

Researchers to test for contaminants in Coal Creek water

EPA studies samples this weekend

by Aleesha Towns

Students and faculty from the University of Colorado at Boulder will spend this weekend waist-deep in Coal and Elk creeks, collecting samples that will help determine the best sites to study water quality in the future.

The study, which was pursued by the Coal Creek Watershed Coalition, is being headed by University of Colorado professor Joe Ryan. The university donated approximately \$16,000 to the project while the U.S. Environmental Protection Agency agreed to test the samples gathered by Ryan's five-person team.

The Coal Creek Watershed Coalition was founded last year with the goal of restoring the water in Coal Creek to support aquatic life. Currently water in Coal Creek is safe to drink; however, elevated levels of zinc prevent aquatic life from flourishing in the water body, which runs through town.

Ryan says the survey will help provide the watershed coalition with a base of information on the creek's health.

Plus, the information will be gathered from a source that doesn't have any jurisdiction over Coal Creek. "The study will help the watershed coalition and the community can have an extra level of confidence knowing that this is coming from a source that isn't biased," Ryan says.

To conduct the testing, Ryan says, his team will take samples from up to 100 sites along a six-mile stretch of Coal Creek. The results will be used to map where the metals are coming from and will provide the Coal Creek Watershed Coalition with essential information for planning clean-up initiatives.

In addition, the team will introduce a lithium sodium compound into the water that will allow them to determine where underground tributaries enter the stream and what metals—if any—those hidden water bodies are carrying.

"We use lithium chloride as the tracer for two reasons," Ryan explains. "One, it is easy to detect because natural concentrations of lithium are so low, so we can easily measure the lithium that we add, and two, it is harmless to the aquatic organisms and humans at the concentrations we use and with the amounts of sodium present in the stream water."

The university team will also test waters in Elk Creek, which flows from the abandoned Standard Mine. Elk Creek flows through the mine site and along the surface impoundment depositing heavy metals into Coal Creek, which runs through Crested Butte until it meets the Slate River.

As a result, there is a potential threat to downstream water users from the Standard Mine, which was called the most environmentally degraded mine site in the entire Ruby Mining District by a report from the Colorado Geological Survey.

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The mine is on 10 acres in the Ruby Mining District of the Gunnison National Forest, approximately 30 miles north of Gunnison and 10 miles west of the Town of Crested Butte. Depending on the season, the Standard Mine releases 100 to 200 gallons per minute on one to 10 gallons per minute of groundwater from the abandoned mine site into Elk Creek.

Coal Creek Watershed Coalition board member Steve Glazer says the testing will be very valuable to the local coalition. "It will help us narrow our focus to see where metals are coming from," he says. "We don't know what it's going to tell us but it's likely to raise questions that will warrant further investigations."

The next meeting of the Coal Creek Watershed Coalition is scheduled for Monday, September 12 at 1:30 p.m. at the Crested Butte Town Hall.