



Central Valley Water Board

Sacramento Office Mines Program



Mount Diablo

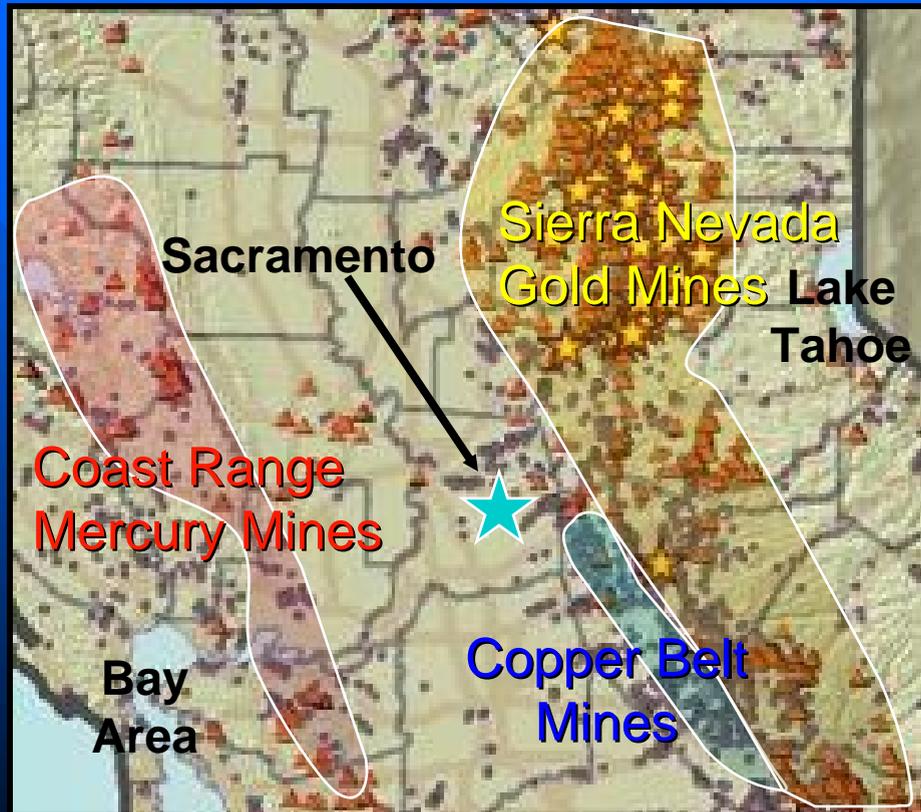


Mining Areas: Sacramento Office

Scope of the Issue

- Coast Range Mercury Mines
(mercury, salts and other metals)
- Sierra Nevada Gold Mines
(arsenic, mercury, salts and other metals)
- Copper Belt – Lower Sierra Nevada Foothills
(copper, pH, salts and other metals)

Mining Area Locations





Coast Range Mercury Mines



Mount Diablo

Sulphur Bank Mine



AP

Elgin Quicksilver Mine





Mercury Mine Issues

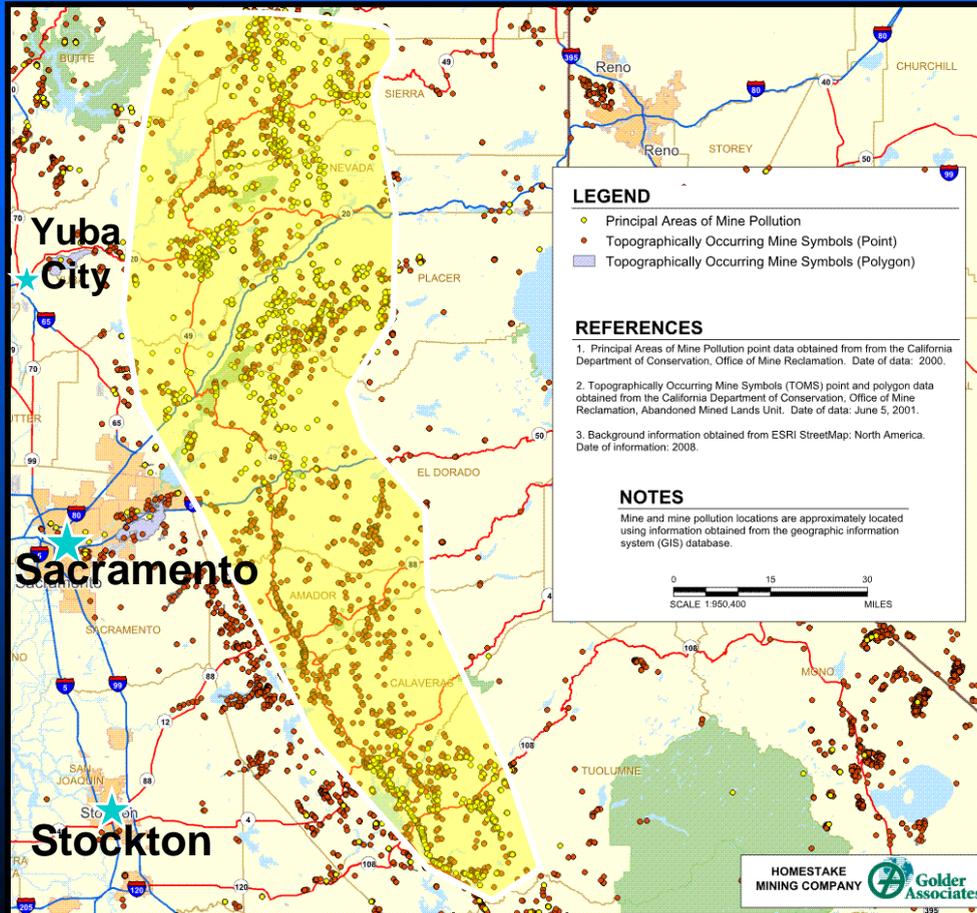
- Mercury loads
 - 40% of the Mercury in Sacramento River is from Cache Creek, which is 4% of the watershed
 - Mercury sediment load increases at and below the mines
- Fish consumption



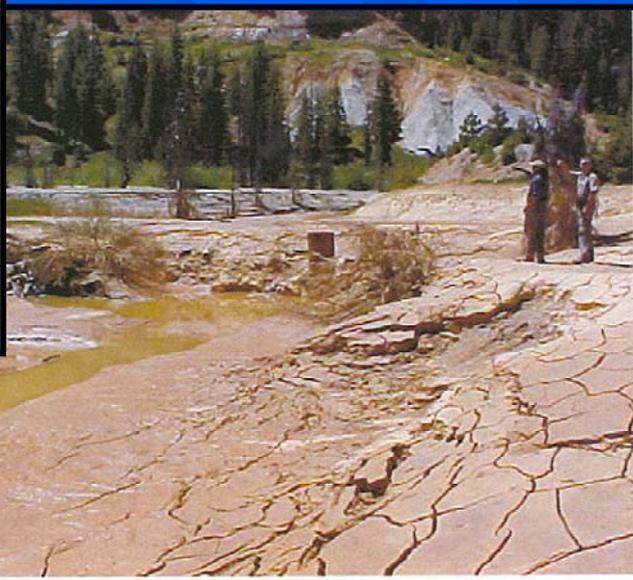
Basin Plan & TMDL

- Cache Creek extensive water quality studies
- Cache Creek TMDL established with Basin Plan implementation
- 303d listed impaired water bodies throughout the mining areas

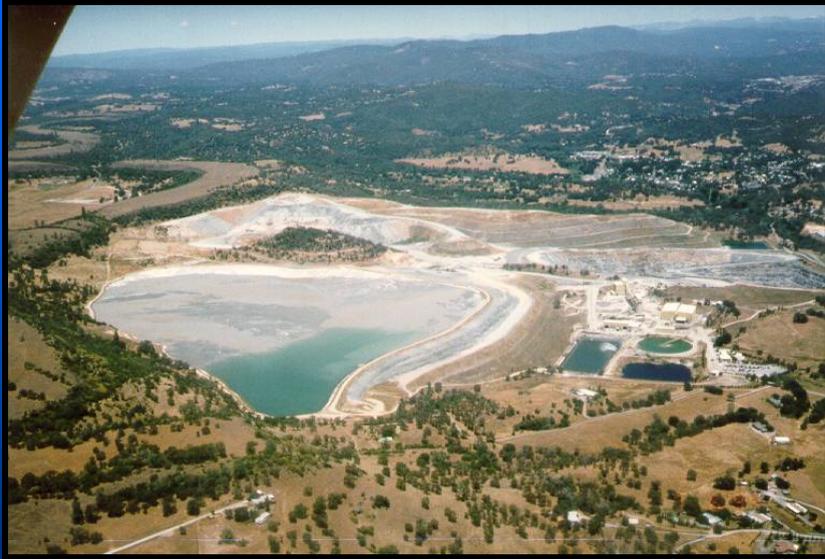
Sierra Nevada Gold Mines



Gardner Point



Jamestown Mine





Lower Brush Creek Mine



Copper Belt Mines





Copperopolis



Copperopolis



03.27.2006



Newton Copper Mine





Success Stories and Different Approaches to Cleanup



Spenceville Mine



Spenceville Mine





Spenceville Mine



Abbot –Turkey Mercury Mines



Abbot –Turkey Mercury Mines





Carson Hill Gold Mine





Carson Hill Gold Mine





Empire Mine



Figure 1. - View of sulfide tailing pile looking west with air-trac drill operating. Gray is sulfide tailings and tan is remains of tailing dikes. Retaining ponds for leachate from tailings in foreground.





Empire Mine





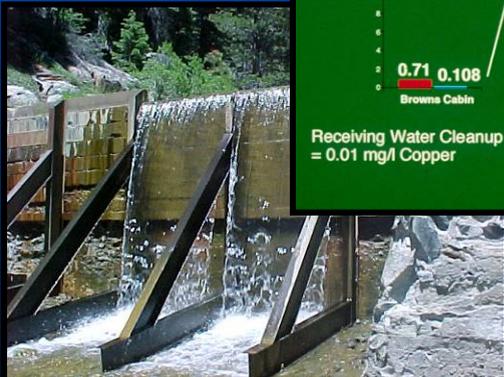
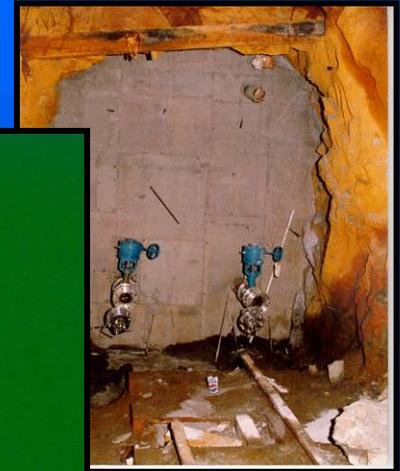
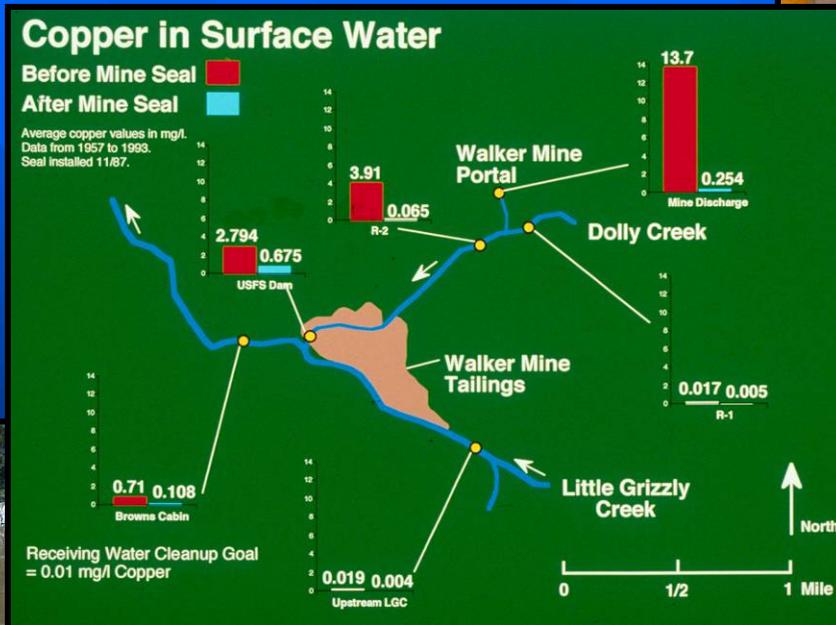
Sliger Mine



Walker Copper Mine



Walker Copper Mine





Discharger

Identification and Issues





Present Owner(s) have typically never mined the site

- Build a house
- Hunting
- Investment/Speculation
- Development
- Mining

Responsible Party (RP) Searches

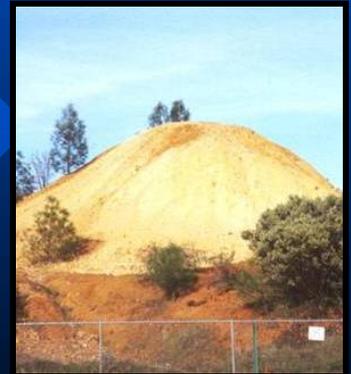
- Past Property Owners
- Operators
- Lessees
- Miners



Issues with Dischargers

Identified Under RP Searches

- Some of the past owners have never mined the site
- Past owners/operators are no longer alive or financially viable
- Property has been split, thus hard to determine who is responsible
- Surface rights and mineral rights may belong to separate or multiple parties





Issues with Dischargers

Identified Under RP Searches

(continued)

- Mine waste can be on multiple parcels and/or jurisdictions
- Mine property may involve both public and private lands
- Discharge may involve both surface mine waste piles and effluent discharges from underground mining sources



Issues with Dischargers

Identified Under RP Searches (continued)

- Discharger or property owner made the situation worse
- Responsible party searches are expensive or may take extensive staff resources to implement
- Even if you successfully identify a responsible party they often do not have sufficient resources to conduct investigations and/or cleanup activities



Federal Government

Bureau of Land Management

US Forest Service

Bureau of Reclamation

US Park Services

11.07.2008



Federal Government Issues

Non- Superfund Sites

- They are subject to CERCLA process
- CERCLA process and Water Code/SWRCB Policy 92-49 cleanup process are different in approach
- CERCLA process can result in cleanups that are less stringent than those required by water code



CERCLA Requires State Involvement

- Provides an opportunity for the state to review and comment on removal plans, design documents and final remedy
- CERCLA section 120(a)(4) requires Federal Government to comply with state laws, including enforcement laws



Staff Resources

Number “1” Issue for Mine
Cleanups



Resource Issues

- Insufficient staff resources currently available for the task
- Need to prioritize sites
- Cost recovery PYs aren't sufficient to support expansion of the mine program
- Other Resources: Contract money for title searches, RP searches, field sampling, etc.

A photograph of a sandy, grassy landscape, likely a coastal dune area. The foreground is dominated by light-colored sand with scattered clumps of dry, yellowish-brown grass. In the middle ground, there is a wider, flatter area with more sparse vegetation. The background features a dense line of green trees under a clear, light blue sky. The text "Any questions?" is overlaid in the center of the image in a bold, yellow, serif font.

Any questions?