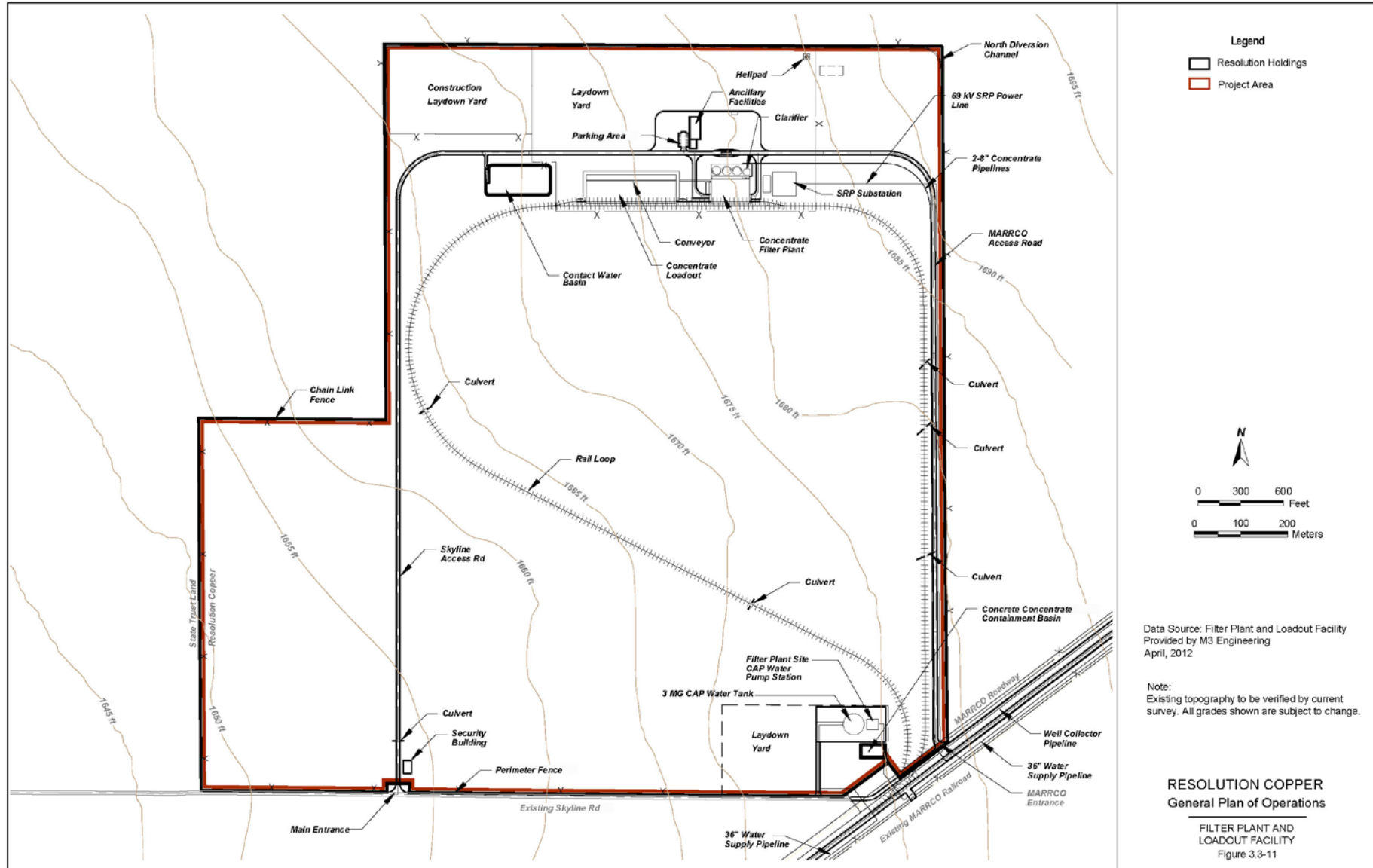
South End
MARRCO Corridor

Central Arizona College
San Tan Campus



Filter Plant Layout

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PLEASE HELP US IDENTIFY ISSUES FOR ANALYSIS

- ✘ An issue is a point of uncertainty, disagreement or dispute about an effect that would be caused by the proposed action
- ✘ We will analyze issues on Forest Service, private and state lands
- ✘ We will screen all issues and identify “significant issues” for analysis in the EIS
- ✘ Significant issues are:
 - + Within the scope of the project
 - + Related to decision to be made
 - + Not already decided by law, regulation or policy
 - + Not opinions

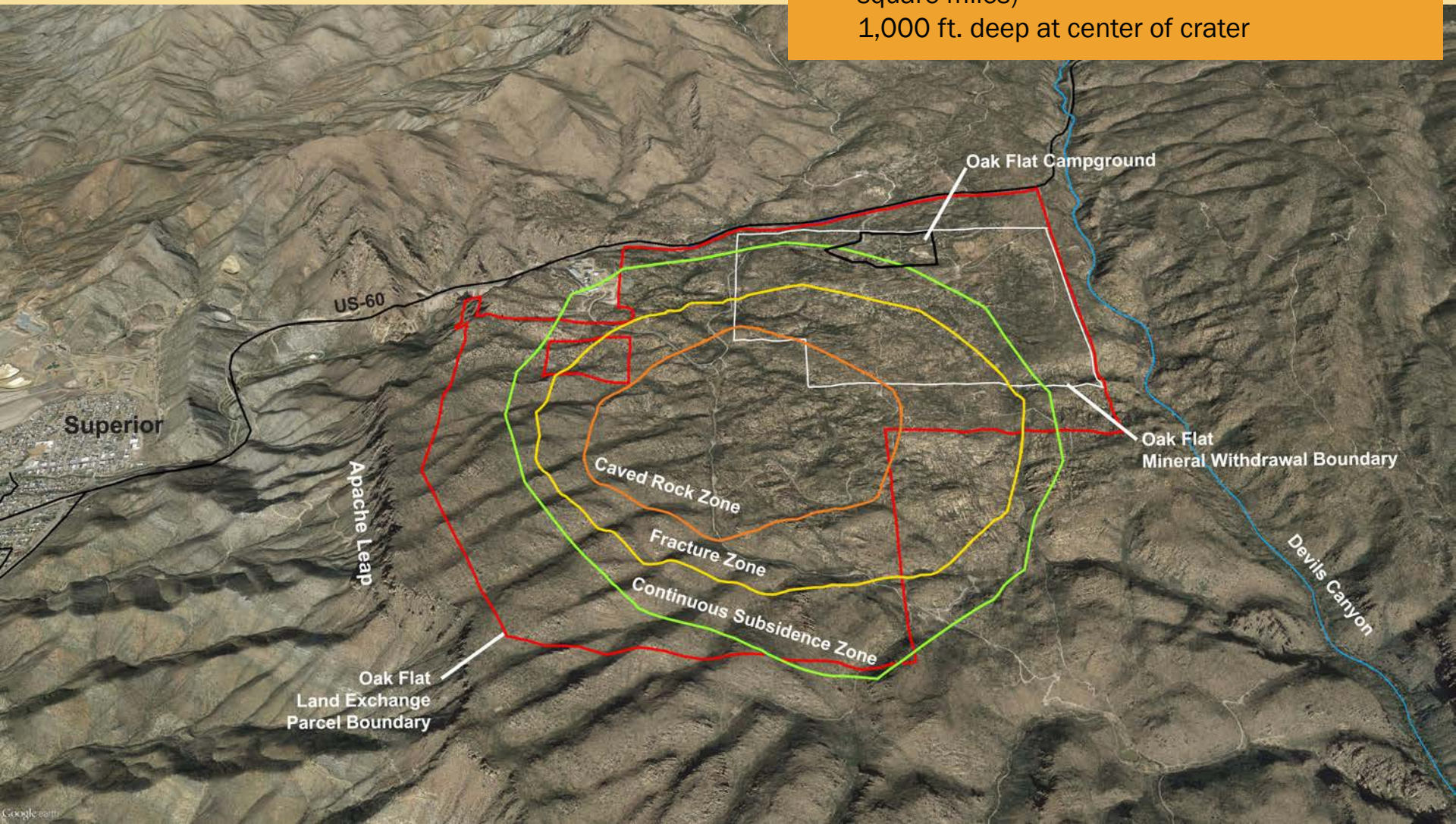


EXAMPLES OF SIGNIFICANT ISSUES: SURFACE SUBSIDENCE

Resolution projects:

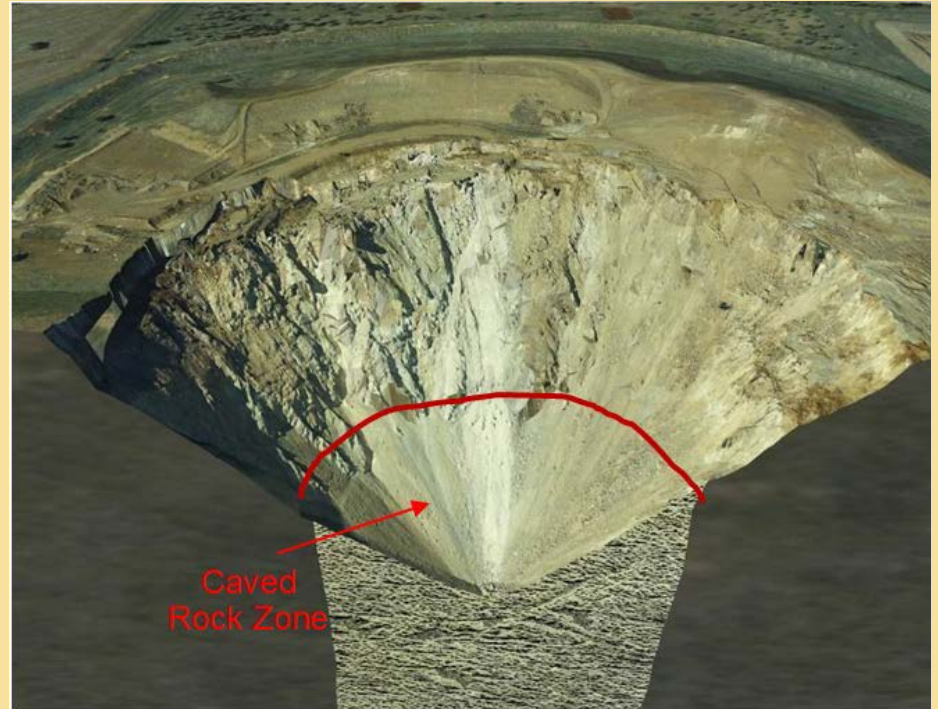
1.5 mile diameter subsidence crater (1.8 square miles)

1,000 ft. deep at center of crater



EXAMPLES OF SIGNIFICANT ISSUES: SURFACE SUBSIDENCE

- ✘ How would subsidence affect cultural resources at Oak Flat?
- ✘ How would subsidence affect surface water quantity and quality?
- ✘ Would subsidence cause physical hazards to wildlife or humans?
- ✘ Would subsidence affect Apache Leap?



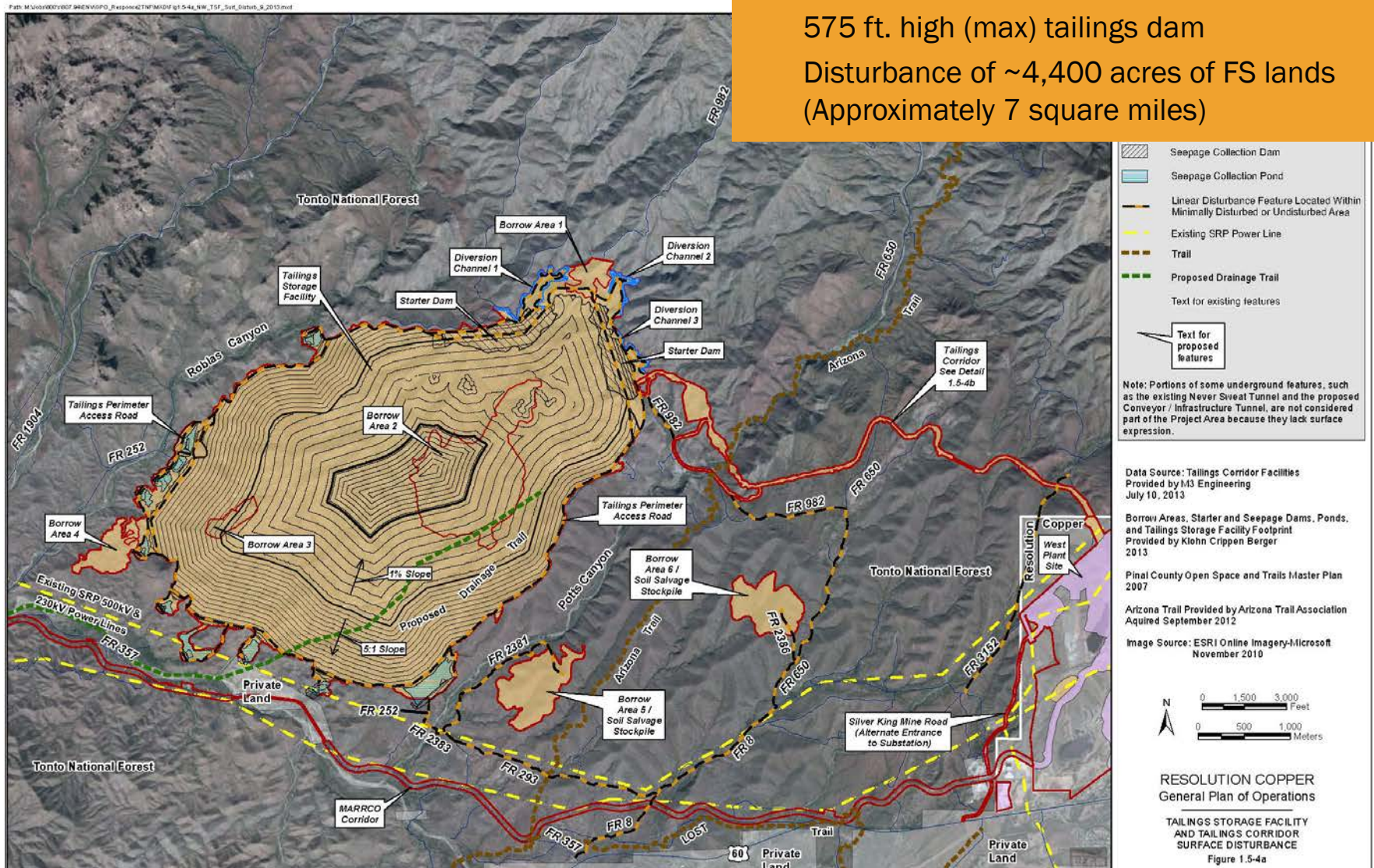
Example of subsidence zone at Northparkes mine in Australia

EXAMPLES OF SIGNIFICANT ISSUES: TAILINGS DISPOSAL FACILITY

Permanent storage of ~1.5 billion tons of tailings at TSF

575 ft. high (max) tailings dam

Disturbance of ~4,400 acres of FS lands
(Approximately 7 square miles)



EXAMPLES OF SIGNIFICANT ISSUES: TAILINGS DISPOSAL FACILITY

- ✗ Would dust from tailings affect public health in Queen Valley?
- ✗ Would tailings cause water pollution?
- ✗ Would the tailings facility destroy cultural resources?
- ✗ Would the tailings cause long-term environmental hazards?



Example of tailings disposal facility at
Sierrita Mine, Arizona

EXAMPLES OF SIGNIFICANT ISSUES: SOCIOECONOMIC EFFECTS

- ✘ How would the project affect employment opportunities in Superior area?
- ✘ How would the project affect state and local tax revenue?
- ✘ How would the project effect local school systems and other public services?
- ✘ How would the project affect the total economic activity in the community and region?

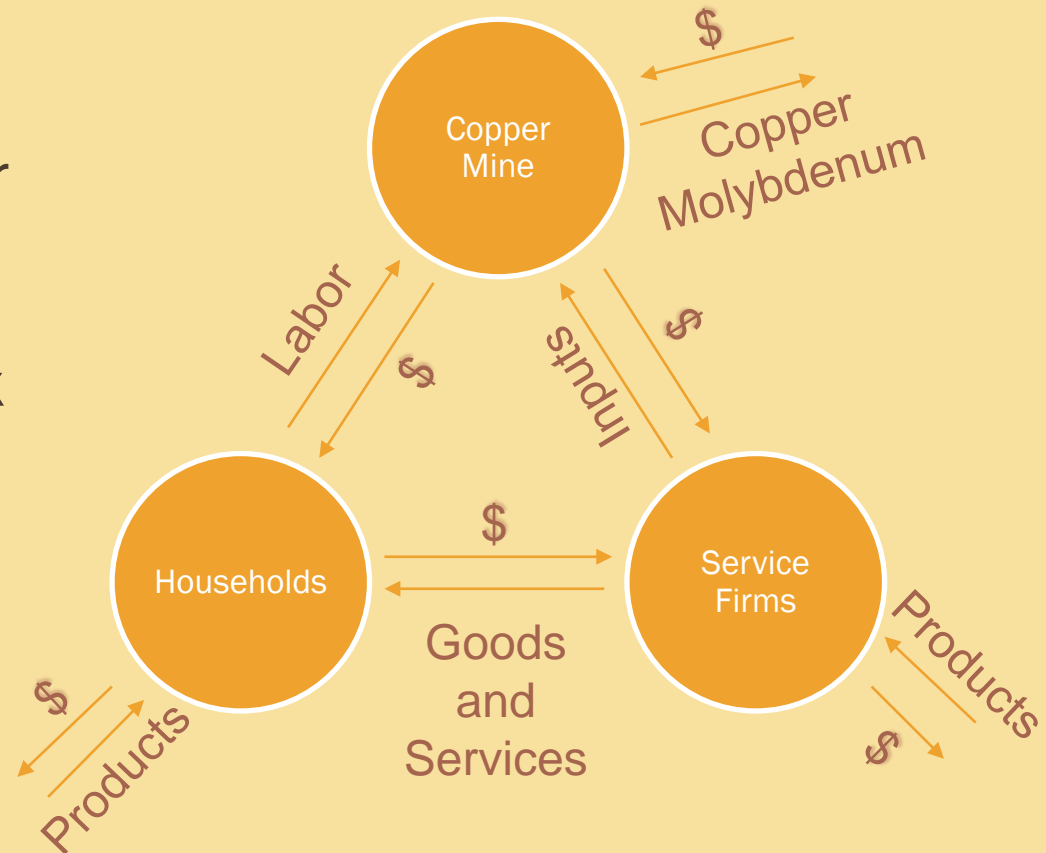


Figure adapted from *Importance of Economic Multipliers* (University of Nevada Reno)

COMMENTS ARE **MOST** HELPFUL WHEN THEY:

- ✗ Are solution oriented and provide specific examples rather than simply opposing the proposed project.
- ✗ Identify significant resource issues or other concerns that should be addressed in the EIS analysis; and
- ✗ Suggest potential alternatives that should be considered.

Example: *“The EIS should consider the potential for acid rock drainage to leak into underground aquifers and to contaminate springs and other water sources downstream from Oak Flat.”*

COMMENTS ARE LEAST HELPFUL WHEN THEY:

- ✗ simply express a personal opinion or
- ✗ address issues that are beyond the scope of this project or the legal authority of the Forest Service to influence or change.

Example: *“Mining is terribly destructive. Mining should not be allowed on any Forest lands.”*

While these types of comments are noted and recorded, they do not help the Forest Service fully analyze the environmental impacts of the project.

HOW TO SUBMIT COMMENTS

In person: Drop off a comment form in the box
or talk to the court reporter

By voicemail or fax: 1-866-546-5718

By mail: Resolution EIS Comments
P.O. Box 34468
Phoenix, AZ 85067-4468

By email: comments@ResolutionMineEIS.us

On website: www.ResolutionMineEIS.us



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Questions?