Lefthand Watershed Revitalization Project
Boulder, Colorado

Land Revitalization = Remediation, Restoration and Reuse

More than 100 years of mining activities in the mountains immediately west of Boulder, Colorado have resulted in heavy metal and other mining-related contamination scattered throughout the Lefthand Creek watershed. The Lefthand Watershed Pilot will provide a model for a multi-program approach to addressing pollution problems found in a watershed impacted by abandoned mines and an industrial manufacturing site and resulting in achievement of water quality goals in impaired stream segments.

Acidic pond at foot of bright white fluorite waste from Burlington Mine.

Background

The mining legacy in the Lefthand Watershed has left the local communities with environmental issues that EPA, Colorado Department of Public Health and Environment (CDPHE), Boulder County Health Department (BCHD) and the Lefthand Watershed Oversight Group (LWOG) are working to address in a collaborative process that encourages efficient, cost–effective and workable solutions. Issues and activities include:

- Little James Creek listed as impaired due to elevated levels of cadmium, copper, iron, lead, manganese, and zinc and low pH
- Captain Jack Mine site recently listed on the NPL
- 319 Nonpoint Source grant for habitat restoration related to off-road vehicle use and related sedimentation
- RCRA Corrective Action at downstream Raytheon facility
- Abandoned underground storage tanks
- Voluntary Cleanup by Honeywell Corp. at Burlington Mine, Jamestown, Colorado
- USFS non-time critical removals in areas around Jamestown
- USFS remedial investigations of sedimentation due to off-road vehicle impacts and historic mining at the Fairday, Bueno and Golden Age Mines
- Targeted Brownfields assessment at Argo Mine

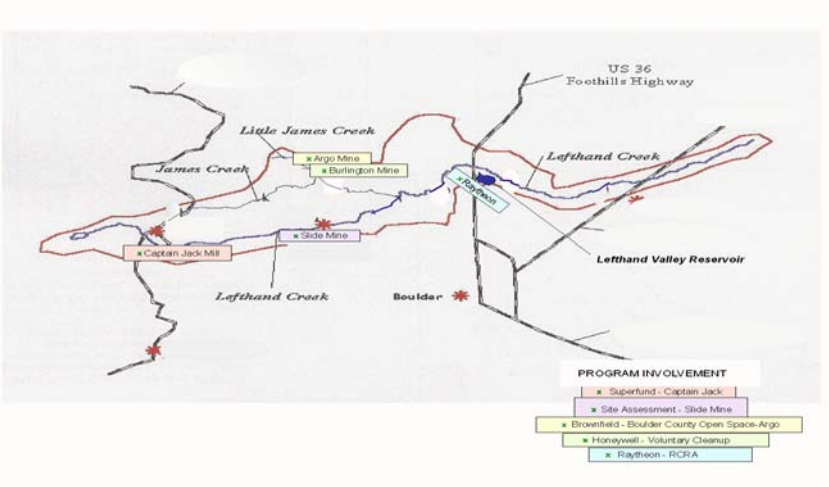
In March 2000, Boulder County Health Department (BCHD) agreed jointly with Colorado Department of Public Health and Environment (CDPHE) and EPA to assume a leadership role in substantively involving the community in further investigations, cleanup and related activities. A new stakeholder group, the Lefthand Watershed Oversight Group was formed to develop a watershed plan to direct future efforts at cleaning up mine wastes. In the summer of 2003, the Lefthand Watershed Oversight Group was awarded two years of funding ($25,000) through the State's Nonpoint Source Council.
http://www.co.boulder.co.us/health/environ/lefthand_report.html

Stakeholders

- Federal partners include EPA Region 8 Brownfields, One Cleanup and Land Revitalization, RCRA Corrective Action, Superfund, Water programs (TMDLs, 319 Non-Point Source), U.S. Forest Service, U.S. Geological Service.

- Partners within the Colorado Department of Public Health and Environment include the Brownfields/Voluntary Cleanup, Superfund, and Water programs (TMDL, 319 Non Point Source).

- Local partners include the Boulder County Health Department, Boulder County Open Space, Lefthand Watershed Oversight Group, James Creek Watershed Initiative.



Key Activities

The following activities are currently being executed as part of this multi-agency and community pilot:

- Multi-agency information sheet developed
  - < background on State and Federal programs
  - < summary of historic and current site assessments
  - < identification and description program funding opportunities

- Coordination of multi-agency and stakeholder supported bi-annual sampling (USGS, USFS,CDPHE, BCHD, EPA, University of Colorado, RiverWatch)
  - < multi-agency sampling and analysis plan to ensure data compatibility
  - < quantified loading assessment

- Dynamic watershed database with mapping capabilities
  - < consistent naming conventions by all agencies and stakeholders
  - < single repository for all watershed data

Project Goals

The 2002 Lefthand Watershed Task Force identified the need for a comprehensive, systematic study of the entire watershed in order to establish:

- the exact extent of potential risks to aquatic life and human health;
- the potential effects on water quality of a catastrophic storm or similar event;
- the source(s) of contaminants;
- the appropriate remediation strategies to remove contaminants.

This community-based watershed effort will utilize watershed-based data and solutions to make site-specific cleanup decisions. The **goal** of the watershed-based assessment is to provide a transparent and efficient cleanup in partnership with the community and local, state and federal agencies in order to meet state water quality standards that protect human health and the aquatic environment.

For additional information:

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