



Lake County Emergency Manager Jeff Foley addresses residents at a meeting in a local gymnasium in Leadville, Colo., Friday, Feb. 23, 2008. Residents of the historic Colorado mining town feared that water buildup in abandoned mines above the town could blow out and send more than a billion gallons of polluted water into parts of the town.

A LESSON IN LEADVILLE

The issue of abandoned mining tunnels made headlines last winter when the Lake County Board of Commissioners claimed that the Leadville Mine Drainage Tunnel posed an "imminent and substantial" danger to the Arkansas Valley watershed.

Leadville was one of the nation's key mining centers for more than a century, but since the 1960s it's had to deal with the aftermath of mining.

As winter closed in, the Leadville Mine Drainage Tunnel, owned and operated by the Bureau of Reclamation, had a serious blockage. Behind it a pool of approximately 1 billion gallons of toxic acid and metal-laden water, nearly 200 feet deep, had built up.

The commissioners claimed the pressure behind the blockage put the tunnel at risk for a catastrophic blowout, especially since large amounts of water infiltrated the mine pool during the spring snowmelt.

In February, the EPA promised to try to prevent a disaster by install-

ing a pump in one shaft to remove water from the mine and to construct a relief well in the tunnel to pump water directly to it then pipe the water to the Bureau of Reclamation's existing treatment plant.

According to the agency, the EPA began pumping water from the Gaw Shaft on Feb. 27. As of mid-April, 28 million gallons of water had been pumped from the underground mine workings in the Leadville Mining District.

The agency began treatment of water from the Leadville Mine Drainage Tunnel in late June.

Bruce Stover, of the state Division of Reclamation, Mining and Safety, said it's unclear whether the tunnel was at immediate risk of a blowout, but the potential risk necessitated action. "If there were a blowout, it would be a disaster for the Arkansas," he said.

The Arkansas River already had that experience.

By 1900, Leadville had more than 400 individual mines and more than 100 miles of underground workings. Most of the mines closed by the 1960s, but drainage continued at a rate of 4 million gallons a day until the early 1980s. Then, the EPA tagged the area a Superfund site and began treating the drained water.

The mine drainage that followed the 1960s' closing left a trail: Absolutely no fish could be found for several miles downstream of Leadville, and for up to 40 miles downstream, fish showed elevated metal levels.

After the area was declared a Superfund site in 1983, water treatment plants were built to treat the tunnel flow and remove heavy metals before they reached the Arkansas River. More than 90 percent of the acid mine drainage has been eliminated, and fish populations are recovering. □

—Eryn Gable



The soon-to-be-reopened Climax molybdenum mine stands in the snow above Leadville, Colo., Friday, Feb. 23, 2008.