

**Testimony submitted to the:**

**HOUSE COMMITTEE ON NATURAL RESOURCES  
Subcommittee on Energy and Mineral Resources**

**“HR 2262, the Hardrock Mining and Reclamation Act of 2007”**

**October 2, 2007**

**Submitted by:**

**Greg Lind, Montana State Senator**

I thank the chair and subcommittee members for inviting me to come and testify on this important matter.

**Mr. Chairman and distinguished members of the subcommittee: My name is Greg Lind. I am a practicing physician in Missoula, MT and member of the Montana Legislature. I was elected in 2004 and served as chair of the Senate Natural Resource and Energy Committee in 2007.**

**The Need for Reform**

The need for reform of the 1872 Mining Law is clear in Montana. Across the state, mining operations permitted on federal land under the 1872 Mining Law have caused substantial pollution to important Montana water resources, resulting in contaminated drinking water supplies, harm to fish and wildlife, impacts to residential and agricultural lands, and significant costs to taxpayers. Several mines have resulted in such severe water quality problems that they will generate contaminated runoff forever. It is time to reform the Mining Law of 1872.

One of the key issues in the debate about reforming the law is the need to clean up abandoned mines and create a source of revenue to ensure that the public safety risks and environmental damage from these mines is corrected. I commend the Chairman for holding the hearing today to address these issues.

In our state of Montana, we have made a significant investment in understanding the problems from abandoned hardrock mines around the state and created an aggressive program to clean up these mines. I want to make a few remarks about the scope of the abandoned mine problem that we have identified in Montana, because I expect these same problems are repeated in states across the West.

First and foremost, abandoned mines are not just the mines that were operated by pick and shovel in the last century. In Montana, we now have a legacy of modern mine disasters that are now the responsibility of the state, tribal and federal government. Here are just a few examples of the mines that have been operated in Montana in the past 20 years.

## **Impacts of Modern Mines**

### ***Zortman Landusky Mine***

The Zortman Landusky gold mine is located on Bureau of Land Management (BLM) land in the Little Rocky Mountains of north central Montana. The mine adjoins the Fort Belknap Reservation to the north, home to the Gros Ventre and Assiniboine Tribes. It operated from 1979-1998. Mining operations resulted in widespread pollution to surface and groundwater in the Little Rockies. Numerous cyanide releases occurred during operations, including a release of 50,000 gallons into Alder Gulch, which affected a community drinking water supply.<sup>1</sup> Water quality problems escalated when acid mine drainage developed at the mine. By 1991, acid runoff from the mine had permeated surface and groundwater.<sup>2</sup> In 1993, the EPA and the Tribes filed suit against the company, charging that its discharges “present human health risks” and that “the acidity of the discharges would kill fish and aquatic life.”<sup>3</sup>

In 1998, the company filed for bankruptcy, leaving insufficient funds to cover reclamation costs and long-term water pollution. State and federal scientists have determined that acid and metals-polluted runoff from the mine will continue in perpetuity. As a result, costly water treatment systems must be maintained to prevent further contamination of downstream water resources.<sup>4</sup>

The BLM's June 2004 Action Memorandum describes the threats to the public health and welfare and the environment that could result if operation of the water capture and treatment systems are not continued at the mines. If the systems fail or ceases operation, the BLM states that "the release of hazardous substances would increase greatly without the benefit of treatment, creating significant environmental damage. This includes the release of solutions containing metals such as arsenic, cadmium, copper, selenium, and zinc; plus cyanide complexes, nitrates, and solutions having low pH (acidic) levels".<sup>5</sup> The document warns that drinking water supplies or sensitive ecosystems could be contaminated and that human and animal populations could be exposed to the toxic effects of these substances. Over a billion gallons of contaminated run-off has been intercepted from the mine since 1999.<sup>6</sup>

Faced with the on-going threat to tribal water resources, the Fort Belknap Tribes have spent endless hours and scarce tribal resources to advance funding legislation. The Tribes worked with state legislator Rep. Jonathon Windy Boy on the passage of a bill in the 2005 Montana legislature that appropriated approximately \$19 million in state funds to pay for long-term water treatment at the mine.<sup>7</sup>

While progress has been made, issues at the mine are far from over. A federal Court Judge Donald Molloy recently wrote, “It is undisputed that the Zortman Landusky mines have devastated portions of the Little Rockies, and will have effects on the surrounding area, including the Fort Belknap Reservation for generations. That devastation, and the resulting impact on tribal culture, cannot be overstated.”

***Beal Mountain Mine:***

The Beal Mountain Mine is an open-pit cyanide leach gold mine located on the Beaverhead Deerlodge National Forest of western Montana. The mine was operated by Pegasus Gold Corp. from 1989 until its bankruptcy in 1998. Even after mining operations ceased, it continued to pollute neighboring streams with cyanide, selenium and copper.<sup>8</sup> In 2003, scientists determined that native westslope cutthroat trout in the mountain streams downstream of the mine were contaminated with harmful amounts of selenium caused by mining activities.<sup>9</sup>

Warren McCullough, of the Montana Department of Environmental Quality, told the *Montana Standard* in July 2003 that the aftermath of the closed Beal Mountain Mine is "not going to be something that we're ever going to be able to walk away from." In 2003 the Forest Service pulled the mine into a federal "time critical" cleanup program because conditions at the mine present a "substantial endangerment to human health and the environment."

The Forest Service and State government have already spent \$5 million in public funds to install and operate a water treatment system, but that is just the beginning.<sup>10</sup> The Forest Service estimates that an additional \$13 million is needed for additional reclamation and long-term water treatment.<sup>11</sup>

***Basin Creek Mine:***

The Basin Creek Mine, which is located in the Beaverhead Deerlodge National Forest near Helena, Montana, operated from 1989 to 1991. After the Pegasus bankruptcy in 1998, responsibility for the mine fell to the State of Montana and the U.S. Forest Service. After spending the \$6.5 million reclamation bond, reclamation work was still needed and water pollution problems persisted. The Forest Service has spent \$2 million, and the State of Montana has spent over \$5 million in public funds, with another \$1 million to be spent in 2007.<sup>12</sup>

***Kendall Mine:***

The Kendall Mine is an open pit gold mine, originally permitted on BLM land in north-central Montana – a key agricultural region. Although the mine operated for just seven years (1989-1995) it caused substantial impacts to water resources. The mine experienced several cyanide releases during its years of operation.<sup>13</sup> Mining operations also polluted waters with contaminants such as thallium, arsenic and nitrates.<sup>14</sup>

In October 2001, six families who live downstream of the mine filed suit against the company for alleged damages to water supplies and private property. According to the complaint, mine activities have deprived livestock of water, crops of irrigation and harmed the value of downstream ranches and other property.<sup>4</sup>

Although the mine was originally permitted on lands managed by the BLM, the BLM subsequently entered into a land swap with the company, leaving the State to deal with

the on-going reclamation and water management issues at the mine. To date, approximately \$500,000 in public funds have been spent on an EIS to develop a new reclamation plan for the site because water treatment issues were not anticipated in the original mine permit.<sup>6,7</sup>

### **Impacts of Historic Abandoned Mines**

In addition to these modern mine disasters, the State of Montana has also inherited a vast legacy of historic abandoned mines. The state conducted a comprehensive inventory of the abandoned hardrock mines on federal, tribal, state and private lands to determine where the problem sites were and to develop a comprehensive plan to address the pollution and health risks from these mines. There are 6,000 inventoried abandoned mines scattered around Montana in our old mining districts, including 350 or more sites that are top priority for restoration because of the ongoing safety risks or the amount of pollution generated by the mine.

These 6,000 old mines pose many hazards, ranging from physical and health hazards from open mine shafts or exposure to toxic materials to environmental hazards such as water contamination from mine tailings or waste rock. According to the Montana Department of Environmental Quality, over 3,700 miles of rivers and streams in Montana are polluted by metals, primarily from abandoned mines.<sup>15</sup>

To date, the State has spent \$26,748,276 for historic abandoned mine cleanup, and it estimates the unfunded cost of remediation for the 350 top priority mines at \$91,815,000.<sup>16</sup> Our state agency estimates that it will cost our taxpayers hundreds of millions of dollars to clean up all the problem mine sites identified around Montana.

The state of Montana has been able to find a small amount of federal, state and local funds to address the water quality and safety issues at some of the state's abandoned hardrock mine sites, approximately \$3.5 million a year. This funding is provided largely by federal grants derived from a tax on coal under the Surface Mining Control and Reclamation Act of 1977 (SMCRA). It is not enough to address the serious problems posed by abandoned mines in Montana, and the tremendous backlog of sites in need of timely remediation. Montana's abandoned mine lands program is an effective program with demonstrated on-the-ground successes. Yet, the limited funding available to the State, allows the program to remediate only a few sites each year. The following examples highlight the problems and the need for funding:

#### ***Silver Creek, Marysville***

Abandoned mines in the Marysville area north of Montana's capitol city have caused extensive mercury contamination in the area, precluding land development and presenting public health risks. Mine pollution has also contributed towards the degradation of area streams, particularly from mercury. The State has issued a fish consumption advisory warning the public of the health hazards associated with eating fish from Silver Creek. Mine cleanup costs are projected at \$4 million.<sup>17,18</sup>

### ***McLaren Tailings, Cooke City***

The New World Mining District has been extensively damaged by historic mining. One of the sites, the McLaren Mill, regularly experienced overflows from the tailings impoundment downstream into Yellowstone National Park.<sup>19</sup> By the late 1960s, Soda Butte Creek was considered the most polluted stream entering Yellowstone National Park, adversely affecting the fish producing capacity of Soda Butte Creek within the Park. Some initial remediation work was done in 1969, but current studies show that the McLaren Tailings Site remains a significant source of acid drainage and heavy metal pollution to Soda Butte Creek.<sup>20</sup> The Montana AML program projects the cost of mine cleanup at \$4 million.<sup>21</sup>

### **Superfund Program**

A number of Montana's more egregious mine sites have been designated Superfund Sites on the National Priority List. Funding for cleanup of these sites has seriously declined in recent years. The tax that supports the federal Superfund Trust Fund hasn't been collected for 10 years, and very little money remains in the fund. The following example demonstrates the real need for reclamation funding.

### ***Ten Mile Creek***

Montana's state capitol, the City of Helena, obtains 70% of its municipal drinking water from the Ten Mile Creek watershed, which also contains an estimated 150 abandoned hardrock mines. During heavy rains or spring runoff, the mines and their associated waste piles and tailings contribute to the contamination of surface water, groundwater, and stream sediments throughout the drainage basin of upper Ten Mile Creek and its tributaries.<sup>22</sup>

The EPA has determined that these mines pose a current and potential threat to human health and the environment. In 1999, the drainage was added to the EPA's National Priorities List for Superfund cleanup. Cost for cleaning up 70 of the 150 sites is calculated at \$22,427,000<sup>23</sup>, of which the State of Montana must contribute 10%. The availability of funds has been piece-meal at best. Much more remains to be done and cleanup is occurring at taxpayer expense.

### **Economic Benefits of Cleanup**

The benefits accrued from abandoned mine cleanup go far beyond the benefits to public health, safety and the environment. Removing the messes of a hundred years of mining takes millions of dollars. Those millions create hundreds of jobs. Across Montana, consultants, engineers and construction crews are rebuilding streams, removing contaminated soils and planting new vegetation. These projects represent a net injection of new funds into Montana's economy. Abandoned mine cleanup provides substantial economic benefits, and many of the jobs are created in rural areas. According to the federal Office of Surface Mining (OSM), the economic impact from abandoned mine remediation projects completed in Montana in 2004 totaled \$5.9 million.<sup>24</sup> The projected economic benefit of the McLaren Tailings cleanup project is \$8 million in generated income and 280 jobs.<sup>25</sup> The projected economic benefit of the Silver Creek is \$7.4 million and 260 jobs.

### **Places at Risk: Yellowstone National Park**

Montana also offers a compelling example for the need for the discretionary provisions in H.R. 2262. Crown Butte Mines, a subsidiary of a Canadian mining company proposed a massive gold, copper and silver mining enterprise on National Forest Service and lands patented under the 1872 Mining Law in Montana, adjacent to Yellowstone National Park. The proposed mine straddled three watersheds. One watershed drains into an adjacent wilderness area, another drains into the only Wild and Scenic River in Wyoming, and the third drains into Yellowstone National Park. The project was highly controversial given the potential damage that could occur to the water, recreational assets and wildlife habitats in and around the Park. Despite the clear risks to one of the nation's most treasured sites, federal land managers maintained that under the 1872 Mining Law they had no choice but to permit the mine. It took intervention by President Clinton in 1996 to stop the mine – at a cost of over \$65 million to the U.S. taxpayer.

We are proud of our abandoned mine program in Montana. We have been able to complete the inventory of abandoned mines. We know where the highest priorities are for restoration of lands and rivers. Montana's abandoned mine program is a model for other states.

It is now up to Congress to create a comprehensive program for abandoned mine restoration in the West. In order for this program to be successful, it needs to be funded. And it should be funded by the mining industry that caused the damage in the first place, otherwise the burden falls to the taxpayer to carry hundreds of millions of dollars of clean up costs.

### **Recommendations for Committee Action:**

#### ***Generate Funding for Clean-up of Existing Mine Sites***

As in many arid western states, water is critical for Montana's economic success. Access to clean water is one of the economic drivers in the western part of our state and the scarcity of useable water has contributed to population outmigration and economic declines in the drier regions. But, as you can tell from the examples in this testimony, many Montana citizens are paying a high price to protect and reclaim sources of water. Ranching families strive to protect their livelihood; native communities struggle to preserve their remaining water supplies; sportsmen work to restore damaged fisheries; and cities pay to remediate their drinking water aquifer.

Montana faces funding challenges for reclamation and long term water treatment resulting from modern *and* historic abandoned mining operations. We anticipate costs of well over \$180 million for just the sites I've mentioned in my testimony. This conservative estimate includes resources that have already been allocated and projections for future needs. For too long, mining interests have been able to extract U.S. minerals from public lands for free. A royalty levied against the hardrock mining industry, as provided for in H.R. 2262, is an equitable and appropriate way to generate revenue to fund the clean up our treasured rivers and streams and reclaim lands for the protection of

public health and the benefit of Montana's wildlife. Congress should look for as many opportunities as possible, like a new royalty on hardrock mining, to create a revenue stream for restoration of these old mines. This program will create jobs in Montana in land and watershed restoration and provide a lasting benefit for Montana communities.

***Protect State Resources and Prevent Future Problems:***

At the same time that funding is urgently needed to address the existing mine reclamation and water treatment issues, it is equally important that measures be taken now to prevent future problems. Under the 1872 Mining Law, federal land managers are forced to prioritize mining over all other land uses. While this may have seemed reasonable a century ago, it doesn't provide for sound public land stewardship today. Land managers must have the discretion to balance mining with other land uses, and the ability to protect important public resources such as Yellowstone National Park. HR 2262 will provide much needed balance to the management of our public lands by requiring the Interior Secretary to assure that mining is conducted in a manner that recognizes the value of such lands for other uses such as wildlife habitat, recreation, agriculture and water supplies.

HR 2262 will also return balance to the management of our public lands by establishing operation standards and reclamation criteria for hardrock mining. It's clear that the existing patchwork of federal laws does not provide sufficient protection to our nation's waterways and puts downstream families, fisheries, wildlife and water supplies at risk. A recent scientific study that analyzed water quality impacts from twenty-five representative hardrock mines around the west found that 76% of those exceeded water quality standards due to mining activity.<sup>26</sup> A solid framework of federal laws -- specific to the impacts of modern hardrock mining -- will better protect our natural resources and reduce the number of future liabilities.

It is crucial that Congress address the enduring legacy of hard rock mining's impacts on our nation's fish and wildlife and other natural resources now. The dramatic increase in commodity prices is currently driving a new "gold rush" across the west, including Montana. The number of mining claims staked on public lands in Montana has increased dramatically, jumping from 617 new claims filed in 2002 to 3,012 new claims filed in 2006 (September).<sup>27</sup>

Although mining activity on public lands has polluted Montana waters, harmed wildlife and left taxpayers with significant cleanup costs, government oversight remains stuck in the 19th Century. Unless something is done now to address the substantive inadequacies of the 1872 Mining Law, these may be the abandoned mine land problems of the future.

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<sup>1</sup> Kuipers, P.E., Jim. "Nothing New Here: A Technical Evaluation of Initiative I-147. September 2004.

<sup>2</sup> U.S. BLM, Action Memorandum for Zortman and Landusky Mines Time Critical Removal. June 2004

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- <sup>3</sup> Final Supplemental EIS for the Zortman and Landusky mines, Phillips County, Montana, MDEQ and BLM, December 2001.
- <sup>4</sup> U.S. BLM, Action Memorandum for Zortman and Landusky Mines Time Critical Removal. June 2004
- <sup>5</sup> Ibid.
- <sup>6</sup> Ibid.
- <sup>7</sup> Mitchell, Larry, "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004. And, House Bill 379: <http://data.opi.state.mt.us/bills/2005/billhtml/HB0379.htm>
- <sup>8</sup> Action Memorandum for Beal Mountain Mine Time Critical Removal. Beaverhead-Deerlodge National Forest, Silver Bow County, Montana, July 2003.
- <sup>9</sup> Aquatic Hazard Assessment for Selenium in the German Gulch subwatershed, Based on 2001 and 2002 Data. Prepared January 2003 by Tim LaMarr, Reviewed by Dennis Lemly.
- <sup>10</sup> Mitchell, Larry, "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004.
- <sup>11</sup> Backus, Perry. "Mine Still Causing Trouble" Missoulian, January 2, 2006.
- <sup>12</sup> Mitchell, Larry. "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004. And, Vic Anderson, Montana Dept. of Env. Quality, personal communication Aug. 25, 2006.
- <sup>13</sup> Kuipers, P.E., Kuipers and Associates, "Nothing New Here: A Technical Evaluation of Initiative 147. September 2004.
- <sup>14</sup> Montana DEQ, Notice of Violation and Administrative Order, Docket No. WQ-98-06
- <sup>15</sup> Sonja Lee, "State Hits Cleanup Pay Dirt", Great Falls Tribune, December 11, 2005.
- <sup>16</sup> Vic Anderson, MT DEQ Abandoned Mine Lands Program, Pers. Comm. Sept. 27, 2002.
- <sup>17</sup>
- <sup>18</sup> Office of Surface Mining Reclamation and Enforcement, Annual Evaluation Summary Report for the Mine Waste Cleanup Bureau's Abandoned Mine Land Program for the State of Montana, 2004.
- <sup>19</sup> Draft Final EECA for the McLaren Tailings Site, Prepared for Montana DEQ, May 2002.
- <sup>20</sup> Ibid.
- <sup>21</sup> Vic Anderson, Montana Abandoned Mine Land Program, Pers. Comm. Sept. 27, 2007.
- <sup>22</sup> U.S. EPA, October 2001 Proposed Plan Upper Tenmile Creek Mining Area Site.
- <sup>23</sup> Ibid.
- <sup>24</sup> Office of Surface Mining Reclamation and Enforcement, Annual Evaluation Summary Report for the Mine Waste Cleanup Bureau's Abandoned Mine Land Program for the State of Montana, 2004.
- <sup>25</sup> Ibid.
- <sup>26</sup> Kuipers P.E., Jim and Ann Maest, "Comparison of Predicted and Actual Water Quality at HArdrack Mines: the Reliability of Predictions in Environmental Impact Statements" 2006.
- <sup>27</sup> U.S. Bureau of Land Management, Claims Data