

Overview of Water Quality Impacts

- Historic mining occurred prior to enactment of environmental laws
- Limited resources to reclaim abandoned mines
- Releases of metals contaminated sediments and acidic water
- ► In Colorado
 - ► Over 17,000 abandoned mine features
 - Over 1,500 miles of streams and rivers impaired



Stakeholder Approach

► EPA leads a multi-stakeholder approach to assess,

prioritize and cleanup abandoned mines in Colorado and Montana

- Stakeholders include
 - ► Federal Land Management Agencies
 - State Agencies
 - ► Non-Profit Groups
- Assessments identify
 - ► High Risk Sites CERCLA Clean-ups
 - ► Lower Risk Sites Good Samaritan Candidates

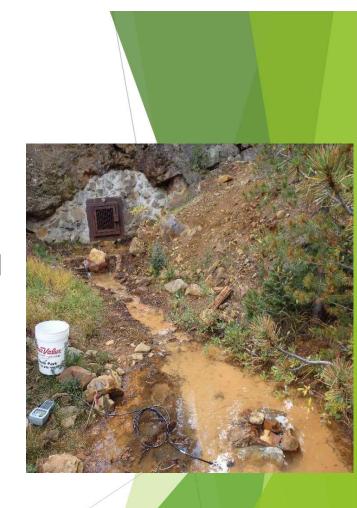


Good Samaritan Abandoned Mine Cleanups

- ▶ 2007 EPA CERCLA Liability management tools
 - Administrative Order on Consent
 - ▶ Comfort Letter
- 2012 EPA Good Samaritan Memorandum
 - ► EPA states that the Good Samaritan would not be the entity expected to obtain a CWA Permit for any remaining discharges at mine site.
- Evaluating other liability management approaches
 - ► Voluntary Cleanup Programs?
 - ► Brownfields Program?

Good Samaritan Abandoned Mine Cleanups

- Water Treatment
 - Clean Water Act concerns has prevented Good Samaritan cleanups
 - ► Concerns based on 1992 East Bay MUD 9th Circuit Decision. EDMUD was NOT a Good Sam, they owned and operated the discharge and rightfully should have obtained an NPDES Permit.



Illinois Gulch Stakeholder Assessment Breckenridge, CO

- Multi Stakeholder Watershed Assessment
 - ▶ Puzzle/Willard Mine
 - ► Complex environmental issues
 - ▶ Draining adits
 - ► Large waste pile located in wetlands
 - ► Located adjacent to homes
 - Mountain Pride Mine
 - ► Excellent Good Sam Candidate site
 - Large waste pile locate adjacent to stream



Illinois Gulch Site Mountain Pride Mine

- Trout Unlimited awarded Clean Water Act 319 non-point source grant
- Comfort Letter issued
- Private and US Forest Service property
- Consolidated 500 cubic yards of mines waste
- Revegetation of .5 acres
- 400 feet stream channel
- Summit County Open Space purchase private property



Illinois Gulch Mountain Pride Mine





Black Swan Site 2013 Colorado Floods





Black Swan Site

- Home constructed on mine waste
- Four Mile Watershed Coalition
- HUD Community
 Development Block Grant Disaster Recovery funds
 obtained
- Administrative Order on Consent
- Work completed



Black Swan Cleanup





Thank you

