

# Lefthand Creek Watershed Updates

## New Organization Formed to Monitor Captain Jack Mill Superfund Cleanup

Local citizen volunteers have formed the Lefthand Creek TAG Coalition (LCTC) to monitor the Superfund cleanup of the Captain Jack Mill site located just outside the town of Ward. Those involved in the organization are residents who live downstream of the site, drink Lefthand Water District Water, or like to recreate around Lefthand Creek. Aided by a Technical Assistance Grant (TAG) of \$50,000 from the Environmental Protection Agency, LCTC will hire an independent technical advisor to help interpret and comment on site-related information. LCTC is looking for more concerned community members to get involved by serving on the Board of Directors or by signing up for the mailing list. If you are interested, please email board president Jan Toniazzo at [left\\_hand\\_TAG@yahoo.com](mailto:left_hand_TAG@yahoo.com).

## Slide Mine to be Addressed Through Colorado's Voluntary Cleanup Program

The Gold Reef Mining Company has submitted a Colorado Voluntary Cleanup Program application for the Slide Mine, located just outside of Rowena. For information about the mine, application or cleanup, please contact the LWOG coordinator at [left\\_hand\\_water@yahoo.com](mailto:left_hand_water@yahoo.com).

## The Lefthand Watershed Oversight Group

P.O. Box 1074  
Niwot, CO 80544-1074

## James Creek Watershed Initiative Update

The James Creek Watershed Initiative was formed in 1997 as a citizen based conservation group committed to engaging the local community in protecting and restoring the waters of James Creek and the surrounding forest. During the spring of 2005 they have taken direct action to accomplish the following projects:

- James Creek Restoration Project – JCWI and its partner, Wildlands Restoration Volunteers, organized over 70 volunteers to stabilize stream banks with willow plantings, improved road drainage with finishing the water bars, and planted native seed along the 3-mile stretch of County Road 102J along James Creek.
- Overland Fire Tree Project - On April 9th they distributed 800 ponderosa pine seedlings to victims of the 2003 Overland fire to reforest their private land.
- Mulch the Gulch Project – On June 11<sup>th</sup> and 18<sup>th</sup> they worked together with the Jamestown Volunteer Fire Department to haul and spread 170 bales of straw in the gulch that flooded Jamestown during 2004 in an effort to prevent further soil erosion.

For more information about James Creek Watershed activities, please contact Executive Director Colleen Williams by email at [echoice@aol.com](mailto:echoice@aol.com).



# Creek Connections

The Newsletter of the Lefthand Watershed Oversight Group

Issue 3, August 2005

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## Brief LWOG Updates

### New LWOG Website

Thanks to volunteer Bruce Cortis, LWOG has a new and very much improved website. For information about the Lefthand Creek watershed and upcoming events, please visit us online at [www.lwog.org](http://www.lwog.org). We are happy to post any updates from our partners, as well as important information about what is happening in the watershed. If you or your organization is interested or have any questions, please contact Elizabeth Russell at [left\\_hand\\_water@yahoo.com](mailto:left_hand_water@yahoo.com).

### LWOG Now Tax-Exempt

LWOG board members are excited to announce that the organization has officially received federal 501(c)(3) tax status. This means that all contributions to LWOG are tax-exempt. Board members will be working on projects and seeking tax deductible donations for the coming year. For information about how to become a member of LWOG, please see page 3.

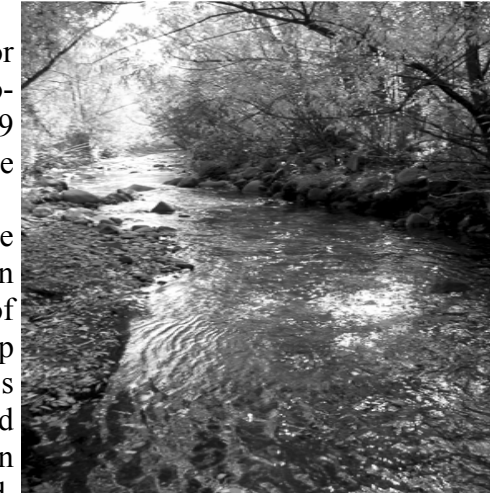
## LWOG Completes Lefthand Watershed Plan

By Elizabeth Russell, LWOG

LWOG recently completed a plan for the Lefthand Creek watershed. The two-year project was funded by a Section 319 Non Point Source Grant that the organization received in 2003.

The watershed plan is a review of the various issues affecting water quality in the watershed, as well as synthesis of existing information that will help provide a cohesive strategy to address problems, especially those associated with past mining operations. The plan will enable LWOG to provide educated, data-based recommendations regarding watershed management to local landowners, water users, water rights owners, and government officials at the local, state, and federal level.

The watershed plan is available on the LWOG website at [www.lwog.org](http://www.lwog.org). To receive a CD version of the plan, please contact Elizabeth Russell at [left\\_hand\\_water@yahoo.com](mailto:left_hand_water@yahoo.com)



Lefthand Creek just west of Highway 36

## Captain Jack Superfund Cleanup Underway

By Cathy Schuster, CDPHE

The investigatory stage at the Captain Jack site is well underway, and initial results were presented at a public meeting held on June 27 at Camp Tahosa. The consensus was that it was a useful forum, with additional meetings to be planned as the Superfund process progresses.

The Captain Jack Mill site investigation has been ongoing since late last summer and included sampling of the surface and ground water on approximately a quarterly basis, along with an extensive soil and plant-sampling program. Bug sampling data taken by LWOG in 2001-02 will be included as part of the analysis. An underground investigation was conducted in the White Raven, Black Jack and Big Five tunnels, as well. After a final round of water sampling, the site investigation will be completed.

Preliminary findings indicate exceedances of lead, arsenic and thallium in the soil and manganese, cadmium and copper in the water. The underground investigation at the Big Five Tunnel came to an end when the team encountered a collapse at 850 feet within the tunnel. Discussions are taking place between The Colorado Department of Public Health and Environment and U.S. EPA regarding how and when to address the situation in the Big Five Tunnel.

For further information contact Cathy Schuster at the Colorado Department of Public Health and Environment at 303-692-3308 or Rob Henneke at the U.S. EPA at 303-312-6734.



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# Honeywell Completes Voluntary Cleanup of the Burlington Mine Site

By Elizabeth Russell, LWOG

Honeywell's cleanup of the Burlington Mine outside of Jamestown has been completed. The company spent nearly \$2 million over the four year process, which was done through Colorado's Voluntary Cleanup Program. The mine operated from 1914 through the early 1970s and the principal ore mined was fluorspar, though other minerals were extracted, as well. The site has been a concern for local residents for years because of the dangerous pits and holes, as well as the acid mine drainage flowing from the mine into Little James Creek, which is a drinking water source for Jamestown.

Honeywell addressed the major public health and environmental hazards associated with the site. The entire mine site was fenced and all of the hazardous openings were closed. Thirty-five thousand cubic yards of wasterock were pulled back from Balarat Creek and moved to engineered repositories. There the wasterock was neutralized with lime and re-vegetated to help prevent future damage to water quality.

Prior to the cleanup, a large subsidence pit existed on the site. Balarat Creek used to flow into the pit, through the mine workings, and out into a mine pond, causing acid mine drainage to flow into Little James Creek. The pit was filled in and Balarat Creek was diverted around the area. This reduced the flow of polluted water from the mine pond from a high of 1000 gallons per minute to five gallons per minute.

It is possible that there will be further cleanup action at the mine in the future. Honeywell continues to evaluate the mine pond discharge to see its impact on Little James Creek. The company is also working on a treatability study to determine potential treatment options for the mine pond discharge.



Before: This large open subsidence pit was one of the many on-site hazards at the Burlington Mine.



After: The open pit was filled in and Balarat Gulch, which used to flow into the pit, was diverted.

## Group Helps Jamestown Develop Plan to Protect Public Drinking Water Source

By Gary Vanderslice, Colorado Rural Water Association

The Colorado Rural Water Association (CRWA) is providing free services to the Town of Jamestown for development of a source water protection plan for their public drinking water system. In a nutshell, CRWA's role is to provide expertise regarding protection options, and to act as a catalyst for source water protection of drinking water sources.

The plan being developed will identify specific issues and protection measures to maintain or improve quality of the untreated source water. Due to its relatively small size, Jamestown's source water area has a "moderately-high physical setting vulnerability" rating, which means that nearly any contaminant release

in the source area has the potential to negatively impact the water source.

The project area includes the James Creek Watershed and South Saint Vrain Creek Watershed located upstream from Jamestown. The Lefthand Water District and City of Boulder are other public water systems with a significant interest in this project. Collaborators involved with the project are LWOG, James Creek Watershed Initiative, Boulder County, U.S. Forest Service, and the Colorado Department of Public Health and Environment Water Quality Control Division.

Over the next few months, CRWA will write the initial protection plan, turn it over to a local steering committee, and then provide assistance with implementing the plan. For more information please contact Gary Vanderslice at garyvanderslice@msn.com or (303) 776-9888.

# New CU Metal Content Study Begins in the Lefthand Creek Watershed

By Susan Baults, University of Colorado

A University of Colorado research team, led by Professor Joseph Ryan and master's degree candidate Susan Baults, is currently conducting a study of the metal content within macroinvertebrates, water and sediments throughout the Lefthand Creek watershed. This summer and fall, look for students along the James, Little James, and Lefthand Creeks sporting waders and carrying nets and buckets.

This work is being conducted as part of an outreach project with LWOG funded by Section 319 grant from the Colorado Non-Point Source Council, as well as a U.S. EPA Regional Geographic Initiative grant that LWOG received last year. The final results will be incorporated into the Lefthand Watershed Plan, which has just been completed by LWOG. The watershed plan synthesizes existing information and provides a cohesive strategy to address the problems in the Lefthand Creek watershed.

Last year, Alice Wood, the former coordinator for LWOG and a recent Master of Science graduate of the University of Colorado, conducted metal loading tracer tests at high and low flow conditions at various locations of concern in the watershed. The study revealed that abandoned hard rock mines and waste rock piles affect the stream water quality in the watershed. A limitation

of metal loading tracer tests is that they record metal contributions only from tributaries and groundwater entering the stream during the times of the tests. Heavy rainfall and rapid snow melt may also carry metals to the streams, but these metal loadings have proved to be difficult to sample because of their short durations. Therefore, LWOG proposed to measure the metal concentrations in benthic macroinvertebrates living in the stream sediments as indicators of intermittent metal contributions to the streams.

Macroinvertebrates, or fly larvae in this case, are excellent indicators of metal loading in streams. The larvae live a majority of their lives on the bottom of streams, otherwise known as the benthos where they are subjected to any type of contamination that may be present, in this case metals. Certain species of larva characteristically hold a high tolerance for metals, which means they can survive in pristine as well as metal contaminated areas. A collection and tissue analyses of these types of larvae can quantify metal exposure throughout their lifetime within the stream.

Abandoned mine sites and waste rock piles within the watershed can be prioritized for remediation using the results from this macroinvertebrate study in conjunction with water and sediment analyses.

## You Can Help the Lefthand Creek Watershed!

LWOG is a community-based non-profit organization whose mission is to assess, protect, and restore the quality of the Lefthand Creek watershed, and to serve as a hub of communication about watershed issues through the fostering of stakeholder collaboration. You can help LWOG's continued efforts to protect the watershed by becoming a supporting member.

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Yes, I'd like to be a volunteer!

Please make checks payable to LWOG. All contributions to LWOG are tax deductible. Thanks for your support!  
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