

2024 Field Work Plans

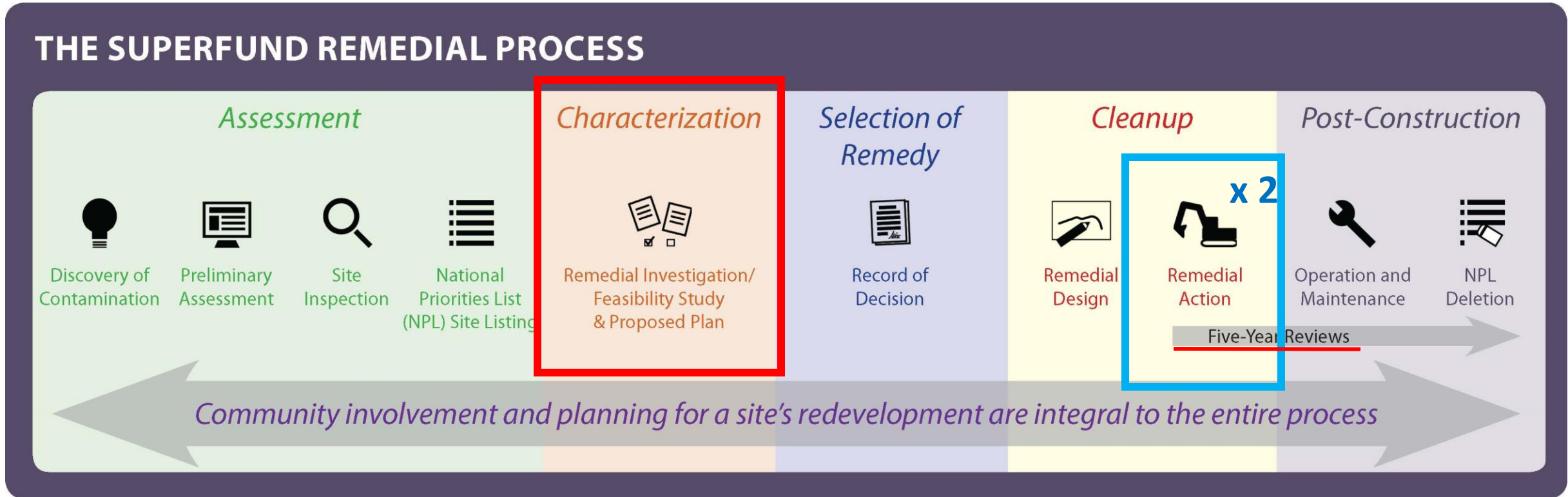
**Bonita Peak Mining District
Superfund Site**





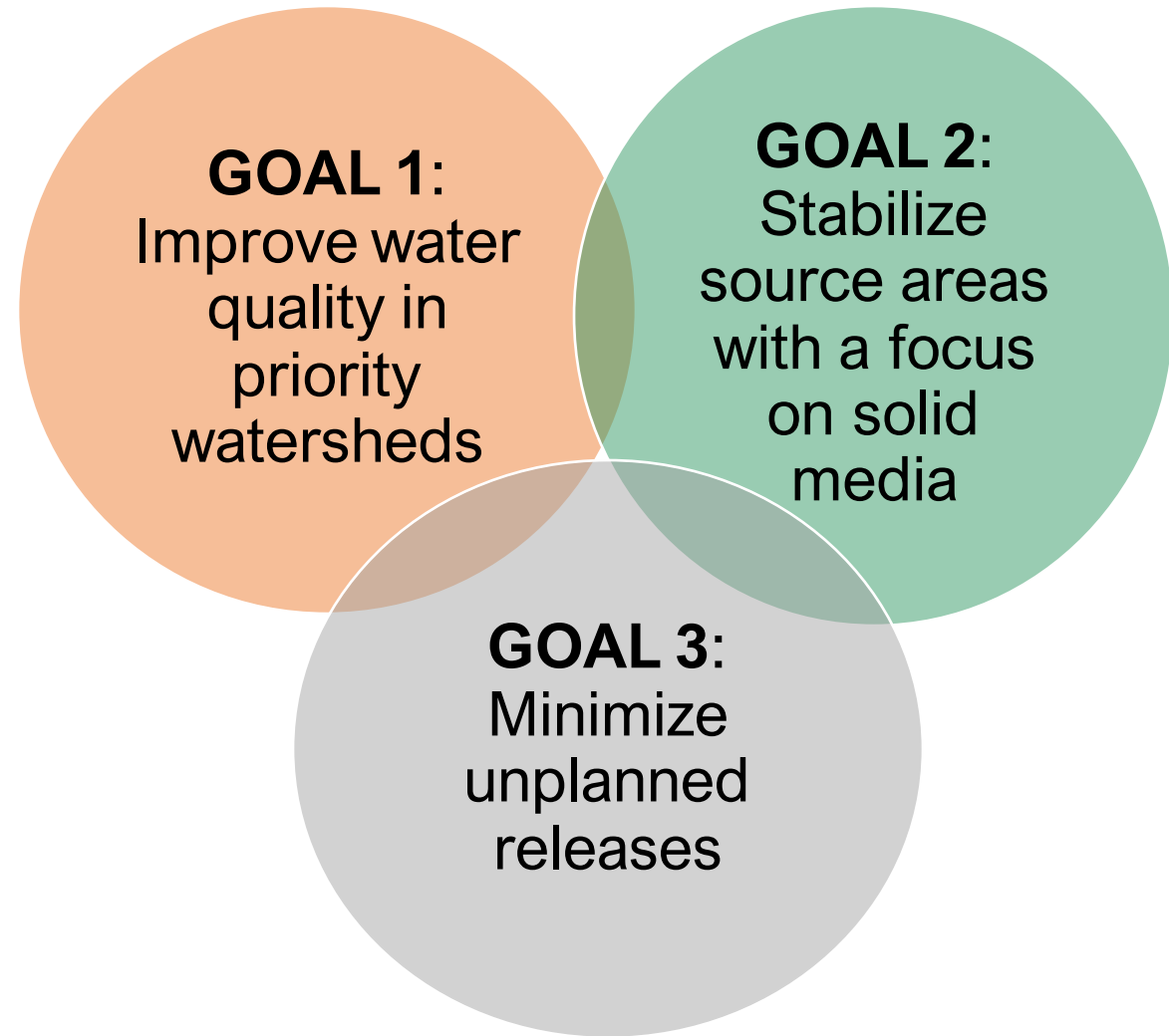
EPA

Overall, BPMD is in the Characterization phase of the Superfund Remedial Process...



....However, the site is also in the Cleanup phase for two remedial actions and an ongoing removal action.

Established Site Goals



GOAL
1

GOAL 1

Gladstone; ongoing treatment of Gold King Mine discharge



Maintaining Conveyances in Upper Cement

- EPA contractors worked until November to clean the conveyance and will return shortly to finish work
- American Tunnel also required jetting early this season which has been completed



GOAL
1



2019 IROD Status

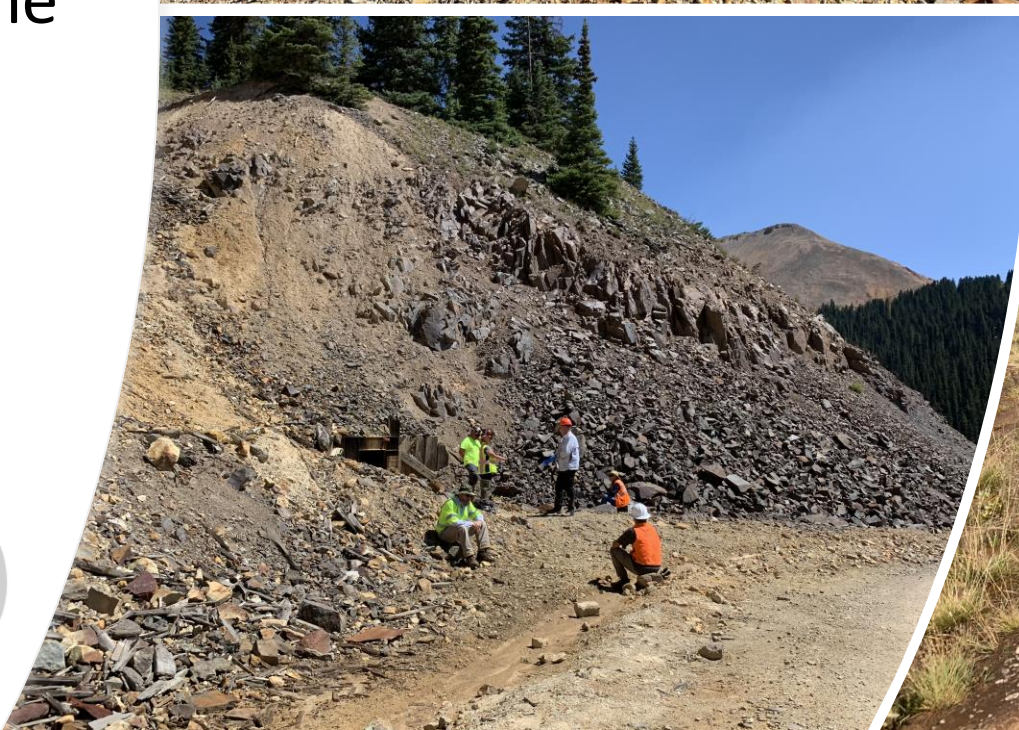
April 4, 2024

2019 IROD, remaining work

- Mammoth Tunnel, Upper Pond
- Grand Mogul Mine
- Brooklyn Mine
- Frisco Bagley Tunnel

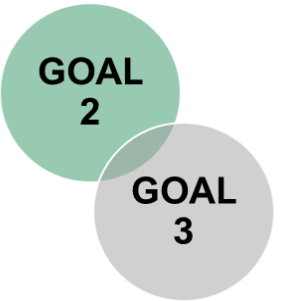
GOAL
2

GOAL
3



2019 IROD by Site

Finished (18)		2024 Work (5)
Henrietta Mine	Silver Wing Mine*	Frisco Bagley Mine*
Ben Butler Mine	Sunbank Group Mine*	Grand Mogul Mine*
Natalie Occidental Mine	Campground 7*	Brooklyn Mine*
Koehler Tunnel	Campground 4*	Mammoth Tunnel*
Junction Mine	Yukon Tunnel*	Bandora Mine (repair)*
Longfellow Mine	Pride of the West Mine*	
Anglo Saxon Mine	Mountain Queen Mine*	
Terry Tunnel*	Vermillion Tunnel*	
Tom Moore Mine*	Columbus Mine*	*Requiring joint inspection



**GOAL
1**



2021 IROD: Bonita Peak Repository





- Mobilization has begun for the season
- Shipments of aggregate materials from Montrose to begin as soon as week of Memorial Day
- Paving will occur in the mid-season and take 3-4 weeks in Cell 2
- Treatment generated solids will be moved to the Bonita Peak Repository in 2025

Removal Actions

Removal Action:

Koehler Mine Ground Support work

- Prevent impoundment of water
- Secure access for bulkhead maintenance

GOAL
2

GOAL
3



Removal Assessments

Removal Assessment Work:

Anglo/Saxon Crib Wall

- Evaluating options for stabilization and historic preservation

Gold King Mine pile/road stabilization

- Evaluating options of pile stabilization or new road alignment



Sitewide: Characterization phase



Currently in Characterization phase, developing Remedial Investigations by watershed/OU & Feasibility Studies to evaluate remedy alternatives.



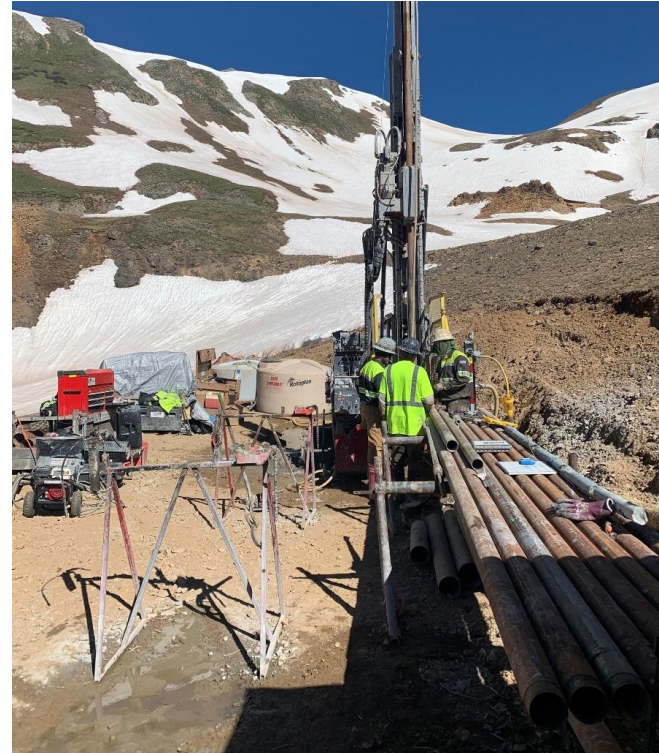
Goal: Characterize contamination and evaluate cleanup options



Near Term Focus: To determine cleanup options for the larger metal source areas in Cement Creek and the Upper Animas



Characterization (RI/FS)



Remedial Investigations in the Bonita Peak Groundwater System (OU3)

- Complete drilling into former Lake Emma (began in 2023)
- Tracer study to understand underground connections

Characterization (RI/FS)

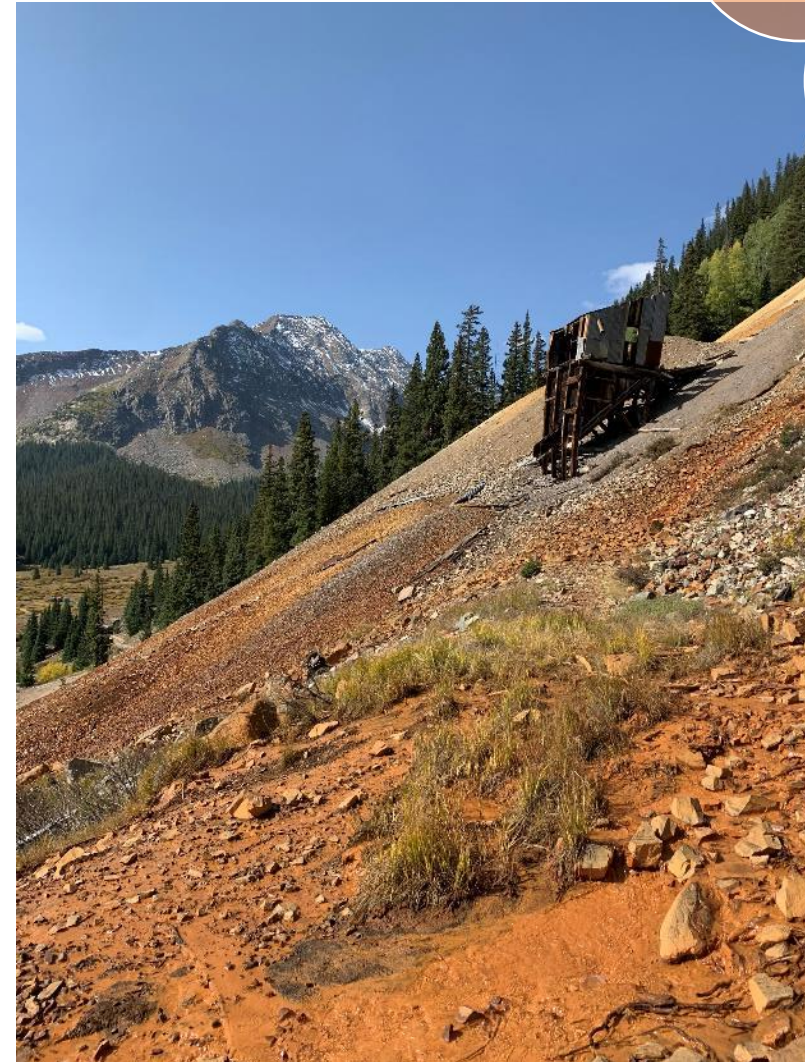
Remedial Investigations at Mayflower Tailings (OU2),

- Updated Conceptual Site Model
- DRMS collected surface water samples above and below OU2 (March/April 2024)
- Semi-Annual surface water and groundwater samples
- Summer 2024 additional well installation to understand sources of groundwater contamination



Characterization (RI/FS)

- Long Term Monitoring
 - Annual surface water
 - Maintenance of gauging station & real time water quality parameters
 - Downstream of Silverton @ A72
 - Hosted and maintained by USGS & CDPHE, Funded by EPA
- Goals 2/3 inspections
- Bulkhead Inspections
- Flow monitoring & monthly mine adit inspections
- Bandora – Monitoring well

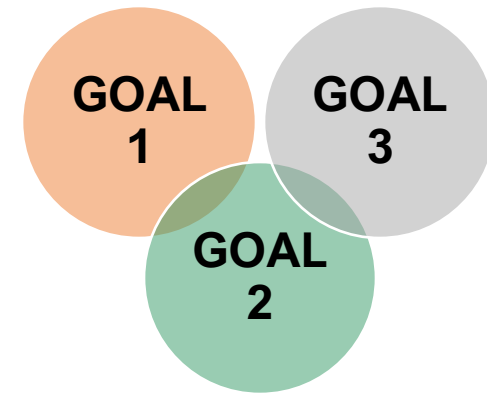


GOAL
1

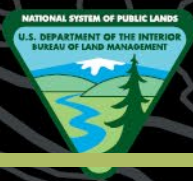
GOAL
3

GOAL
2

Community Involvement Focus



- Early and often communication on Repository Construction
- Engaging CAG and Planning Group on EPA's 5 Year Strategy
- Showing the work – tours, newsletters, social media
- Supporting workgroup development
 - Howardsville - Review of Tech Memo

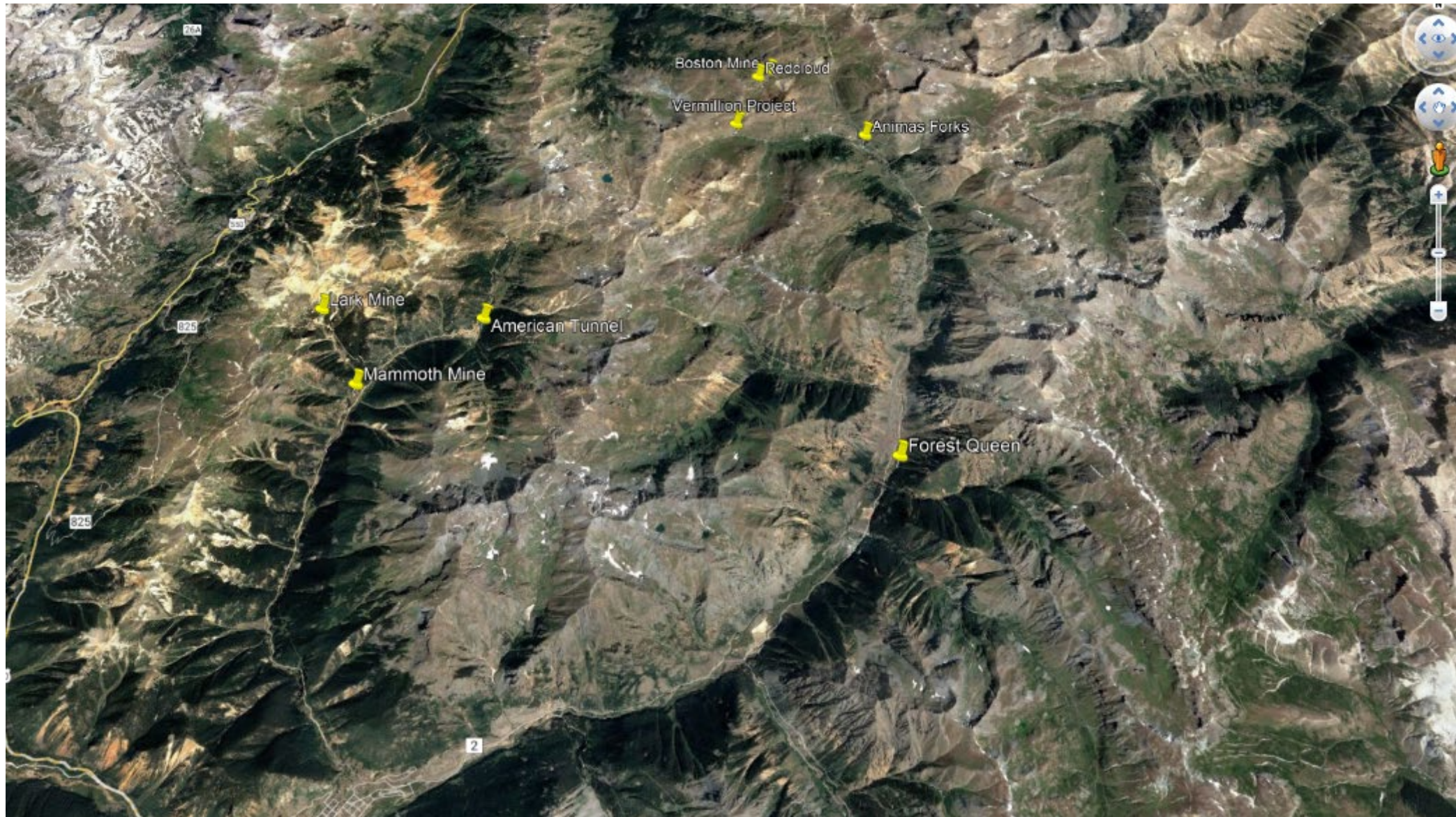


U.S. Department of the Interior
Bureau of Land Management

Updated 4.9.2024 LM

BLM – FY 2024 Planned Field Activities





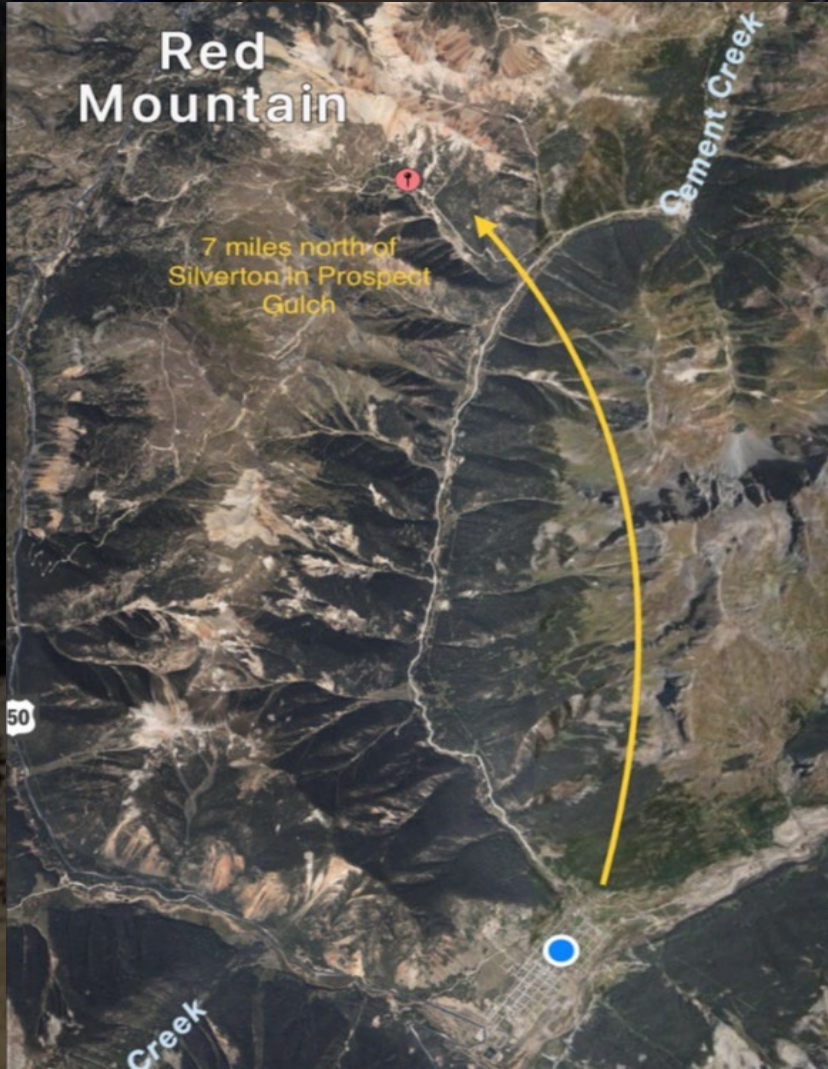


2024 work planned

- Lark continued, Fluid Hazard Analysis and O&M
- Mineral Point Ditch – restoration (Boston coordination w/EPA and private landowners)
- Red Cloud – safety closures and erosion control
- Burrows Gulch fen restoration –MSI
- Vermillion Tunnel – hot spot removal, waste placement
- Forest Queen, Fluid Hazard Analysis and O&M
- American Tunnel Study – no field work, study uses existing information
- Mammoth – DRMS, restoration of top pond on BLM (lower pond on private)
- Alpine Loop Campground evaluation, sampling and data collection
- Cunningham Gulch BDAs- USACE permitting and phase 1
- Animas Forks Hot spot planning/data collection
- Burns Gulch Closure Project, DRMS and BLM in Burns, Minnie, Hematite, Burrows)
- [Palmetto \(Wyoming\) Sept 2024](#)
- [San Juan Chief & Roy Pray, not BPMD Likely in 2025,](#)

A black and white halftone photograph of a construction site. In the foreground, a crane is visible on the left side. In the background, a large building is under construction, with its skeletal frame and some roof sections visible. The overall scene is a busy construction site.

Cultural Site Monitor
required on most projects



Lark Repository O&M- 1st project of the season, early June





Mineral Point Ditch update

Mineral Pt Ditch & Red Cloud & Fen

Burrows Creek

Animas/
Uncompahgre
Pass

Burrows Fen
Restoration

Redcloud Mine
Closure Project

Point of
Diversion

ows Creek



Redcloud O&M- Closure Replacement and Erosion control





Burrows Fen Restoration Area





Mountain

37°55'58"N 107°35'50"W

Lower
Vermillion

Animas Forks

Project area is
1.5 miles west
of Animas
Forks

Vermillion tunnel Hot Spot Removal

Lower Vermillion Hot Spot Removal – September with traffic control



Vermillion Tunnel Removal



Removal Area -
Max of 300CY

2000' between Removal Area and WCA



WCA in
footprint of end
of road



Excavate hot material
and fill with clean
borrow in red circle



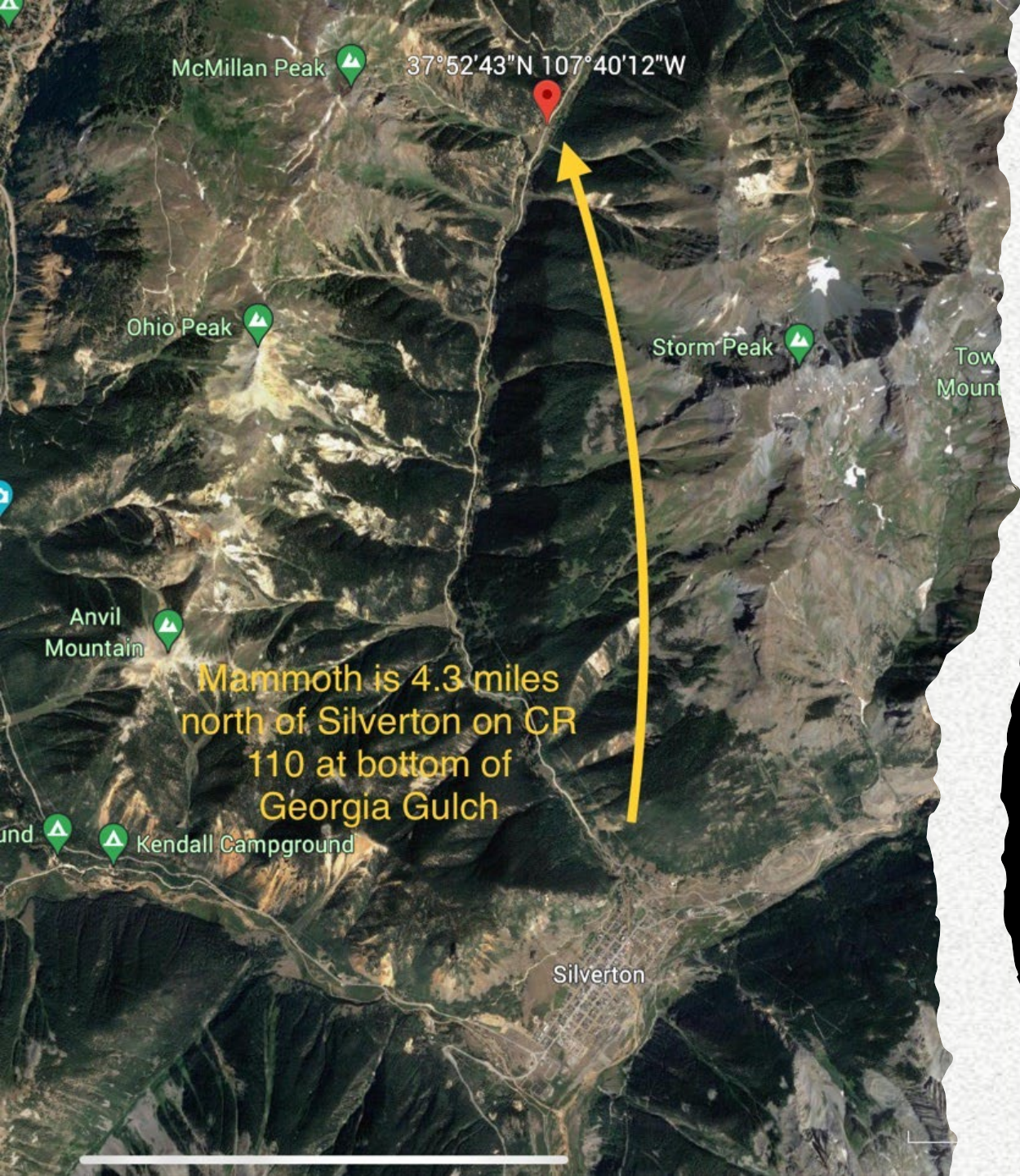
Dig
zone

Reveg in green
circle



Forest Queen- September





DRMS is doing
all work at
Mammoth in
2024



Mammoth- BLM pond

Alpine Loop
Designated
Campsites-
screen



Maximum area for
enhancement by BDA/PALS
treatments is 17.58 acres

Highland Mary
Free Camping sites

< Measure ?



Move the map and add points to measure
distances and area

Perimeter
1.45 mi ▼

Area
17.58 ac ▼

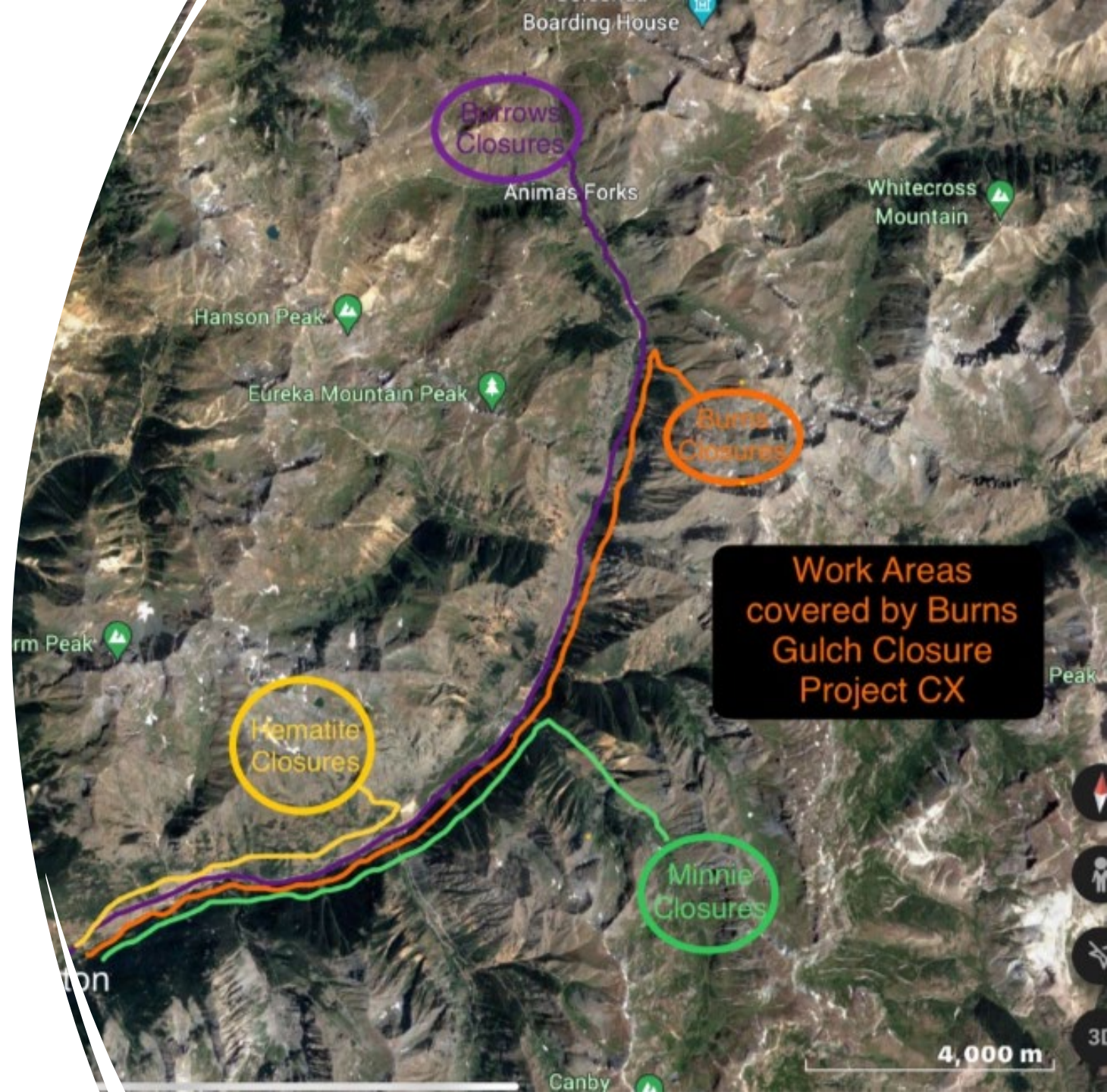
Animas Forks Hot spot removal Discussion



Appropriate
Signage?

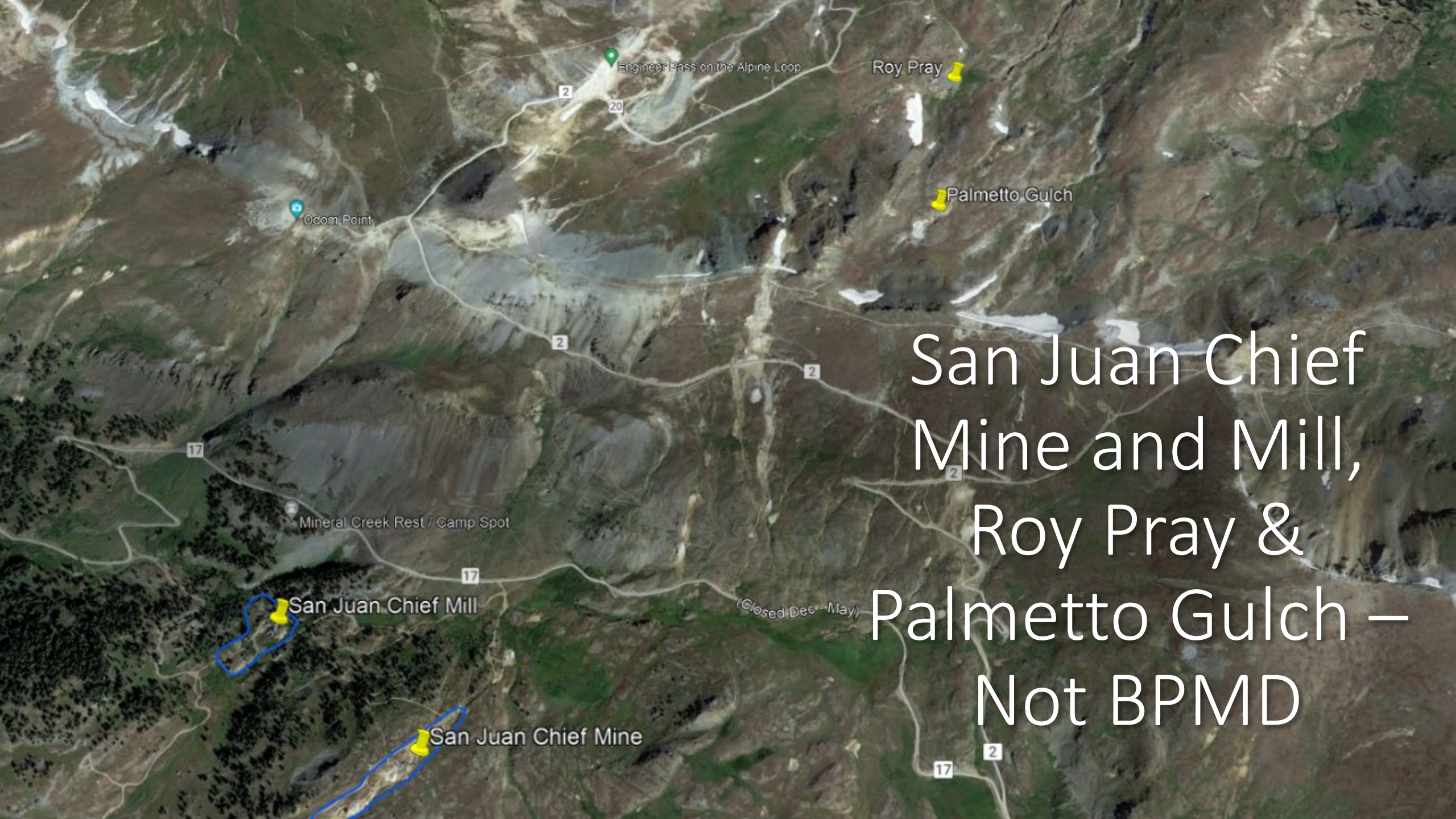


Burns Gulch Closure Project – 20 closures on BLM





Wyoming Mine in
Palmetto Gulch



San Juan Chief
Mine and Mill,
Roy Pray &
Palmetto Gulch –
Not BPMD



Roy Pray Repository
at center of photo



Questions?

Thanks for meeting with us!



USFS

USFS Planned 2024 Field Activities

- Scope
 - **1) Brooklyn Mine Construction/Rehab.** Level 2 portal and adit rehab to increase size and improve access and ventilation.
 - **2) Pond Sediment Removal and Restoration.** Sediment will be excavated, and berms repaired within ponds to allow continued pond function. Excavated wastes will be managed locally at the source on an interim basis.
 - **3) Interim Repository.** Permanently block vehicle access to Level 1 adit with characteristic look to blend with natural and existing landscape.
- Schedule
 - FS CO negotiating with Leisnoi Kemron for award. Construction to begin July 2024
- Constraints/Considerations
 - Coordination
 - Inspection services. FS negotiating with DJ&A

USFS Planned 2024 Field Activities

- Scope
 - Continue to support BPMD wide efforts e.g.; current background, reduce bias & uncertainties, access, IDT, Tribal Consultation to support informed decisions.
Found this old slide and it seemed like it belonged 😊
- Schedule
 - To Be Determined during this meeting.
- Constraints/Considerations
 - Need for site wide strategy
 - Coordination
 - Financing

An aerial photograph of a river valley. The foreground features a wooden fence made of stacked logs, running across the bottom of the frame. The middle ground shows a wide, rocky riverbed with sparse vegetation and scattered evergreen trees. In the background, a person is visible on a ridge, and the valley is surrounded by dense evergreen forests. The text "CDPHE & DRMS" is overlaid in the center of the image.

CDPHE & DRMS



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

DRMS and CDPHE 2024 Work Plans

- Mammoth Pond (BLM & DRMS)
- Frisco Bagley (CDPHE & DRMS)
- Grand Mogul (CDPHE)
- Bulkhead Inspections (Team)
- Unplanned Release Sampling (Rider Resources & DRMS)
- Mayflower Animas Sampling (DRMS)

Mammoth

- Decommission Upper Pond
 - Stormwater controls – stay in place
 - Mix lime and cement into pond precipitates
 - Re-grade area with at least 1' of onsite cover materials
- Schedule – July or August – 1 week

KEYED NOTES:

1. DECOMMISSION BLM OWNED AND MAINTAINED SEDIMENTATION POND BY ADDING LIME CEMENT TO TOP 6" OF SEDIMENT AND REGRADING SLOPE, ENSURING THAT LIME-AMENDED SEDIMENT HAS AT LEAST 1 FOOT OF CLEAN SOIL COVER.
2. PROPOSED CLEAN FILL TO BE HARVESTED FROM BLM-OWNED LANDS CONVENIENTLY LOCATED TO PROJECT.
3. INSTALL BMPs DOWNSTREAM FROM LAND DISTURBANCE TO PROTECT FROM SEDIMENT MIGRATION.

MATERIAL QUANTITIES		
ITEM	QUANTITY	UNITS
ESTIMATED LIME CEMENT	60	CY
ESTIMATED CLEAN FILL REQUIRED	125	CY
ESTIMATED SILT FENCE	250	SF

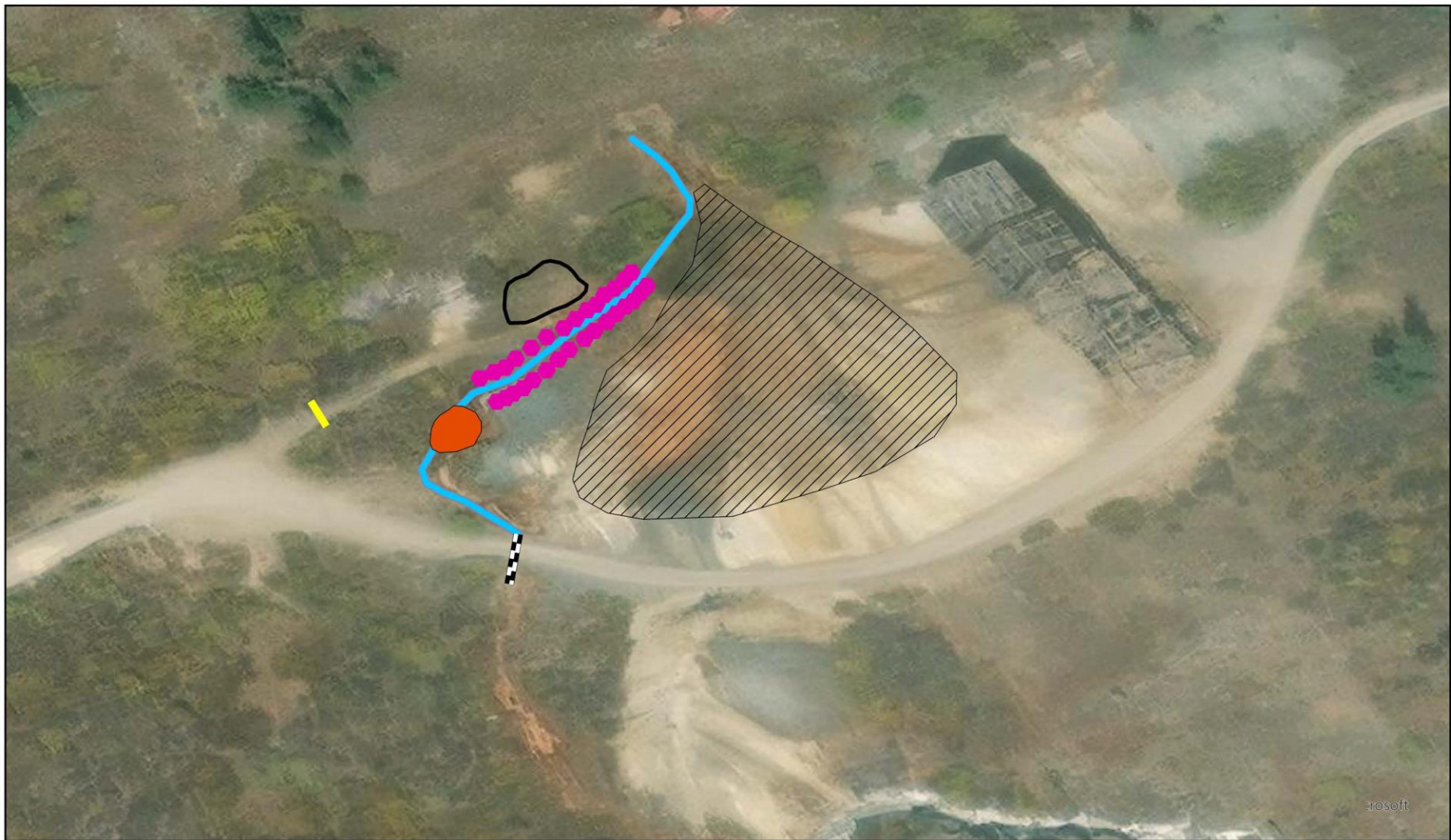
LEGEND

 EXISTING P/L (PRIVATE PROPERTY W/IN BOUNDARY)



Frisco Bagley (CDPHE & DRMS)

- CDPHE route AMD water
- DRMS enhance AMD channel
- Re-contour waste rock into convex shape
- Institutional controls – boulders
- Expand parking area (institutional control)
- Replace culvert
- New gate (institutional control)



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BPMD Frisco Bagley IROD SOW



Legend

- █ GATE
- Boulders
- Culvert Replacement
- AMD_Channel
- Re-contour Waste Rock
- Parking Area Expansion
- Precipitates

4/30/24

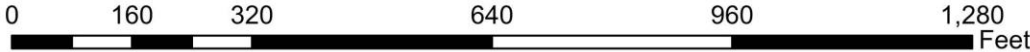
Grand Mogul (CDPHE)

- CDPHE regrade/slope road so that surface water runoff is routed away from waste rock
- Waste rock at the Grand Mogul Crosscut at Queen Anne Creek will be pulled back out of the Queen Anne Creek side channel and armored with boulders to stabilize



4/3/24

Grand Mogul 2024 IROD Work Plan



Legend

-  Rolling_Dip
-  Road_Shaping
-  Waste_Rock

Questions?

