

# Bonita Peak Mining District

## INTRODUCING EPA's GOALS

March 2019



### Background

The Bonita Peak Mining District Superfund site (BPMD) contains 48 sources of mining-related contamination — including historic hardrock mines, tailings and waste rock – within the Mineral Creek, Cement Creek and Upper Animas River drainages in San Juan County, Colorado. Over 130 years of mining operations have contaminated soil, groundwater, and surface water with heavy metals. Dispersed over three watersheds, many of the 48 sources continue to release metal-contaminated water and sediments into the environment.

The U.S. Environmental Protection Agency's (EPA) overarching purpose for its work at BPMD is to minimize the human and ecological risks posed by the 48 identified source areas in the site.

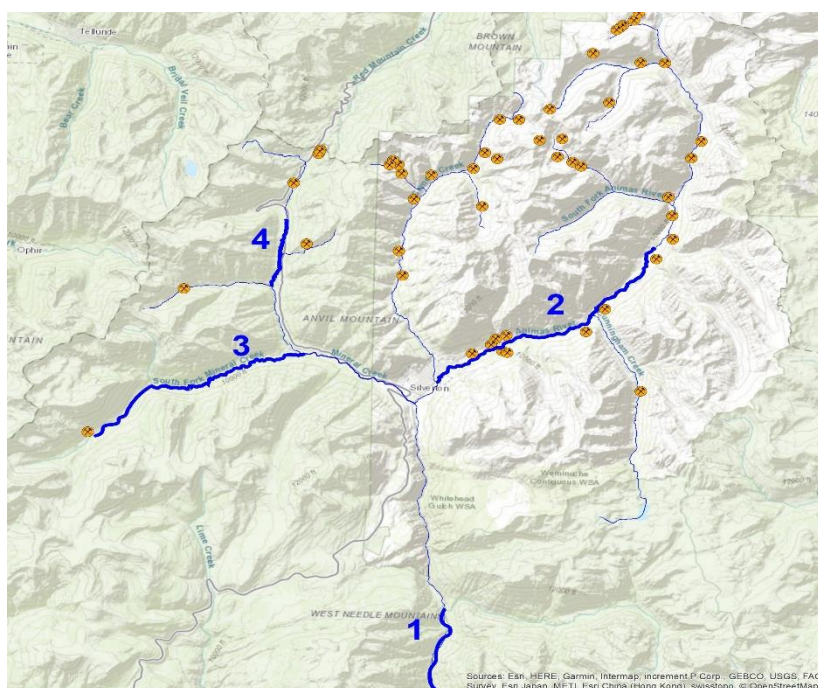
In support of its purpose, EPA has identified three goals for the site:

- Achieve water quality improvement, with a focus on mine drainage.
- Stabilize source areas, with a focus on solid media.
- Minimize unplanned releases.

### Goal One: Water Quality Improvements

To achieve water quality improvements in the BPMD, EPA will:

- Identify achievable actions necessary to meet Table Value Standards at a location downstream of Elk Creek.
- Improve water quality to meet or exceed State water quality goals in priority areas.



Water Quality Improvement Priority Areas

EPA has identified four priority areas in the BPMD associated with its water quality improvements goals. In **Priority Area 1**, the Canyon Reach, water quality improvements will come from work in all three priority areas. It is considered a sitewide priority area.

EPA has also identified three focused priority areas. They are the Upper Animas at Howardsville (**Priority Area 2**), South Fork of Mineral Creek (**Priority Area 3**) and Upper Mineral Creek (**Priority Area 4**).

Reducing metal loading in Cement Creek will be critical to the achieving EPA's water quality goals in Priority Area 1. However, no focused goals have been established for Cement Creek since viable aquatic life was never present there.

In each of the priority areas, EPA has established water quality improvement goals:

- Sitewide Goal (Canyon Reach) – Undertake activities necessary to meet Table Value Standards in the Animas River at a location below Elk Creek (with the possible exception of aluminum due to high background concentrations). Table Value Standards are generic water quality standards set by the State of Colorado.
- Focused Goals – Improve water quality in the following three areas, which are currently supporting or have the potential to support aquatic life, and that are necessary to achieve the Sitewide goal.
  - Upper Animas at Howardsville: Improve numbers and spatial extent of the existing brook trout fishery.
  - South Fork of Mineral Creek: Improve numbers and diversity of the existing fishery. Improve the benthic macroinvertebrate community and protect/enhance the trout corridor to Animas River.
  - Upper Mineral Creek: Investigate the potential for expansion and improvement of the Mineral Creek fishery. Improve the benthic macroinvertebrate community.

## Goal Two: Stabilize Source Areas

EPA's goal is to stabilize mining related-source areas to minimize unacceptable risk to humans as well as aquatic and terrestrial species. Mining-related source areas include waste rock piles, mine waste in or near creeks, and sediment ponds.

EPA identified actions to stabilize mining-related source areas in its Proposed Plan for Interim Remedial Actions. Stabilization activities include: preventing erosion of waste rock piles; preventing rain, snowmelt and mine drainage from flowing over waste rock piles; removing waste rock from creek banks; removing sludge from settling ponds; and capping waste rock piles that are used for recreation.

## Goal Three: Minimize Unplanned Releases

EPA's goal is to minimize unplanned releases that may result in negative impacts to human health, welfare or the environment. Unplanned releases, or mine blowouts, are relatively common in the mining district. Several source areas have been linked to unplanned releases in the past. Colorado Division of Reclamation, Mining and Safety is completing a survey of adits in the mining district to identify those that might pose a risk of an unplanned release. This is a longer-term effort, and as the ongoing investigations continue, EPA will develop specific goals.

## Next Steps

EPA will continue its remedial investigation of the BPMD. As additional information is collected, EPA may, with input from the community and stakeholders, revise the goals. EPA will implement the interim remedial actions identified in the Proposed Plan for Interim Remedial Actions and identify, prioritize and implement additional response actions throughout the BPMD.

Note: EPA's mission is to protect human health and the environment. Federal Land Management Agencies have different missions and legal authorities. The Federal Land Management Agencies may develop goals of their own that are different than those proposed by EPA.

## More information

Visit the BPMD website at [www.epa.gov/superfund/bonita-peak](http://www.epa.gov/superfund/bonita-peak).