



“WQS... we’re supposed to meet standards?”

Working with other agencies and programs on abandoned mine cleanups





Overview of the Issue

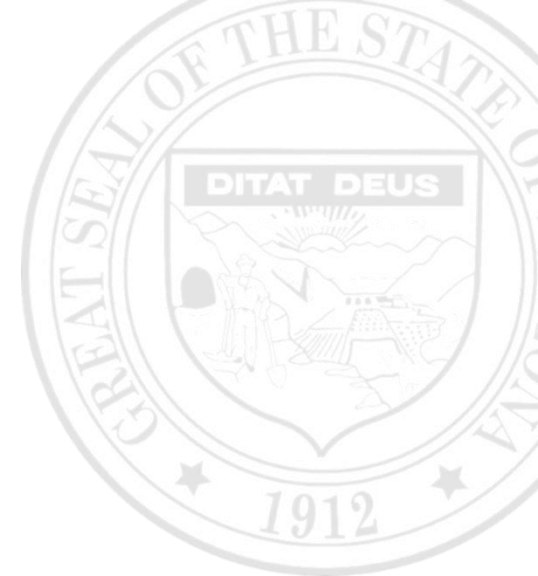
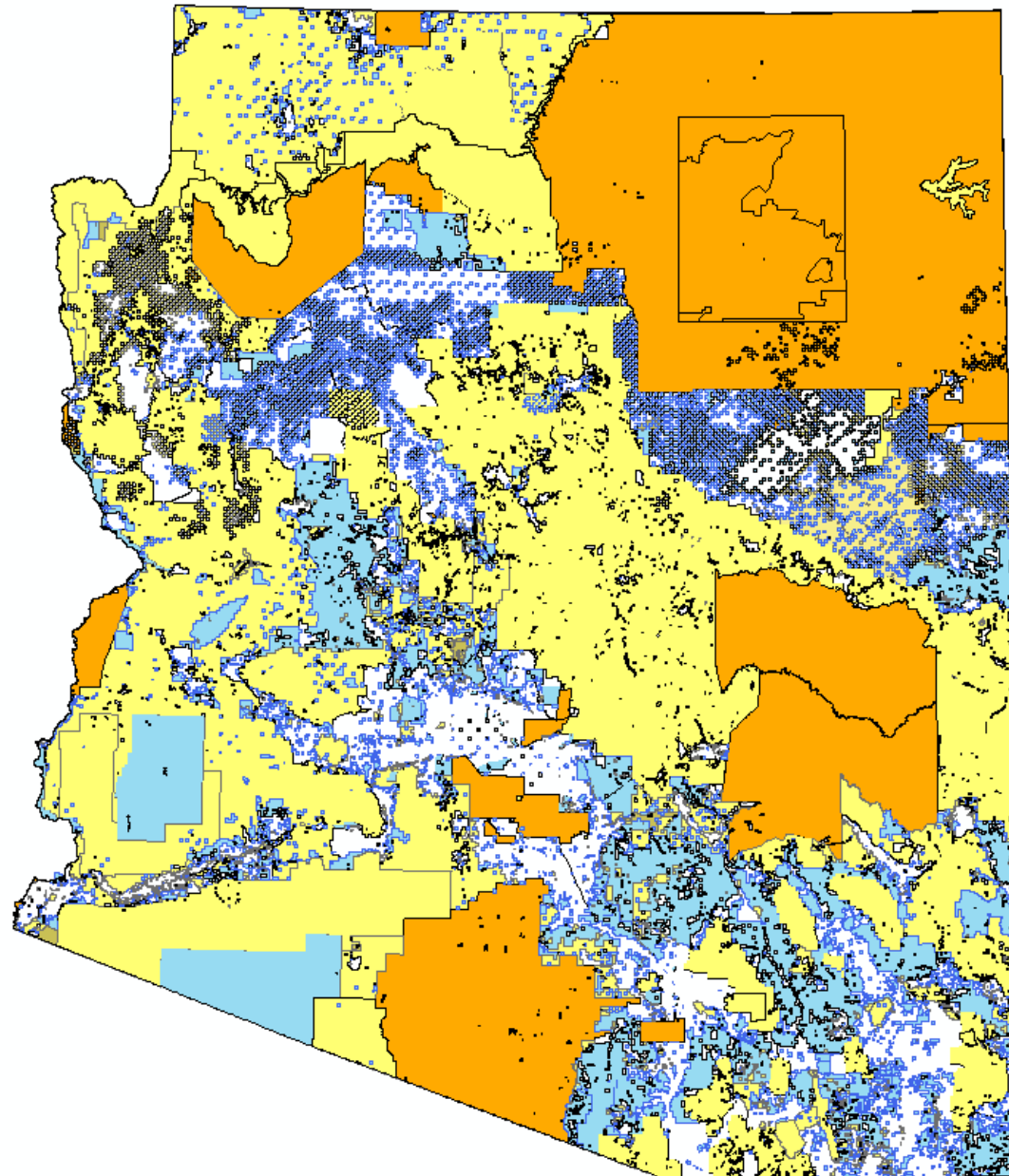


There are many state and federal agencies tasked with mitigating abandoned mine risk

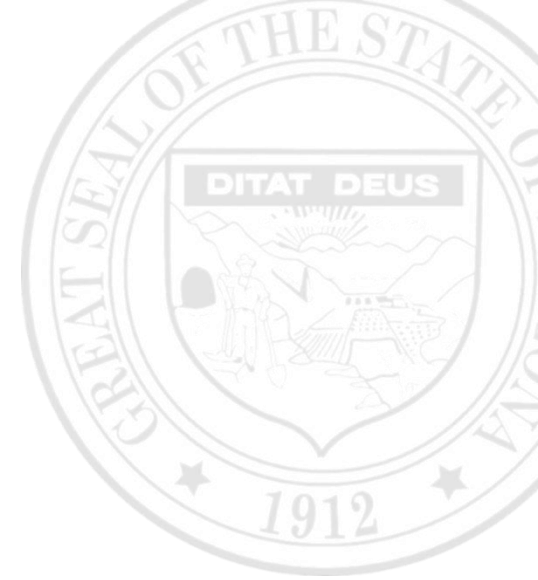
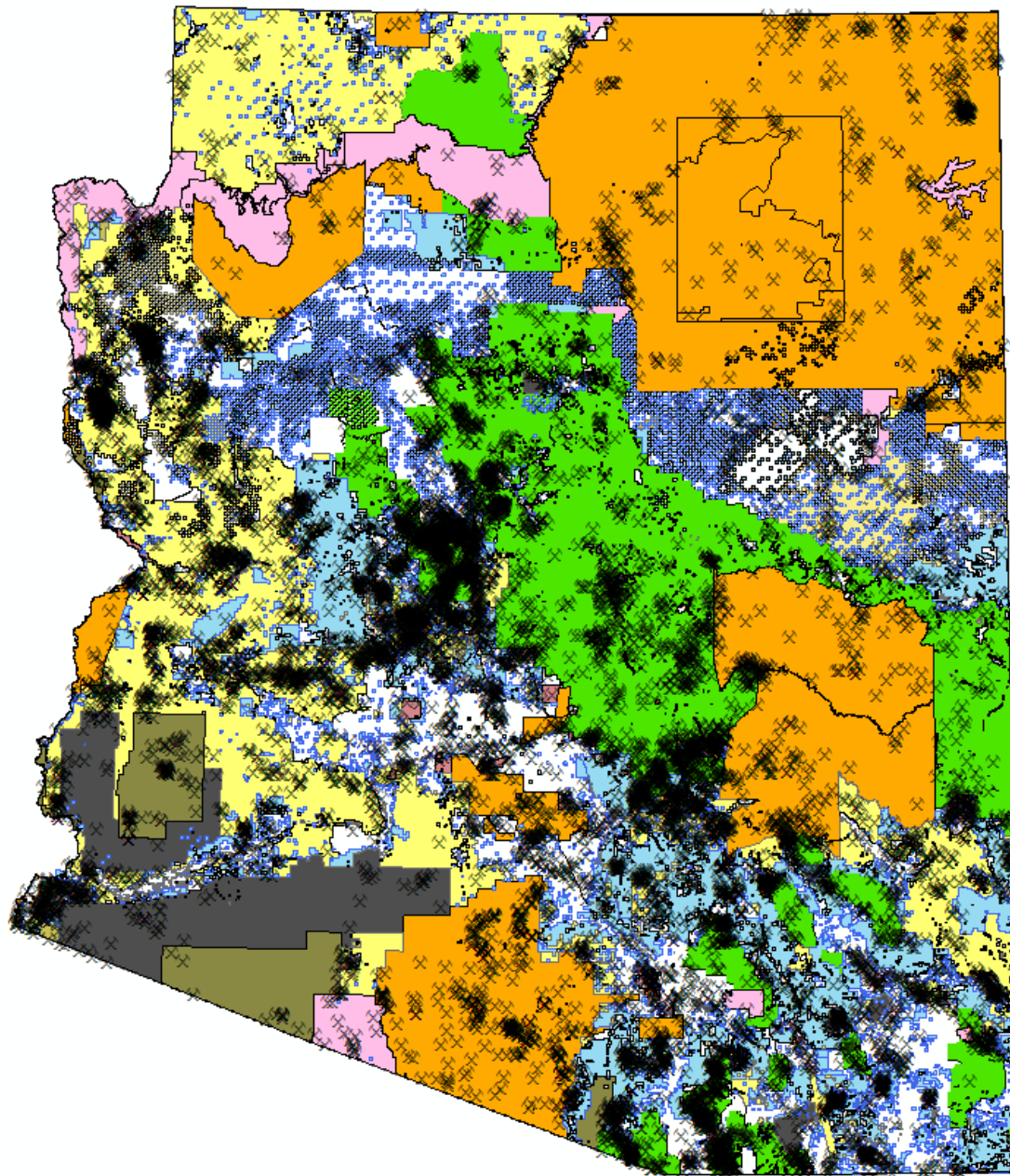
Each agency and program has their own set of priorities, goals and limitations

How can the attainment of surface water quality standards be included as a goal regardless of who oversees the cleanup effort?

What can be done when water quality standards are not met post remediation?



Private 16%
Federal 43%
State 13%
Tribal 28%







USFS Coordination

Memorandum of Understanding (MOU) in place

Meet annually with Arizona and regional USFS hydrologists

- Agency updates

- Nonpoint source pollution activities

Meet annually with On-Scene Coordinator

- Priority discussion

- Coordinate efforts

- Review completed and proposed actions

We receive notification CERLCA related USFS actions



USFS removal actions

Purpose: protect public health and welfare and the environment

Objectives: reduce or eliminate...

...the downstream movement of tailings and waste rock as well as acid mine drainage

...exposure of wildlife and humans to contaminated soil

Targets:

Arizona Soil Remediation Level for Non-residential uses

Background soil or water concentrations

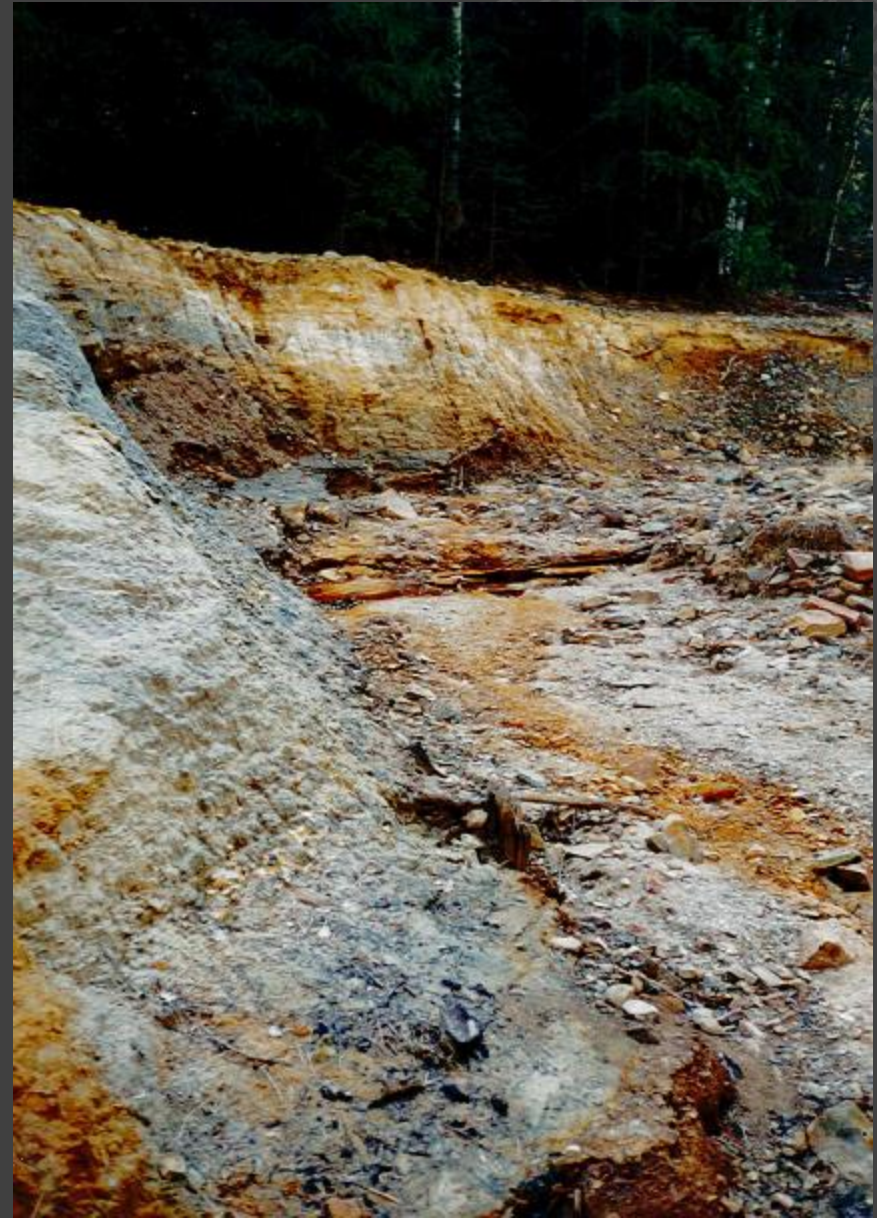
Water quality standards are rarely mentioned

McClellan Mine

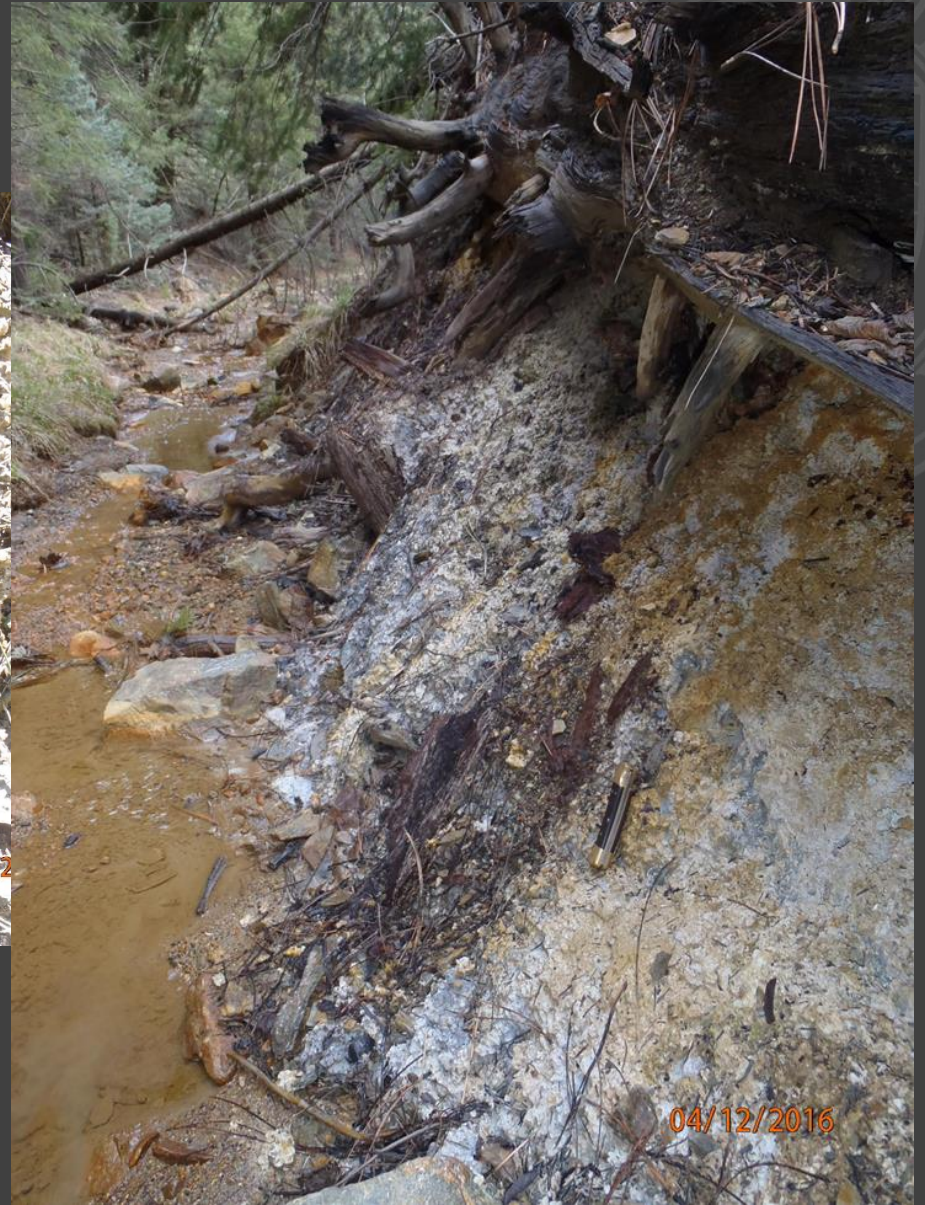
Joint EPA/USFS CERCLA action (2004)

Water quality concerns: copper, zinc
cadmium

Sources: mine tailings, waste rock,
adit discharge, natural background





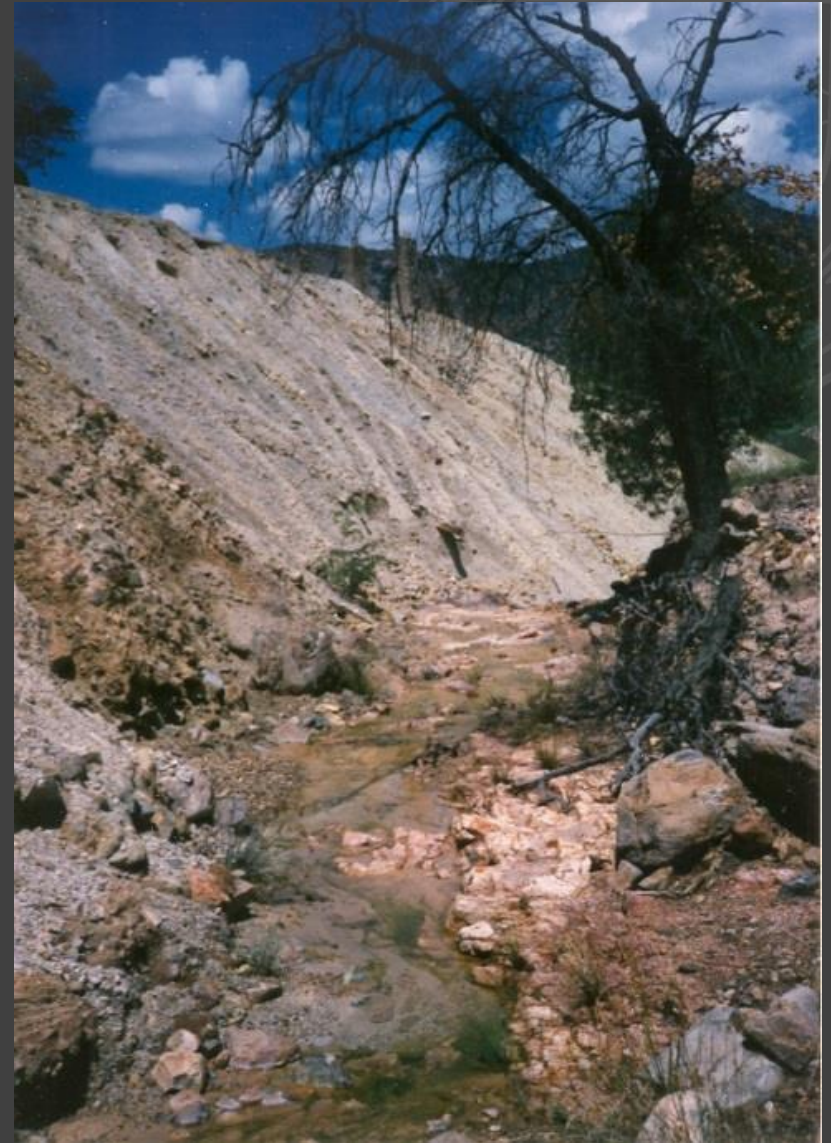


World's Fair Mine

USFS (cap 2006, plug 2011)

Water quality concerns: copper, zinc, cadmium, pH

Sources: mine tailings, waste rock, adit discharges, artesian well, natural background







Gibson Mine

Private and USFS (2006, 2013)

Water quality concern: Copper

Sources: mine tailings, waste rock, adit discharges, natural background





Refocused collaboration

Provide greater focus on WQ attainment when commenting on planned activities

Request monitoring activities include collection of water quality rather than just visual assessments of project stability

Seek commitment to revisiting project if goals and objectives are not met.

Develop statewide MSGP permit for federal and state agencies to formally document annual priorities and actions (current and future)

Effective communication needed

Questions and Discussion

