

Superfund Construction Project – Funding Pending

Basin Mining Area Superfund Site

Basin, Montana



Site Description

The [Basin Mining Area](#) in Jefferson County, Montana, encompasses approximately 77 square miles. It includes the town of Basin and approximately 300 individual abandoned mine sites in the surrounding watersheds of Basin Creek, Cataract Creek and part of the upper Boulder River.

Hard-rock mining in the Basin watershed began in the 1870s and continued intermittently into the late 1960s. Mine releases of hazardous substances, such as arsenic, cadmium, lead, zinc, silver and copper, pose a risk to human health and the environment. EPA added the site to the National Priorities List in 1999.

Site Status and Cleanup Actions to Date

- In 1998, EPA completed a time-critical removal action to remove 5,000 cubic yards of contaminated soil and tailings from the south end of Valley Street in Basin.
- EPA completed removal actions at the Buckeye, Enterprise, Crystal and Bullion mines in 2002 to remove mine wastes, including approximately 27,000 cubic yards of mine wastes from the Bullion mine alone. At the Crystal mine, EPA lined a surface trench and placed a cover to prevent infiltration of snow melt and precipitation into the mine workings.
- EPA completed cleanup in the town of Basin in 2004.
- In 2005, EPA conducted removal actions at the Crystal mine and Bullion mine to remove some materials and to stabilize the mines pending final remedial action. These two mines contribute the most to the watershed's water-quality degradation.
- EPA conducted a removal action in 2014 at the Crystal mine to remove pond sludge and liner material.
- In 2014 and 2015, EPA conducted a removal action at the Bullion mine to remove the adit's debris-contaminated plug and to establish free-flowing conditions to prevent contaminated mine water buildup.
- EPA selected cleanup remedies for Bullion and Crystal mines in 2015.

Project Pending Funding, as of the end of Fiscal Year 2019

This work includes the interim remedies at the Crystal and Bullion mines:

- **Bullion:** Collect and treat contaminated mine water in a passive treatment system as a follow-up response to the 2005 removal action, which opened the mine tunnel to maintain free-flowing conditions and to prevent future blockage and fluid backup in the mine.
- **Crystal:** Consolidate and cap mine wastes on site, collect and treat contaminated mine water in a passive treatment system, ensure the adit remains clear of blockage, and reclaim excavated areas on site and along the creek.

Funding Through Fiscal Year 2019

EPA has provided approximately \$22 million for cleanup activities at the site.