

Reuse Situation Assessment

Nelson Tunnel/Commodore Waste Rock Superfund Site, Mineral County, CO



Introduction

As part of the Superfund Redevelopment program, EPA Region 8 requested a reuse situation assessment for the Commodore Mine structures associated with the Nelson Tunnel/Commodore Waste Rock Superfund site (the site) located near Creede in Mineral County, Colorado. On behalf of EPA, Skeo Solutions conducted a site visit on August 5-7, 2019 to tour the site and discuss redevelopment considerations with local stakeholders. The purpose of the situation assessment report is to understand community goals and preservation opportunities related to the aboveground structures remaining from the Commodore mining complex. This report summarizes findings from the site visit, community interviews and additional research to inform local planning and the cleanup process.

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Downtown Creede, Colorado.



Entrance to Bachelor Loop Historic Tour, a 17-mile drive through the historic mining district above Creede, Colorado.

Site Overview

Site History

Creede was born out of a silver mining boom that began in the late 1880's when Nicolas Creede and other prospectors located the silver-rich Holy Moses vein just north of the current town. Prospectors staked claims in the West Willow Creek drainage area and developed the Last Chance and Amethyst mines. The Nelson Tunnel was constructed to connect the main mines along the Amethyst vein, including the Commodore claim staked in 1891 by John Mackenzie. Mining in Creede has lasted nearly 100 years, with explorations continuing today in the Bulldog and Equity Mines.



West Willow Creek downstream from Nelson Tunnel and Commodore Waste Rock Pile.

Mining operations resulted in the ongoing discharge of acid mine drainage from the Nelson Tunnel directly into West Willow Creek. In addition, a formerly unstable waste rock pile that is part of the Commodore mining complex leached contaminants to the surface water of West Willow Creek. The waste rock contains elevated levels of arsenic, cadmium, lead, manganese and zinc. In 2005, catastrophic failure of the pile occurred following a spring high-water event. As a result, the Commodore Waste Rock Pile became highly unstable and partially collapsed into West Willow Creek. South of Waste Rock Pile, West Willow Creek joins East Willow Creek to form Willow Creek. Willow Creek is a tributary of the Rio Grande River, a state-designated Gold Medal fishery.

Superfund overview and status

In 2008, EPA added the Nelson Tunnel/Commodore Waste Rock Superfund site to the National Priorities List (Superfund) and divided the site into two operable units to manage the work. In 2008 and 2009, EPA conducted a removal action to stabilize the Commodore Waste Rock pile in Operable Unit 1 and reduce contamination entering West Willow Creek. The removal action included reconfiguration of the waste pile and establishing a new channel for West Willow Creek. The pile was re-graded to create stable slopes that allow rainwater and snow melt to flow toward the creek. In 2011, EPA completed the site's remedial investigation to evaluate the nature and extent of contamination. In 2019, EPA released the remedial investigation addendum. A Time Critical Removal Action is currently underway to stabilize the Commodore 5 Level tunnel to prevent further deterioration and additional impoundment of water in the mine complex.

Concern for stability and preservation of structures

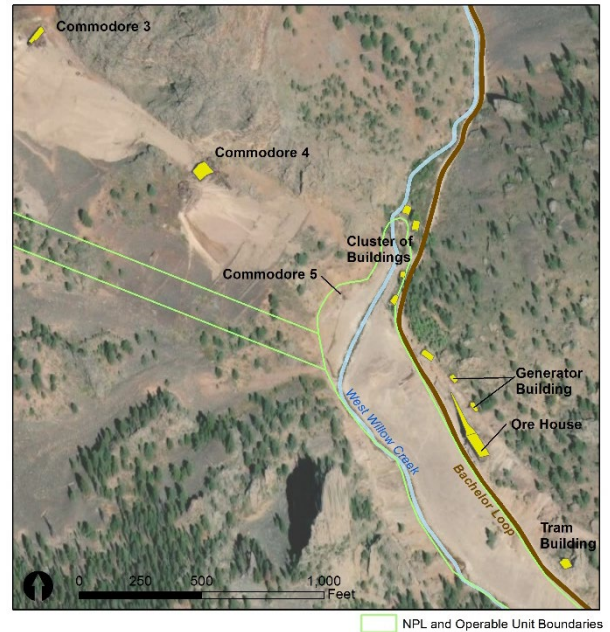
Since Commodore mining operations ceased in 1985, the above ground structures have deteriorated. Locals have raised concerns about the need to stabilize and preserve the structures for public safety and to maintain this unique example of local mining heritage. Several of the Commodore structures, including the Ore House and the Tram Building, are located adjacent to a U. S. Forest Service Road 503 (jointly maintained by Mineral County through a cooperative agreement) and may pose a safety risk if portions of the structures fall into the roadway that serves as a tourist attraction and access to both public land and private residences.

Site ownership is a mix of private and public land. Interest in preserving the historic structures has been expressed by property owners and community members to EPA staff working on the Site. To support the remedial process and local planning, this reuse situation assessment identifies reuse goals and considerations for the stabilization, preservation and potential reuse of the Commodore Mining Structures. Additionally, this document discusses tools that are available to manage environmental liability for reuse of Superfund sites.

Overview of the Commodore Mining Structures

The Commodore Mine includes a complex of structures that supported the transport of raw material from five levels of the mine. Structures remaining today include:

- The Commodore Ore House (roof and portico need attention soon)
- Trestles and remnant rail lines
- Commodore 5 Portal
- Cluster of buildings adjacent to Bachelor Loop (generator buildings, compressor house) that date back to early mine operations
- A newer metal building
- Commodore 4 building
- Commodore 3 building and Tramway (considered in poor condition and could collapse)
- No exterior structures were built for Commodore 1 and 2 tunnels
- Tram Building
- Cribbing holding back mine waste rock



Commodore Mine Structures (for planning purposes only).

Most of the structures are on private land and therefore not accessible without the owner’s permission. Generally, local interviewees agreed that the structures are not stable and would be unsafe to enter.



Commodore Ore House on right with cribbing and Commodore 3 and 4 visible up the slope to the left.



Deteriorating condition of the Ore House roof.

Local Mining Heritage

Creede was established as a mining town and today embraces an identity rooted in mining and mining heritage. As mining began to decline in the mid-60's, mining heritage-based tourism began to grow supported by a historic main street, striking natural scenery, outdoor recreation opportunities (Gold Medal fishing, Continental Divide Trail hikers, ATV, cross-country skiing, pond hockey) and the iconic mining structures. Creede is located along the Silver Thread, a Colorado Scenic and Historic Byway along State Route 149 linking South Fork and Gunnison. Tourists come to Creede to drive the popular Bachelor Loop Historic Tour, a 17-mile driving tour that loops through Creede's silver mining district and ghost towns. Museums include the Creede Historic Depot Museum and the Underground Mining Museum. Mine tours are offered at the Last Chance Mine. The Creede and Mineral County Chamber of Commerce promotes a number of mining heritage events including the Donkey Dash in June, the Days of '92 in July and the Rock and Mineral Show.

The Chamber of Commerce estimated that tourism is currently the primary economy in Creede and that nearly

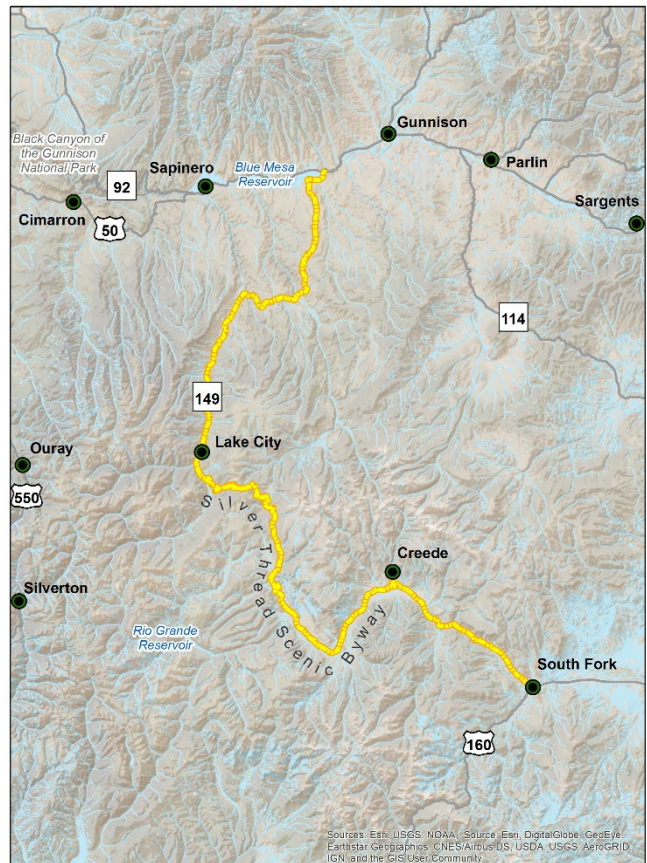
13% of visitors note mining or museums as their reason for coming. The Commodore structures are a significant attraction for the mining tourism economy, as some of the finest extant old mining structures and the "crown jewel" of the Bachelor Loop. Many locals referred to the Commodore Ore House as an iconic representation of Creede and their local mining heritage. For these reasons, everyone interviewed agreed that the Commodore structures should be preserved to support both tourism and local identity.

Community Interviews

Stakeholder Interviews

During the site visit from August 5-7, EPA Region 8 and Skeo conducted interviews with the following individuals and entities:

- Scott Lamb, Ramona Weber, Jesse Albright, Mineral County Commissioners
- Janelle Kukuk, Mineral County Administrator
- Brian, Rosie and Eileen Egolf, Emerald Ranch (along Bachelor Loop)
- Judy Lopez, Colorado Open Lands
- Jim Loud, Creede Historical Society
- Jan Crawford, Willow Creek Reclamation Committee
- Frank Freer, Town of Creede Board of Trustees



Silver Thread, a Colorado Scenic and Historic Byway.

- Henry Brink, owner of adjacent mining claims
- Kathleen Murphy, Creede and Mineral County Chamber of Commerce
- Randy McClure, Bulldog Mine and American Mining Foundation

Additional meetings following the site visit included:

- Tyrus Poxson II, president of the Del Monte Mining Company and the Commodore Mining Company, both of which own claims associated with the site
- Jan Jacobs, Creede Historical Society and American Mining Foundation
- Patrick Moran, U.S. Forest Service Rio Grande National Forest
- Damon Gibbons, 4UR Ranch and American Mining Foundation
- Jane Daniels, Colorado Preservation, Inc.
- Eric Twitty, Archaeologist specializing in mining history
- Mary Sullivan, History Colorado (Colorado's State Historic Preservation Office)

Community Goals and Considerations

During the interviews conducted in August 2019, the community shared the following goals and considerations for the remaining Commodore Mine structures:

- All interviewees strongly agreed that the Commodore Mine structures should be preserved. Many consider the structures, particularly the Ore House, to be iconic of the town and the area's mining heritage. Interviewees consider the potential loss of these structures to be devastating.
- Interviewees shared that preserving the structures is important to support mining history education, the identity of Creede and the mining tourism economy.
- Interviewees shared a range of preservation goals including:
 - Stabilize structures for safe viewing from a distance,
 - Restore structures to authentically represent most recent operations,
 - Restore structures and basic functions as an education museum so visitors can go inside and see how the mining structures operated, and
 - Add additional retail features such as a tap house, zipline and gondola. Community members shared the Argo Tunnel and Mine as an example: <http://argomilltour.com/argo-tunnel/>.
- Interviewees also identified educational opportunities that could complement the restored structures including:
 - Interpret the history of mining,
 - Educate visitors about the role of metals and minerals in our economy and everyday lives, and
 - Support environmental education and stewardship.
- Interviewees also shared that many local organizations and community members would likely provide support to restore the Commodore mining structures; however, availability of local financial support is likely limited.



The Commodore Ore House is a popular stop along the Bachelor Loop Trail.

Preservation Options

A Cultural Resources Survey (*Mining the Amethyst Vein: Selective Cultural Resource Inventory of the Principal Historic Mine Sites on the Amethyst Vein, Creede Mining District*) was conducted in 2000. The survey documents the condition and location of the Commodore Mine structures and features. An evaluation of the structures was also conducted, and it determined that many of the Commodore Mine structures are field eligible for the National Register and State Historic Landmark Designation. In 2006, Colorado Preservation, Inc. – a non-profit promoting statewide historic preservation – listed the Commodore Mining District as one of Colorado’s Most Endangered Places to save.¹

The historians interviewed during the reuse situation assessment recommended that a re-evaluation of the Commodore Mine structures be conducted to determine eligibility since it has been 19 years and the integrity or condition of some of the features may have changed. The National Register guidelines identifies five categories of cultural resources: building, site, structure, object and district.² Given the concentration of structures and buildings related to the Commodore Mine, it may be appropriate to consider this area as a district rather than as individual buildings or structures.

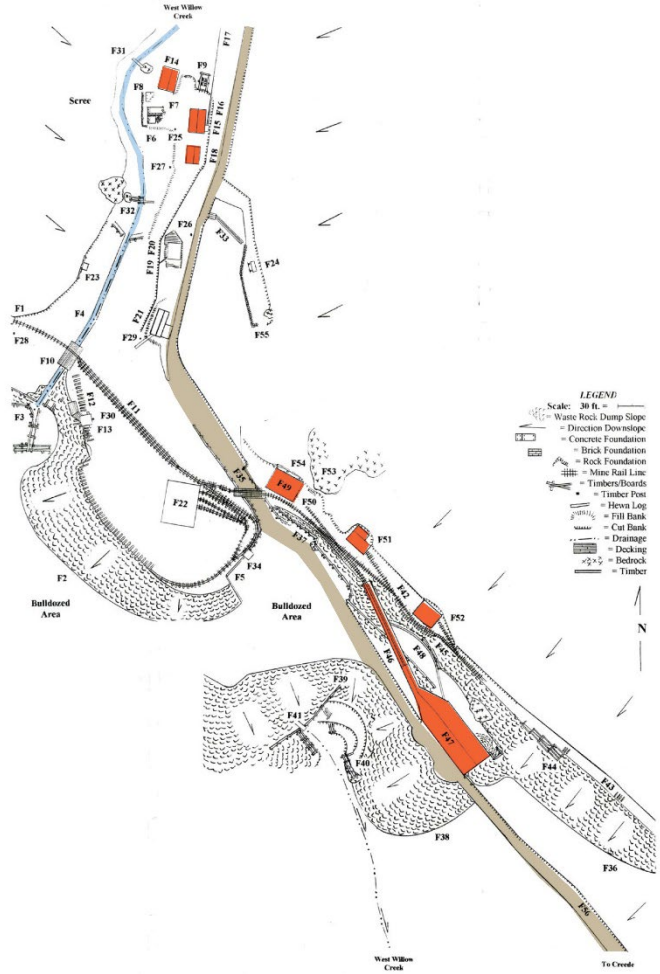
¹Colorado’s Most Endangered Place: <http://coloradopreservation.org/programs/endangered-places/endangered-places-archives/commodore-mine-district/>.

² The National Register bulletin, *How to Complete the National Register Registration Form*.

State Resources for Historic Preservation

History Colorado is Colorado's State Historic Preservation Office, which supports preservation and interpretation of the state's historical places and includes two preservation programs – the Office of Archaeology & Historic Preservation (OAHP) and the State Historical Fund (SHF). OAHP assists property owners in listing Colorado's most historically and architecturally significant sites in the National Register of Historic Places and the Colorado State Register of Historic Properties.³

- Properties listed in the National or State Register may be eligible for investment tax credits for approved rehabilitation projects. Listed properties are also eligible to compete for grants from Colorado's State Historical Fund.
- Although OAHP strongly encourages the preservation of National and State Register properties, listing offers no automatic protection. Private owners of National and State Register properties using private funds may alter or demolish these properties within existing local building regulations.
- Projects involving federal or state agency actions or funding are reviewed by OAHP with the goal of preserving historic resources whenever possible.
- Counties and municipalities can apply to be a Certified Local Government (CLG) which provides access to the CLG Grant Program and eligibility for State Historic Preservation Tax Credits.



The Cultural Survey Map, conducted in 2000, enhanced to show cluster of structures (in red) and Bachelor Loop (brown).

The State Historical Fund receives a portion of the gaming tax revenues to support historic preservation throughout the state through different grant opportunities:⁴

- Non-competitive grants include the Historic Structure Assessment Grant, Archaeological Assessment Grant, and Emergency Grant. The Emergency Grant may be an option for immediate stabilization work.
- Competitive grants include Acquisition and Development Grants, Archeology Grants, Education Grants, and Survey and Planning Grants.

Additional funding resources are listed here: <https://www.historycolorado.org/additional-resources-funding>.

³ <https://www.historycolorado.org/national-state-registers>

⁴ <https://www.historycolorado.org/state-historical-fund>

Treatment of Historic Properties

The U.S. Secretary of the Interior has developed standards for four approaches to the treatment of historic properties which may be helpful to consider in context of preservation and future use goals.⁵

- **Preservation** focuses on the maintenance and repair of existing historic materials without extensive repair or replacement or a new use that does not require additions or extensive alterations.
- **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- **Restoration** focuses on depicting a particular period of time, while removing features from other periods of time.
- **Reconstruction** recreates features that are no longer present for interpretive purposes.

The community goals shared to date tend to focus on the first two historic treatment approaches.

Potential Partners

Community members suggested the following entities as potential partners who could be approached to support the stabilization, restoration and long-term management of the Commodore Mining structures:

Local

- Mineral County
- Town of Creede
- Creede Historical Society
- American Mining Foundation
- Creede Mining Heritage
- Creede and Mineral County Chamber of Commerce – education, promotion, letters of support
- Local landowners (4UR Ranch, Emerald Ranch, Bulldog Mine)
- Headwaters Alliance
- Creede Elks Lodge

Regional

- San Luis Valley Tourism Council
- Silver Thread/Alpine Loop Interpretive and Information Center
- Museum of the San Luis Valley
- Western Hardrock Watershed Team, Office of Surface Mining (OSM) and AmeriCorps VISTA (Volunteers in Service to America)

State and National

- US Forest Service
- History Colorado
- Historical Mining Association (national)
- Colorado Open Lands
- Colorado Preservation, Inc.



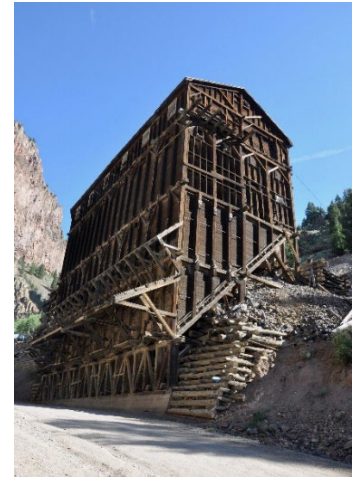
Cluster of buildings along West Willow Creek.

⁵ <https://www.historycolorado.org/sites/default/files/media/document/2017/1572.pdf>

Ownership and Management Models

Mineral County includes a range of preserved historic structures, as well as others that have deteriorated or been removed because they have not been protected. For example, the Bachelor Town Site has lost structures and other elements over time due to vandalism and visitors removing items for souvenirs. In another example, the U.S. Forest Service removed the Kentucky Bell cables and ore carts that transferred waste rock to Humphrey’s Mill due to deterioration. However, local public and private initiative and creative partnership models have resulted in the restoration of a number of historic structures. These include:

- The Railroad Depot: donated to the County, restored through a History Colorado grant and operated as the Creede Historic Depot Museum by the Creede Historical Society.
- The Clay Mine: owned and maintained by the U.S. Forest Service; determined eligible for the National Historic Register; reconstructed for unattended interpretation purposes.
- CF&I Mine and Mill: privately owned and operated on the 4UR Ranch; State designation and restored with a History Colorado grant; open to the public by reservation.



The iconic Commodore Ore House.

Potential Environmental Liability Protections

Acquiring land associated with a Superfund cleanup site can often be done in a manner that addresses liability protections for the new owner or operator. Parties who have or anticipate a role related to the Commodore Mine structures and associated land should contact EPA Region 8 to understand potential Superfund liability and potential liability protections that may be available and which are outlined briefly below.

Superfund listing is often incorrectly perceived to limit reuse of a site; however, there are legal provisions available to assist in managing environmental liability. Prospective purchasers and local government entities that may be involved in the acquisition and redevelopment of a Superfund Site should understand the provisions and steps needed to manage environmental liability issues. The 2002 Brownfield Amendments to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the subsequent Brownfields Utilization, Investments and Local Development (BUILD) Act, which passed in March 2018, provide important protections to prospective landowners and operators who meet certain statutory criteria and comply with ongoing obligations at a site.

Bona Fide Prospective Purchasers (BFPPs) – CERCLA Sections 101(40) and 107(R)(1)

In order to be considered a BFPP under CERCLA, a prospective purchaser would need to ensure it meets the statute’s requirements. A BFPP must also satisfy the criteria discussed in the “common elements” guidance, which includes 1) performing “all appropriate inquiries” prior to acquiring the property, 2) demonstrating “no affiliation” with a liable party and 3) satisfying ongoing long-term stewardship obligations. For additional information on BFPP liability protections, see: <https://www.epa.gov/sites/production/files/documents/top-10-ques.pdf>

Local Governments and Involuntary Acquisition – CERCLA Sections 101(20)(D) and 101(35)(A)(ii)

CERCLA provides certain liability protection to state and local governments who acquire Superfund site property. The 2018 BUILD Act updates to CERCLA expand this liability protection by revising the definition of “owner or operator” under CERCLA to remove the “involuntary acquisition” requirement, and to expand liability protection to state/local governments that acquire Superfund site properties by seizure, tax foreclosure, abandonment, bankruptcy, and other means by virtue of their function as a sovereign.

The 2018 BUILD Act also expanded and codified existing EPA guidance on bona fide prospective purchaser liability protection for tenants of federal Superfund sites. Tenants can now obtain and maintain BFPP liability protection status completely independent of the owner's status. For example, if a BFPP owner loses its BFPP status (provided it was not related to the tenant's action), the tenant is now protected as long as it can demonstrate it has complied with the BFPP criteria excepting the criteria of all appropriate inquiry (AAI) and providing notices. And a tenant can obtain BFPP status even if the owner is a PRP because the BUILD Act clarified that a lease does not create an impermissible affiliation with the owner.

Potential Next Steps

During the interviews, participants shared several ideas of key steps needed to facilitate the stabilization and restoration of the Commodore Mine structures. These include:

- Share information regarding Superfund liability protections to interested parties.
- Identify an ownership/operations model that can facilitate fundraising, restoration and operations long-term.
- Conduct an assessment of the structures to determine level of deterioration and eligibility for state designation. Assessment grants may be available through History Colorado.
- Apply for state designation to support fundraising. The Commodore Mine structures were determined field eligible approximately 20 years ago (documents on file with History Colorado).
- Build community support for shared vision of the final use and level of restoration for the structures.
- Develop fundraising and operations plan.
- Enlist local partners to support implementation.

Contact Information

Nelson Tunnel/Commodore Waste Rock Superfund Site

Site Profile

www.epa.gov/superfund/nelson-tunnel

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