

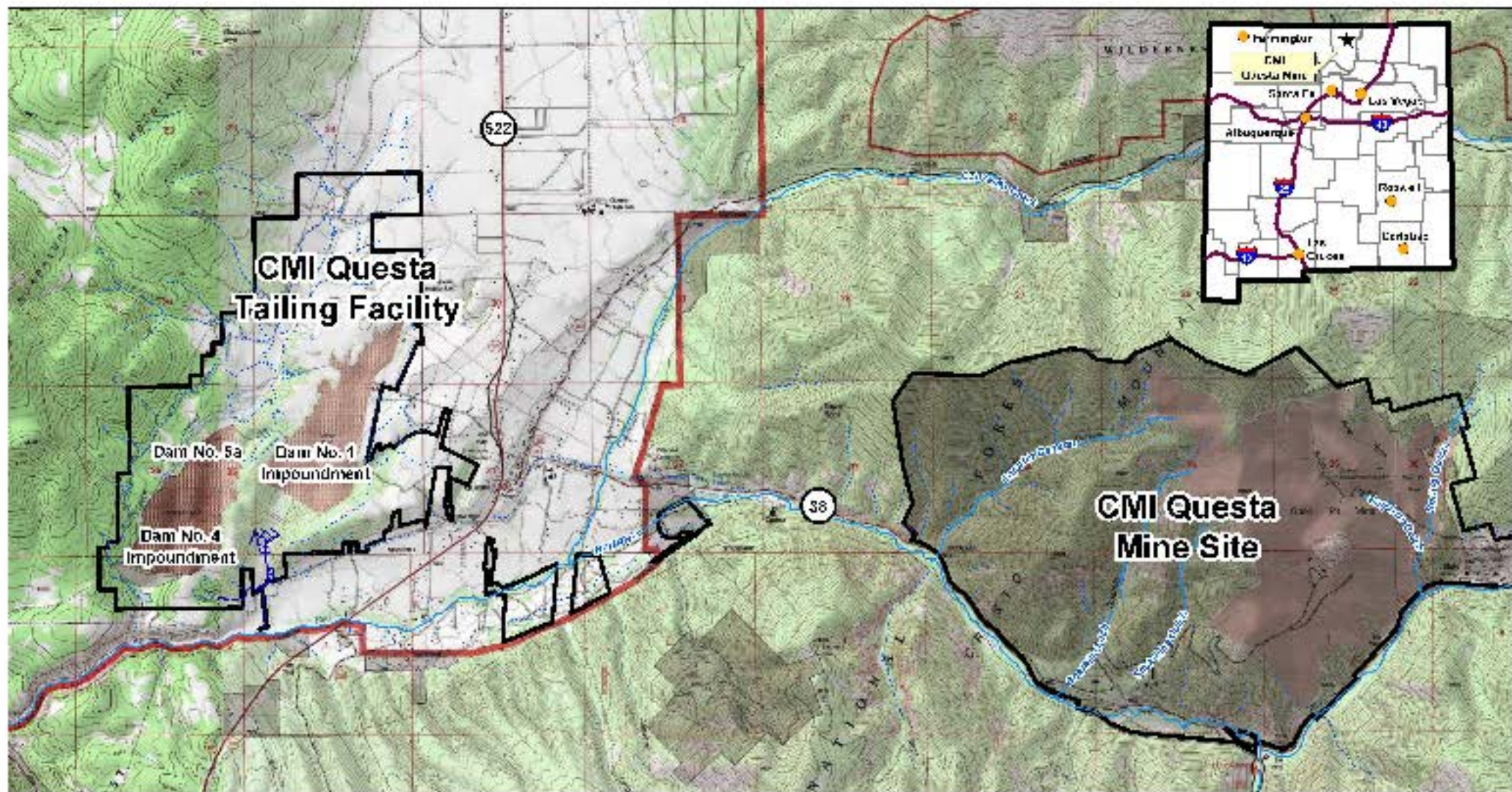


**CHEVRON QUESTA MINE  
SUPERFUND SITE**

Community Meeting  
June 23, 2022

# Agenda

- Welcome & Kickoff
- Facilitation Instructions
- Superfund Introductions & Activities
  - Site Background
  - Status of current work
  - Future Work
- Superfund Questions from the community



**Legend**

- Geopage Interceptor System Lines
- Streams
- ..... Geopages
- CMI Property Boundary



M.S.  
 "Map" Title: Questa Mine Tailings  
 2010-10-10 10:00:00 AM  
 2010-10-10 10:00:00 AM

**Site Location Map**



# Background Information

1919–2014 Molybdenum mining & milling

1964–1983 Open pit mining

June 2014 Mine permanently closed

- 300 million tons of waste rock
- 100 million tons of tailings



# CLEANUP AREAS

3



Tailing Facility Area

2



Mine Site Area

1



Mill Area

5

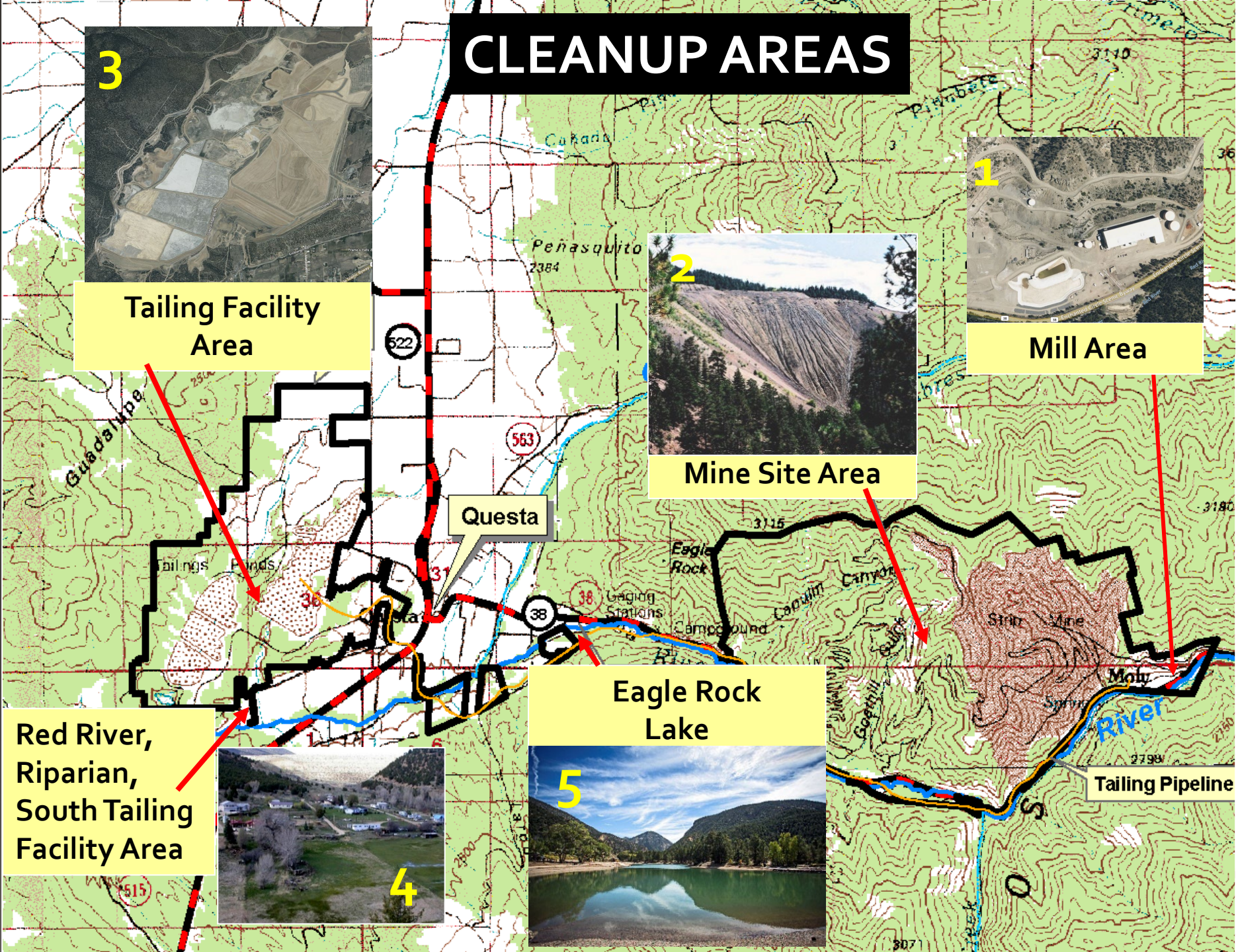


Eagle Rock Lake

4



Red River, Riparian, South Tailing Facility Area



## Superfund Remedy

- Governor of New Mexico requested that EPA place the Site on the NPL in 2000
- RI/FS: 2001 - 2010
- ROD: December 2010
- Five areas identified for remediation
- Total Remedy Cost: \$517M - \$883M
- Cleanup work being conducted under Administrative Settlement Agreements and Partial Consent Decree

# Enforcement Instruments

- Removal Administrative Order on Consent (AOC) – March 2012
- Early Design AOC – September 2012
  - First Amendment – September 2014
  - Second Amendment – November 2014
  - Third Amendment – August 2016
  - Fourth Amendment – Pending 2022
- Partial Consent Decree – Entered May 1, 2017

# Completed Activities Under AOCs

- Mill Area PCB Clean-up (Mill Area)
- Eagle Rock Lake (Eagle Rock Lake Area)
- Tailing Spills (Red River Riparian)
- Eastern Diversion Channel (Red River Riparian)
- Spring Gulch Cover Field Trials (Mine Site Area)
- Underground Mine Dewatering System (Mine Site Area)
- Technical Workgroup (Mine Site Area)
- Tailing Facility Grading Plan (Tailing Facility Area)
- Waste Rock Pile Regrade Pilot Project (Mine Site Area)
- Tailing Facility Groundwater Investigation (Tailing Facility Area)

# Activities Under Partial Consent Decree

- **Mine Site Area**
  - Mine dewatering O&M
  - Groundwater extraction system
  - Water treatment plant O&M
  - Groundwater monitoring
- **Tailing Facility Area**
  - Cover demonstration pilot project
  - Replace seepage collection systems
  - Groundwater extraction system
  - Groundwater and surface water monitoring
  - Monitor and maintain tailing dams
- **Eagle Rock Lake**
  - O&M and monitoring





# Early Actions



Tailing Spills  
Removal



Eagle Rock Lake  
Before Removal



Soil Removal  
at Mill



Eagle Rock Lake  
After Removal

# Early Design Actions



Underground Mine Dewatering System

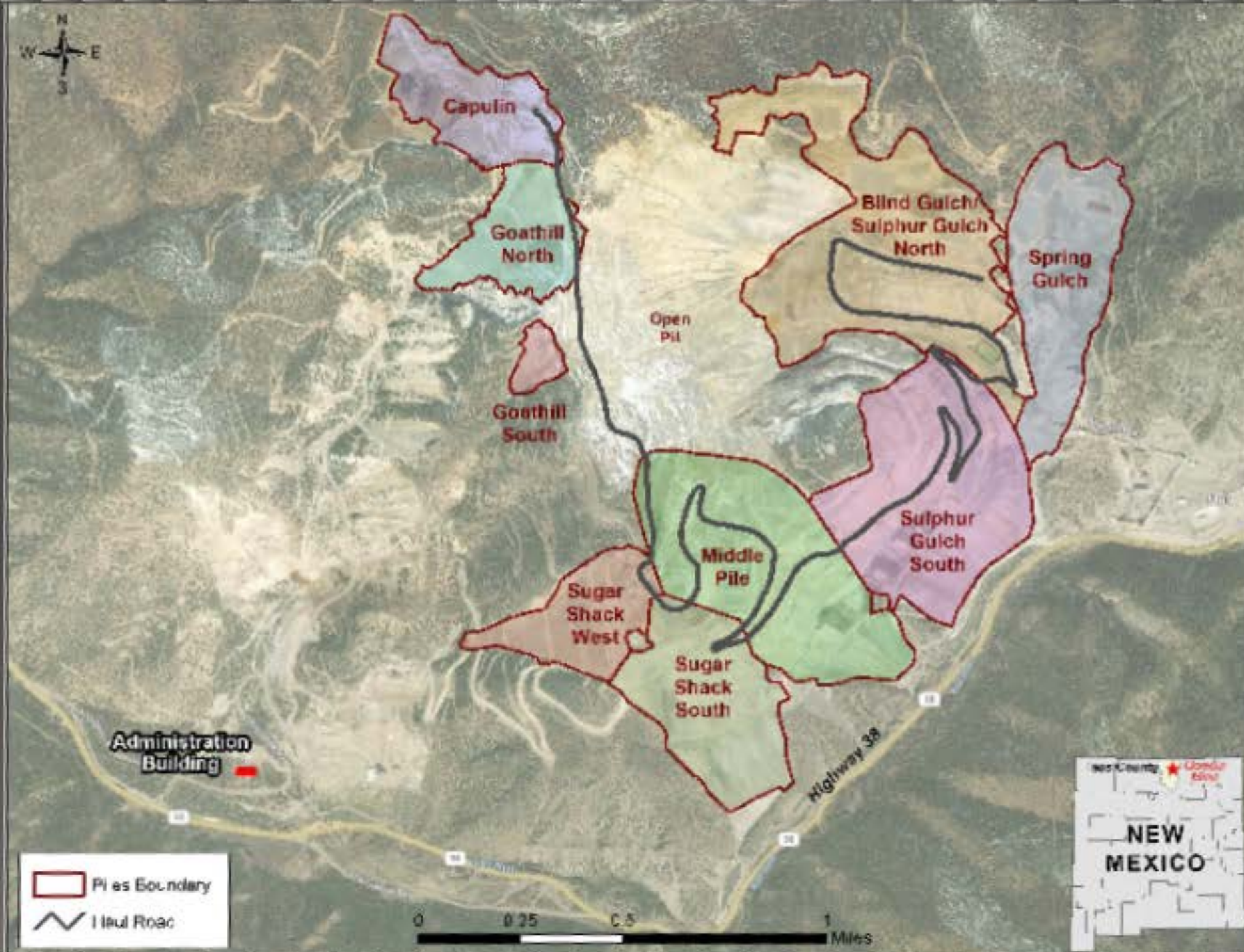


Spring Gulch Cover  
Field Trials



Waste Rock Pile  
Regrade Pilot Project

# Rockpile Overview



# Rockpile Regrade Pilot Project

- Reclamation of Capulin and Goat Hill North Waste Rock Piles
- Rock piles regraded to slopes with acceptable factor of safety
- 3-foot evapotranspiration cover
- Revegetation of cover
- Spring/Summer 2021 – Start of construction
- Current Work:
  - Cut and Fill of Capulin Benches at Toe
  - Goat Hill North Grading and Material Removal
  - Began dozer push at Spring Gulch and top of Capulin; and
  - Continue to haul in rip rap and aggregates



# Drainage and Underdrain Work



Under Drain #1  
08-06-21

# Capulin & Goat Hill North

January 27, 2022



# Capulin Waste Rock Pile East

January 27, 2022



# Capulin Pushdown

January 27, 2022





# Goat Hill North Access Roads

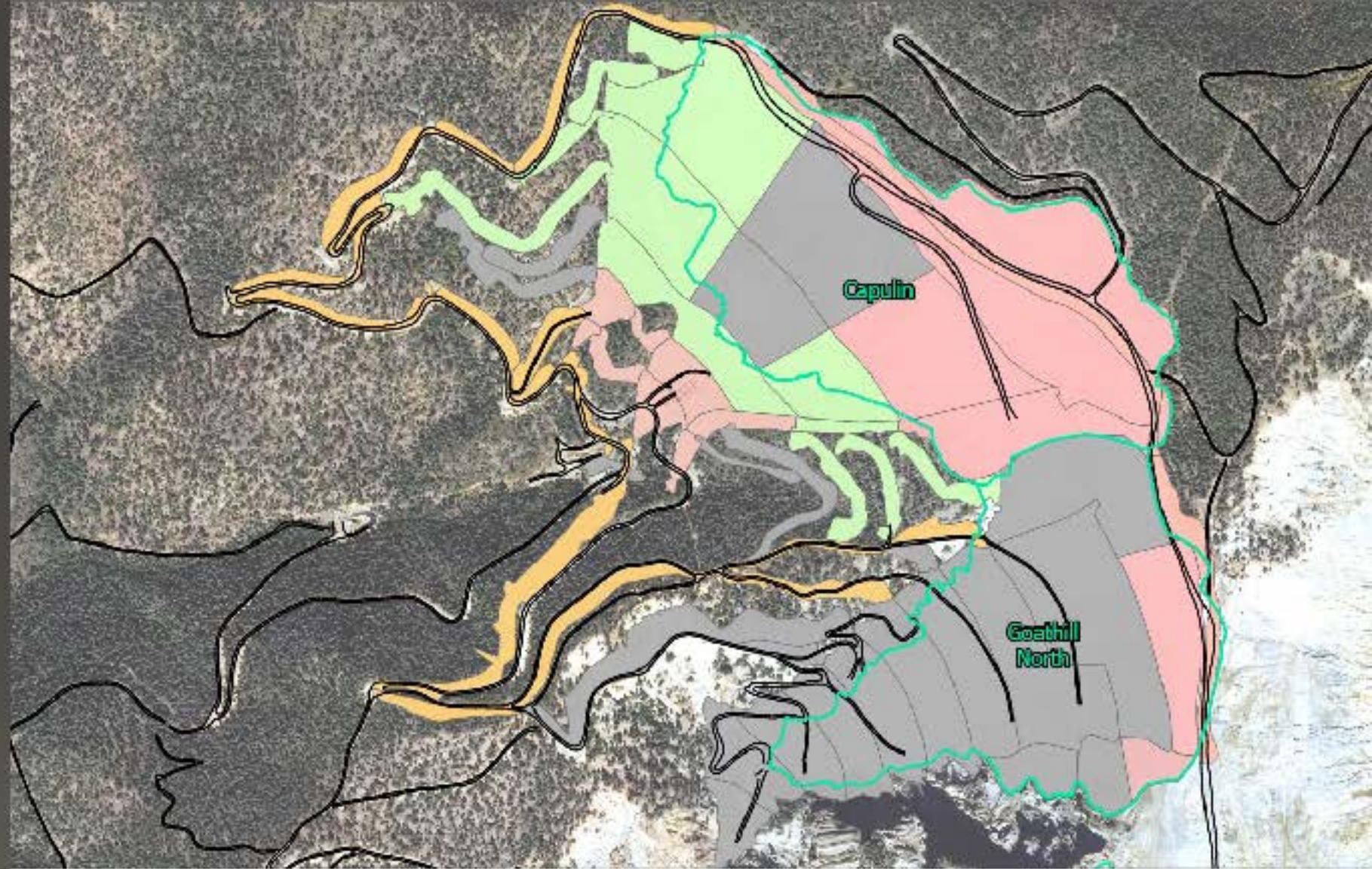


# Spring Gulch Waste Rock Pile



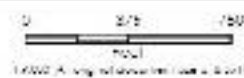
# Construction Progress

- Roads
- Cut and Fill



## Legend

- |  |                          |
|--|--------------------------|
| Existing Roads                           | Cut and Fill started     |
| Waste Rock Pile                          | Trees felled and removed |
| Roads and Rockpiles Status End of August | Completed                |
| Not Started                              |                          |
| Road widened                             |                          |



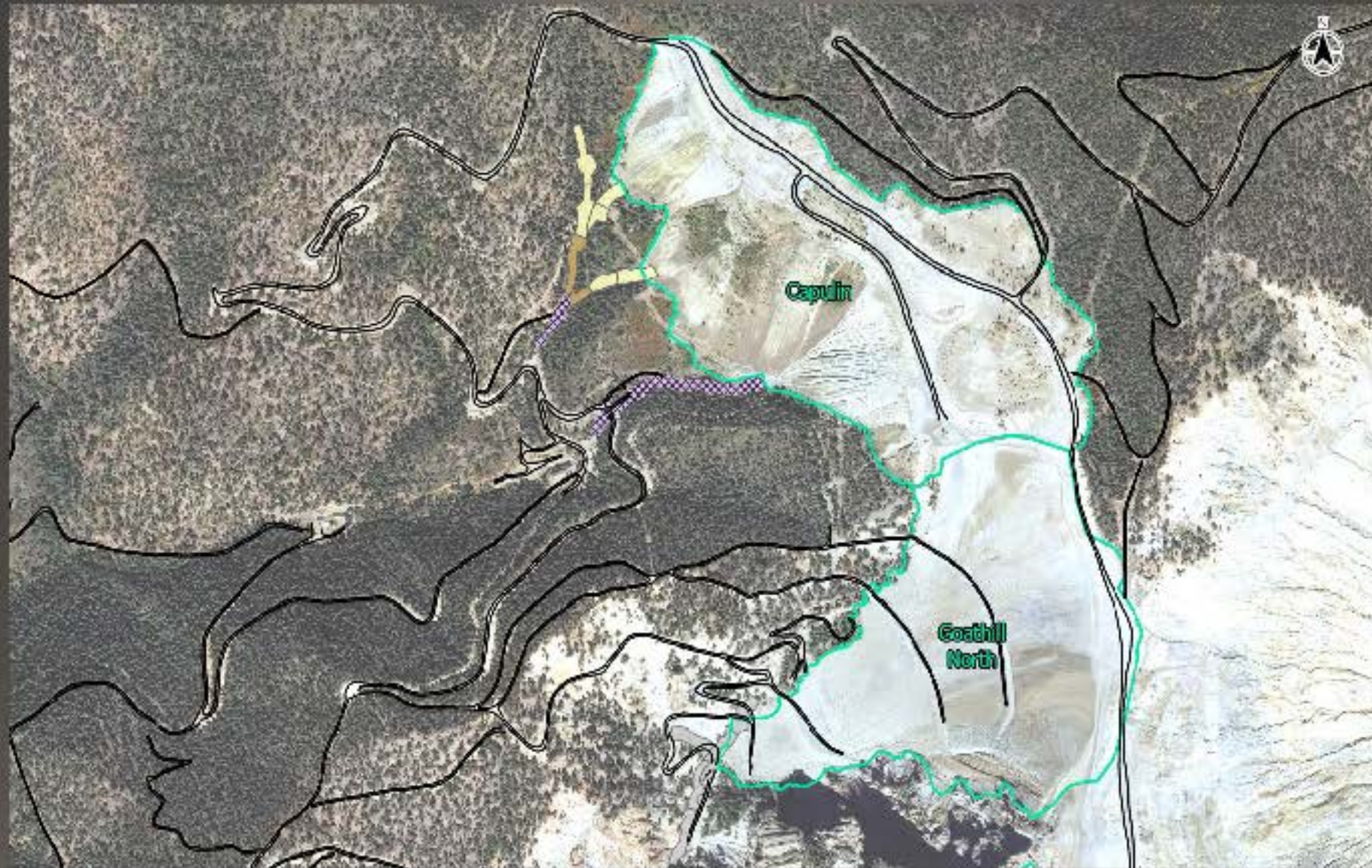
Project Location  
Waste Rockpiles  
Cut and Fill  
Columbine  
Columbine



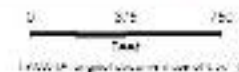
Construction Progress:  
Roads and Rockpiles  
August 2021

# Construction Progress

- Underdrain Work



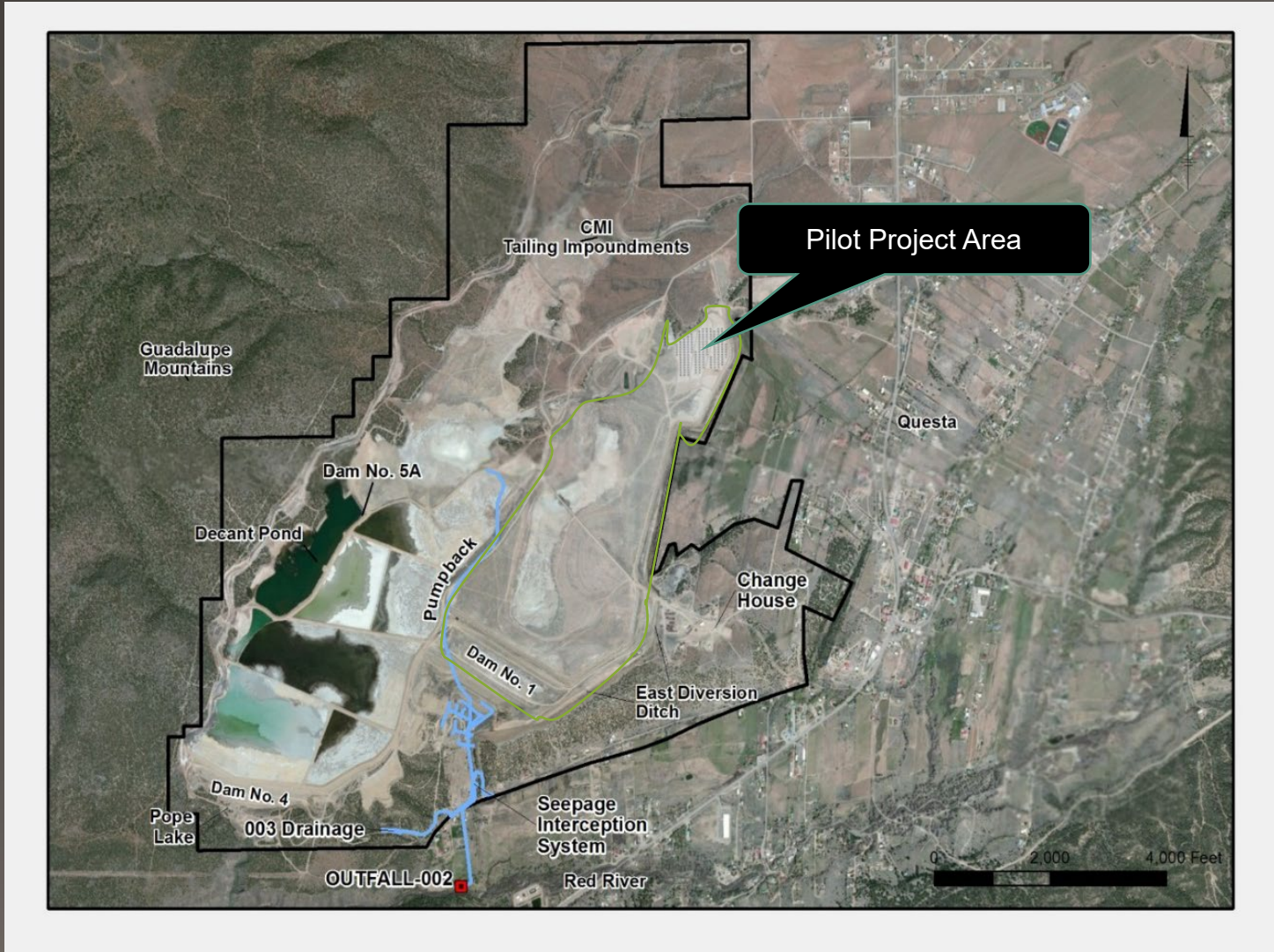
Legend	
Loading Roads	Mill Sited
Waste Rock Pile	Protective cover installed
Cleared and grubbed	Underdrain materials installed
Completed	



Project Location:  
Waste Rock Pile  
Client:  
Crown  
Questa WRP  
Prepared by:  
**Construction Progress: Underdrains**  
August 2021



# Tailing Facility Cover Demonstration Pilot Project



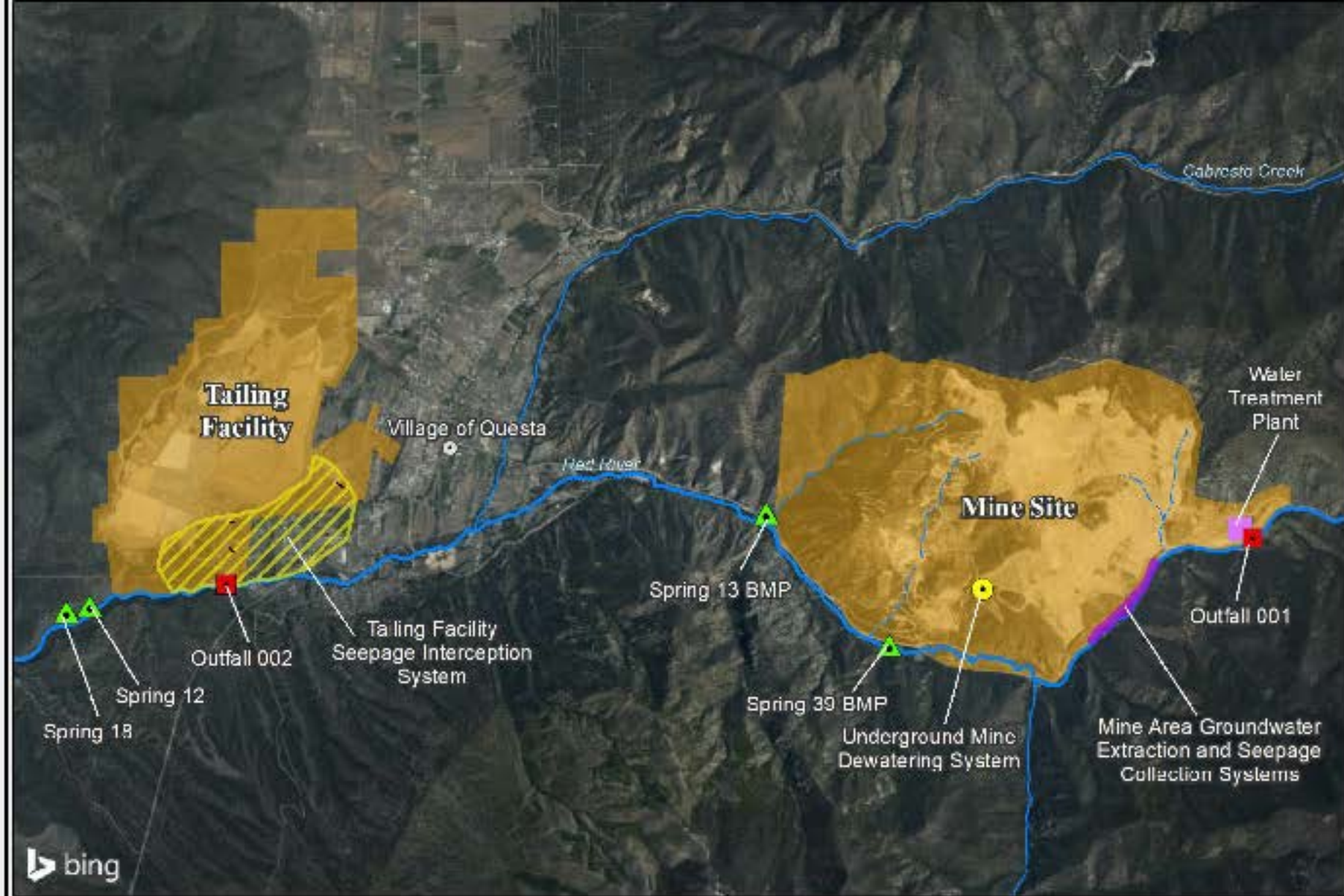
# Tailing Facility Vegetation Cover

- Determine whether a 2-foot cover system meets soil, groundwater and revegetation objectives
- Monitor effectiveness of cover system over 5 years
- Use test results to evaluate possible change to ROD requirement for a 3-foot cover

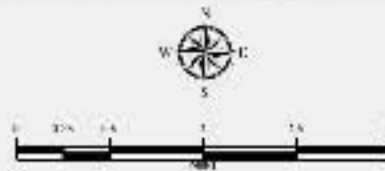




# Groundwater Management



EPA Region 6  
Superfund  
GIS Support  
5/18/2021



**Chevron Questa  
Tailing Facility & Mine Site  
Taos County, NM**

- Spring BMP
- Outfall
- Water Treatment Plant
- Underground Mine Dewatering System
- Seepage Interception System
- Tailing Facility & Mine Site
- Groundwater Extraction & Seepage Collection Systems





12/1: Installed cleanout, geotextile, and drain gravel within trench.



Excavated trench at STA 02+30.

# Spring 13 Replacement Status

March 9, 2022

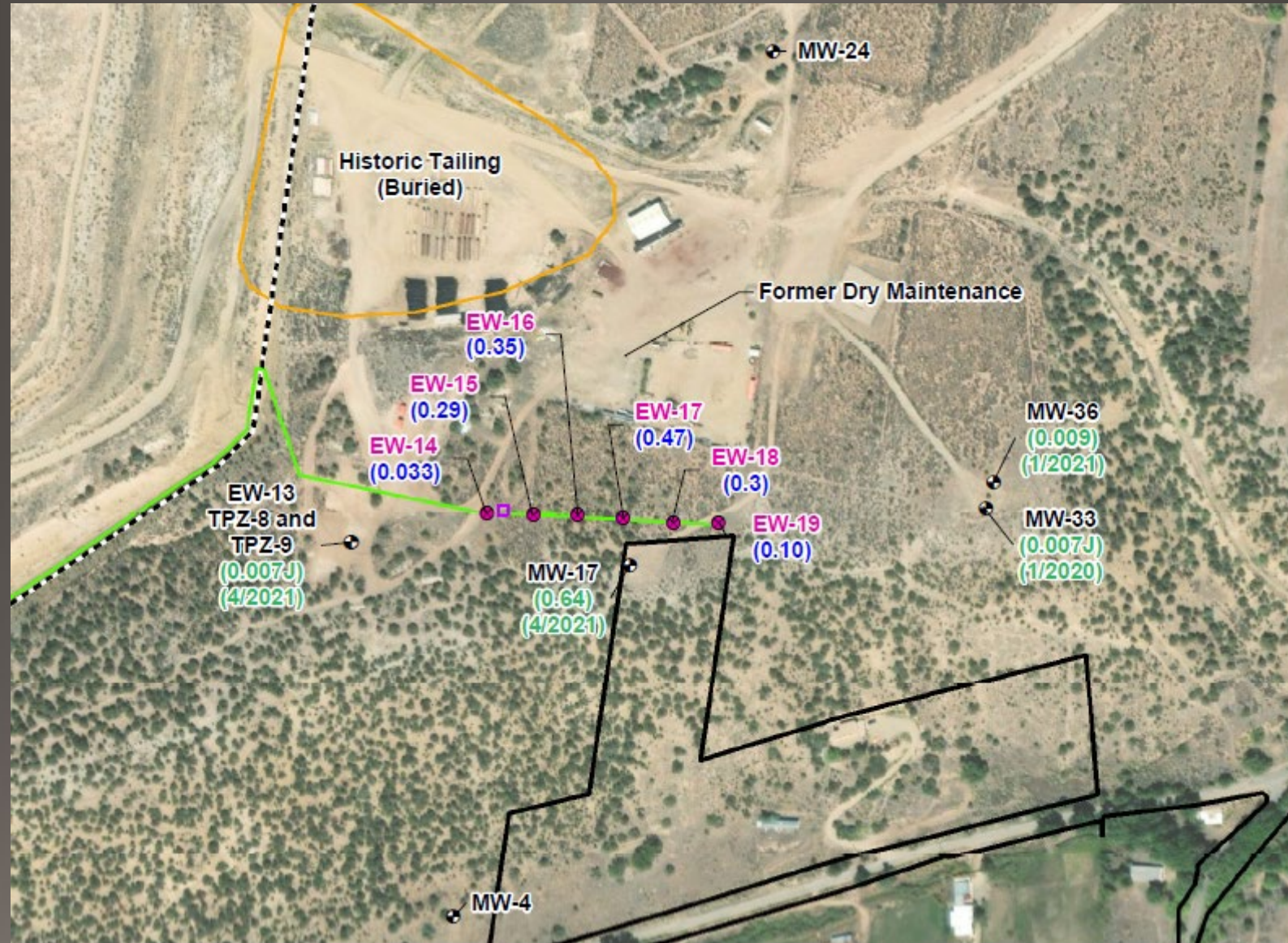
# Spring 13 Updates

- Sump Water Management
- Pump back Vault Improvements
- Piezometer Installation
  - Piezometer Monitoring



# Southeast Groundwater Extraction System

- Continuous zone of groundwater capture of molybdenum-affected groundwater downgradient (south) of historical buried tailing along the eastern limits of the Dam No. 1 impoundment
- 5-Well System (EW-15 thru EW-19) Positioned to Capture Plume
- Highest Concentrations in Middle of the Array
- EPA Molybdenum GW Cleanup Level – 0.08 mg/L



# Southeast Groundwater Extraction System



Looking SSW - trench  
near Reach 5 to  
connect SEGWES to  
Outfall 002  
08/23/2021

Cascade sonic  
drilling rig at EW-18  
test borehole



# Future Items

- **Proposed Fourth Amendment to AOC**
  - **Design of Permanent Sludge Repository (Water Treatment Plant Area)**
  - **Design of Grading Plan for Tailing Facility (Tailing Facility Area)**
  - **Pre-Design Investigation & Preliminary Design for Group 2 Waste Rock Piles (Mine Area)**
  - **Pre-Design Investigation of South of the Tailing Facility**
- **EPA's 2<sup>nd</sup> Five Year Review Report (late summer)**

# Questions

Nichole M. Foster, P.E.

[foster.nichole@epa.gov](mailto:foster.nichole@epa.gov)

214-665-7248

