

## A. COVER PAGE

### Project:

Kirwin Mining District Stabilization Project.

### Location:

Upper Wood River Valley 25 miles southwest of Meeteetse, Wyoming on the Greybull Ranger District of the Shoshone National Forest.

### Nomination Submitted by:

Evan Green, AML Administrator  
Department of Environmental Quality  
Herschler Building - 3<sup>rd</sup> Floor East  
122 W. 25<sup>th</sup> St.  
Cheyenne, WY 82002

**Project began:** July 27, 2001

**Project completed:** August 4, 2001

**Date submitted:** March 1, 2002

### Construction Costs:

House logs	\$3,000.00
Lumber & timbers	\$2,803.00
Bora Care & impel rods	\$987.00
Backhoe work	\$540.00
Equipment rental	\$521.00
Porta potties for volunteers	\$640.00
Log screws/fasteners	\$275.00
Roofing	\$455.00
Cable & connectors	\$567.00
Nails, paint, misc.	\$224.00
Fuel, transportation	\$480.00
Volunteer food/supplies	\$550.00
Harrison Goodall	\$7,500.00
Total	\$18,542.00

### Organizations responsible for the reclamation (including contractor(s)).

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Ernie Robb, Project Officer  
Abandoned Mine Lands Division  
Department of Environmental Quality  
3030 Energy Lane  
Casper, WY 82604

Rebecca Aus, Forest Supervisor  
Shoshone National Forest  
808 Meadow Lane  
Cody, WY 82414-4516

Brent Larson, District Ranger  
Greybull District, Shoshone National Forest  
230A Yellowstone Ave.  
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Harrison Goodall, Conservation Services  
305 Concho Dr.  
Pueblo West, CO 81007

Richard Curritt, State Historic Preservation Officer  
2301 Central Ave.  
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Bill Gentle, Director  
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Cheyenne, WY 82002

John Keck, Director  
Wyoming Department of State Parks and Cultural Resources  
2301 Central Ave., Barrett Building  
Cheyenne, WY 82002

Meeteetse Museums  
P.O. Box 53  
Meeteetse, WY 82433

### Volunteers:

Thirty-one volunteers from as far away as Georgia, Texas and Washington and as close as Meeteetse, Wyoming donated more than 900 hours of labor to the project. The volunteers ranged in age from 15 to 60 and came from all walks of life. The fact that this project attracted volunteers from across the nation is a testimony to the interest people have in preserving our heritage and protecting historical sites such as the town site of Kirwin.

January 23, 2002

2002 Abandoned Mine Land Awards Committee  
C/O Chuck Meyers, Office of Surface Mining  
Washington, D.C. 20240

To Whom It May Concern:

The Kirwin Mining District Stabilization project was funded and supported by the Wyoming Abandoned Mine Lands program. AML project managers deserve national recognition for acting as a driving force in developing this exemplary partnership project. Including federal, state, and local agencies and private individuals, the stabilization project resulted in rehabilitation of the Wolf Mine shaft house, Tumlum Mine shaft house, and headquarters buildings in the historic ghost town of Kirwin. This project helped reclaim and preserve one of Wyoming's most important historic sites while making the area safer for an ever-increasing number of visitors. Thirty-one volunteers from Wyoming, Georgia, Texas and Washington, ranging in age from 15 to 60, contributed more than 900 hours of donated labor to assist with this important stabilization effort.

The Abandoned Mine Lands Division effort at Kirwin has been instrumental in protecting and preserving one of the premiere historical sites in Wyoming. Kirwin is, without doubt, the most intact example of a period gold mining town in Wyoming; truly a window to the past. Visitors making the arduous journey to visit Kirwin are impressed by the stabilization efforts funded and supported by AML. The Kirwin stabilization made the mine shafts safe for the public while maintaining the historic integrity of the significant sites. Volunteer labor and other federal, state and local partners has increased public understanding and awareness of Wyoming's mining history, reduced project costs, and led to improved relationships between the agencies and the public.

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## **B. Narrative description of the work that resulted in exemplary abandoned mine land reclamation.**

The Wyoming Abandoned Mine Lands program provided funding to assist with the rehabilitation and stabilization of the Wolf Mine and Tumlum Mine shaft houses at the ghost town of Kirwin. This not only has helped reclaim and preserve one of the most important historic sites in Wyoming, it also has made the area safer for an ever-increasing number of visitors.

The Kirwin mining camp had its beginnings in 1885 when William Kirwin began prospecting in the area. The Kirwin Mining District was formed six years later in 1891. Located at 9,500 feet in the picturesque Wood River Valley and surrounded by 12,000-foot peaks, Kirwin presents a window to the past where visitors can experience a colorful era of western history. Thousands of miners surged into the rugged mountains in search of gold and silver during the 1800s. Mining towns sprung up overnight, and many of them died just as quickly. While the skeletal remains of most mining camps have virtually disappeared, Kirwin is unique. Numerous buildings, including two mine shaft houses, remain standing. One of those is the Tumlum Mine shaft house, constructed about 100 years ago, is one of the most unique, picturesque and most photographed structures in the Kirwin Mining District. The other shaft house, the Wolf Mine shaft house, was developed forty years later in the 1930s. Having intact shaft houses from different eras makes Kirwin an ideal site to interpret the evolution of mining. For this reason, great efforts are being taken to preserve both shaft houses. The Kirwin town site has the best architectural and historical integrity of any mine site in Wyoming and has been determined eligible for inclusion in the National Register of Historic Places.

The Tumlum shaft house is built of hand-hewn logs, has two rooms and measures 39 by 23 feet. One room houses a large boiler that was used to produce steam for a steam-powered hoist, drills and other tools. It also was used as a blacksmith shop. The second room housed the hoist and other equipment. Rising from this room is a three-story headframe constructed of rough lumber with a sturdy frame consisting of four large vertical logs.

The Tumlum is a photographer's delight. Colored and sculpted by a century of sun, wind and weather, the boards of the headframe range from black to a rich, golden amber. Below them the heavy, hand-hewn log walls of the shaft house attest to the back-breaking labor of those early-day miners.

All was not well with the Tumlum, however, the headframe logs had rotted at the bottom and the headframe was leaning, supported by the front wall. The log walls of the building were rotting and settling. The roof had collapsed under the weight of heavy winter snows. The front wall was leaning outward. And the building presented a danger to visitors who came to view and photograph it. Recognizing the need to stabilize and rehabilitate this important historical and archaeological site, the Abandoned Mine Lands Program came to the rescue. It provided funding for needed materials along with professional advice and other support.

The first and most critical task was to raise, align and stabilize the headframe. Using a structural engineer and others, AML brought the headframe back into plumb, poured concrete to anchor large pipes and bolted the pipes to the headframe logs. They also plugged the shaft to remove the danger of visitors being injured on site. Once the leaning headframe was righted and stabilized and the shaft had been plugged, the stage was set for stabilizing and rehabilitating the rest of the building.

For this project, professional log stabilization expert Harrison Goodall was brought in to train

and supervise a group of volunteers. Goodall was on hand for an entire week working with and training over thirty volunteers. They faced a daunting task. Dirt had been deposited against the rear and side walls causing severe damage and rot. Sill logs were rotted. The front wall and an interior wall were askew and leaning out of plumb. Goodall and the volunteers used jacks, come-alongs and muscle power to painstakingly raise walls and move the front wall and interior wall into plumb. Rotted sill logs were removed and replaced. Side and back walls had to be almost entirely rebuilt.

Additionally, considerable work was conducted on the Wolf Mine shaft house to repair the foundation, floor deck and roof. The work at the Wolf Mine shaft house was instrumental in maintaining the structural and historic integrity of this building, in turn, insuring that the safety devices installed by AML on the Wolf Mine shaft remain intact. The challenge was not only to stabilize and rehabilitate this structure, but to do so in an historically accurate manner so that the new work matched the existing architectural style.

Volunteers received extensive training in log preparation, log hewing techniques, and log construction. Goodall has worked extensively throughout the Rocky Mountain West on a wide variety of stabilization projects for numerous public agencies. Typically, participants are charged several hundred dollars to attend week-long log preservation workshops with Goodall. However, because of the leadership role Abandoned Mine Lands took in providing funding, this opportunity was available to all participants that volunteered for the Kirwin project. The preservation training was invaluable for the volunteers who worked on this project. In addition, these volunteers will be able to use this training on other preservation efforts in the future, thus insuring that this project will provide long lasting benefits.

The Department of Environmental Quality Abandoned Mine Lands Division partnered with the Wyoming Department of State Parks and Cultural Resources; including staff from the State Historic Preservation Office and State Parks & Historic Sites, and the Shoshone National Forest.

Participants brought their own gear for camping and filtered drinking water from a nearby stream. Food items were locked in bearproof lockers because of the presence of Grizzly bears near the project area. The National Forest allowed the use of a nearby ranger cabin for food preparation and equipment storage. For many years the State Historic Preservation Office has encouraged its federal partners to form historic building teams to deal with their many complicated historic preservation issues. We were fortunate to have AML provide the funding to protect this irreplaceable piece of our nation's heritage and to make this important training opportunity available to our preservation partners at no charge.

### **Conclusion and results:**

The Abandoned Mine Lands Division has been instrumental in protecting and preserving one of the premiere historical sites in Wyoming. The Tumlum Mine shaft house, the Wolf Mine shaft house and Kirwin town site, represent a colorful and important era in the heritage of Wyoming and the West. Kirwin is, without doubt, the most intact example of a period gold mining town in Wyoming. It is truly a window to the past. There is a great deal of interest in Wyoming's history as attested to by the numerous visitors that make the arduous journey to visit Kirwin every year. Many of these visitors are already commenting on the work that is being done to stabilize and preserve the Kirwin town site. Both the Tumlum Mine and Wolf Mine have vertical shafts which presented a hazard to

the general public. The AML program managers devised a method to make the shafts safe for the public while maintaining the historic integrity of these significant sites. Additionally, these managers understand that maintaining the structural and historic integrity of the shaft houses helps to extend the life of the safety features installed. These managers also incorporated the use of volunteer labor to reduce project costs and increase public understanding and awareness of Wyoming's mining history.

The AML project managers are deserving of national recognition for acting as a driving force in developing this exemplary partnership project. The project addressed public safety requirements while preserving the historic integrity of the Kirwin Mining District for future generations. Important long term partnerships were created because AML project managers invested the time and resources to develop a project that exceeded all expectations. AML's leadership role will continue to serve as an example and an inspiration for involving the public and other agencies in important historic preservation projects.

### **Captions for photos:**

1. Tumlum Mine shaft house before stabilization.
2. Preservation crew working on Tumlum.
3. Preservation crews fitting corner on Tumlum shaft house.
4. Preservation crews working on Tumlum.
5. Preservation crews reroofing Wolf Mine.
6. Wolf Mine shaft house after stabilization. (cover photo)