

**Peru Creek Basin Site Assessment
Summit County, Colorado
Brownfields Assessment Demonstration Pilot**

Location: Peru Creek Basin is located in Summit County, Colorado. It is a high altitude basin tributary to the Snake River, and has been the site of hard-rock mining since the mid-1800's.

Pilot Area Population: The pilot area contains two permanent residences and numerous summer cabins and shelters on public and private lands. Year-round population in the Snake River Basin, downstream of Peru Creek, is 2,939. Seasonal peak population, including resort and second home use, in the Snake River Basin is 24,800.

Applicant: Summit County, Colorado
Open Space and Trails Department

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Project Period: May 1, 2001- May 1, 2003

Community Background:

	Summit County		Snake River Basin
Median Family Income:	\$64,600	Housing Units	5,808
Per Capita Income:	\$30,894	Permanent Population:	2,939
Persons below Poverty Level:	7.8%	Second Home Population:	14,862
Unemployment Rate:	2.2%	Peak Population	24,800
Home Ownership:	48.2%		

Statistics compiled by Summit County Government from Census, HUD, and other sources

Cooperative Partners:

**Colorado School of Mines
Keystone Center
Northwest Colorado Regional Council of Governments
Snake River Watershed Task Force
Trust for Land Restoration
United States Forest Service**

PROJECT OVERVIEW

Total Request:	\$250,000 (\$200,000 Brownfields Pilot, \$50,000 Greenspace)
Non-Cash In-Kind Match:	\$ 50,000
Non-contributing Match:	\$170,000 US Forest Service In-Kind Match
Total Project:	\$470,000

Background and Overall Goals:

The hardrock mining industry played a major role in the economic development of the West. Unfortunately, the hardrock mining industry left the West with a legacy of contaminated inactive and abandoned mine sites that lay idle and continue to degrade our environment. These contaminated mine sites are the Brownfields of the rural West. The clean up, reuse and revitalization of rural lands contaminated by mining is often hampered by the same liability concerns that encumber urban lands. While the USEPA's Brownfields Program has successfully encouraged revitalization of Brownfields in urban areas, there remains a profound need to encourage the use of Brownfields techniques in rural and natural settings such as those impacted by the mining industry.

Peru Creek is a tributary to the Snake River, in Summit County, Colorado. The Snake River terminates in Dillon Reservoir, a principle domestic water storage impoundment owned by the City of Denver. About 3,000 people live year-round in the Snake River Watershed, though resort use, particularly in the winter, frequently swells that number to over 20,000.

Mining and its associated acid mine drainage have significantly impacted Peru Creek. Peru Creek has been identified as the primary source of metals loading into the Snake River, although there are currently no pending EPA enforcement actions. Peru Creek is listed as a Clean Water Act 303(d) "Water Quality Limited" stream, requiring a yet-to-be conducted TMDL assessment.

Community attempts to remediate environmental problems associated with contaminated sites within the Peru Creek Basin date back more than a decade. Unfortunately, the fear of potential environmental liability has stymied these activities. Like many other places in the West, important environmental laws have had the unintended consequence of actually discouraging well-meaning clean-up efforts. For instance, the strict and retroactive liability imposed by the Comprehensive Environmental Liability and Compensation Act (CERCLA) and the Clean Water Act (CWA) have deterred developers and "Good Samaritans" from acquiring and voluntarily cleaning up abandoned and inactive mine sites.

Summit County, through this Peru Creek Basin Site Assessment, proposes to conduct environmental site assessments and legal analysis of about 1200 acres of privately held mining claims located in a high elevation, sub-alpine basin of central Colorado, so that stakeholders can have the information that is required to apply accepted and proven Brownfield liability management techniques to clean up and preserve contaminated sites within the basin. This assessment represents a dynamic community-based environmental protection project, involving local and state government, the US Forest Service, a non-profit land trust, academia, and a diverse group of stakeholders. Federally owned lands, administered by the US Forest Service, comprise over 80% of Peru Creek Basin. Summit County is the second largest

landowner. The County has successfully transferred some of its Peru Creek properties to the Forest Service in the past, but contamination and liability issues are preventing this activity from continuing. Summit County would like to use its Open Space funds to acquire other mining claims for trade to the Forest Service. These trades, too, have been stopped by liability concerns.

This pilot project will create economic benefit in Summit County by improving and restoring the natural ecosystem and thereby enhancing recreational opportunities. Another important aspect is the benefit to disadvantaged populations, living either in close proximity or downstream of contaminated mine sites throughout the West, by demonstrating liability risk management associated with the clean up and restoration of inactive and abandoned mine sites. Through the use of Brownfields tools to clean and remediate, the applicant proposes to develop solutions that may help overcome a major barrier that has inhibited the clean up and redevelopment of abandoned and inactive mine sites throughout the country.

In addition to understanding and managing CERCLA liability, analysis of many of the sites in Peru Creek will need to consider liability associated with the Clean Water Act (CWA). Like many Brownfields sites, some of the residual contamination from past industrial activities in the Peru Creek Basin may be causing un-permitted discharges of pollutants in violation of the CWA. Congress has considered amending the CWA by adding a “Good Samaritan” provision to encourage the clean up of contaminated sites that present potential CWA liability issues. Additional study of these issues in a Brownfields context may help to highlight the need for these amendments.

The sub-applicant for this grant is the Trust for Land Restoration (TLR). TLR is a 501(c)(3) land trust whose mission is to manage environmental liability so that significant lands degraded by mining can be restored and conserved. Summit County and TLR have chosen Peru Creek to develop a model of successful environmental liability management.

TLR was incorporated in 1999, and is directed by a Board with expertise in mining, environmental restoration, law, real estate, government relations and non-profit land conservation. Recognizing that important land conservation efforts are almost always stymied when mined land liability issues present themselves, TLR has sought to find a path through the regulatory maze by cooperating with regulators, local governments, the legal community and other land trusts to develop and share environmental liability management techniques. TLR has made presentations to the Land Trust Alliance at its national conference, and to the Colorado Coalition of Land Trusts. They drafted their own environmental liability management policy (attached) and have written a legal paper on the topic (which is currently out for review). They have consulted with other land trusts in Colorado, Idaho, Montana and Alabama, with the BLM, and with several local counties in Colorado, including Summit County. TLR is currently developing a website: www.restorationtrust.org.

An important element of the proposed Peru Creek Basin Pilot Assessment will be the liability analysis performed by TLR. Attorneys for the Trust will help analyze the results of environmental assessments, conduct landowner interviews, review chain of title, provide legal analysis and opinion, and perform other due diligence tasks that will provide the basis for site prioritization that is a core task of this project.

Project Specific Objectives: This project will assess, identify, characterize, and plan response activities to address mining-related contamination and to revitalize land in the Peru Creek Basin. The specific objectives for the EPA-funded aspects of this project include:

- 1) Gather existing data and conduct a preliminary environmental assessment of the private property within the basin;
- 2) Prioritize sites on the basis of the preliminary assessment and conduct a Phase I and II environmental assessment for highest priority sites;
- 3) Conduct a legal analysis and liability assessment of potential environmental liabilities at the highest priority sites;
- 4) Develop remediation plans for highest priority sites; and
- 5) Develop the results of the assessment as a demonstration model and conduct a program of education and outreach.

The ultimate goal of taking these specific measures will be to allow Summit County, in cooperation with the Trust for Land Restoration, the US Forest Service, the Colorado Department of Public Health and Environment and other stakeholders, to remediate and acquire prioritized properties, and to transfer those properties to the Forest Service. Remediation will reduce existing contamination and significant metals loading to Peru Creek, restore habitat, and allow for the re-use of degraded and contaminated land.

Greenspace

The Greenspace goal of this assessment is to identify and assess specific properties to be acquired with Summit County Open Space funds and transferred into Federal ownership. These specific properties are a high priority for the US Forest Service as public access points to National Forest lands, and would allow for the development of a trailhead parking area to access the popular Argentine Pass Trail and its connection the Continental Divide Trail. Consolidating Federal ownership in this scenic valley has the added benefit of reducing the threat of habitat fragmentation from cabin and second home development and preserving open space and wildlife habitat.

Project Strategy

The overall strategy is to work cooperatively with landowners, the Trust for Land Restoration, the Colorado Department of Health and Environment, the USEPA, the United States Forest Service, the Colorado School of Mines, the Snake River Basin Task Force, and other stakeholders to assess environmental conditions, land ownership, regulatory constraints, laws and liability issues in the Peru Creek Basin, and design and develop appropriate remediation and acquisition strategies that include Brownfields techniques and tools. These strategies will be developed as a model for use at other abandoned hardrock mining properties in the West where similar issues hamper well intended clean up and revitalization.

Authority:

All environmental assessment and clean-up activities related to this project will be conducted in cooperation with the Colorado Department of Public Health and Environment and USEPA. The applicants will cooperate with private property owners and the US Forest Service to utilize Colorado's Voluntary Clean Up Program and the tools set forth in the USEPA's Handbook of Tools for Managing Federal Superfund Liability Risks at Brownfields and Other Sites to safely identify, assess, prioritize and plan responses for contaminated sites within the Peru Creek Basin.