

Fiscal Year 2016 Unfunded New Construction Project



Basin Mining Area Superfund Site Basin, Montana

Site Description

The [Basin Mining Area site](#) 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. Releases of hazardous substances such as arsenic, cadmium, lead, zinc, silver and copper from these mines pose a risk to human health and the environment. EPA listed the site on the Superfund 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. Approximately 27,000 cubic yards of mine wastes were removed from the Bullion mine. 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 addressed Crystal and Bullion, the two mines in the watershed that contribute the most to water-quality degradation.
- EPA conducted a removal action in 2014 at the Crystal mine to remove pond sludge and liner material.
- EPA conducted a removal action in 2014 and 2015 at the Bullion mine to remove the contaminated-debris plug in the adit and establish free-flowing conditions to prevent a buildup of contaminated mine water.
- In 2014, EPA removed the Silver Dyke tailings.

Unfunded Action

The unfunded fiscal year 2016 work for this site includes the interim remedies at the Crystal and Bullion mines:

- Bullion: Collect and treat contaminated mine water in a passive treatment system. Follow-up response to the removal action to open the mine tunnel to maintain free-flowing conditions and 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 Status

EPA has spent approximately \$7 million on removals and \$6 million on remedial action.