First Results for Spring Runoff:

Water quality results now available from a partnership between the City of Durango and the Mountain Studies Institute

The fact that people in the community noticed when the Animas River was distinctly yellow-brown in color on February 15, 2016 reflects a heightened awareness of changes in water quality since the Gold King Mine release. Warm temperatures in mid-February initiated the first increase in runoff since last fall’s storms, picking up sediment in the process.

Mountain Studies Institute (MSI), a nonpartisan independent research station, has been monitoring water quality of the Animas River since before, during, and after the Gold King Mine release. MSI received lab results back from water quality samples collected from the Animas River at Rotary Park on February 15, and March 1, 2016.

“These samples are the first in a series of sampling that will occur as part of a monitoring program that aims to understand changes in water quality during 2016 storm events and spring runoff” said Scott Roberts, MSI’s aquatic ecologist. The monitoring program is part of a partnership between MSI and the City of Durango to convey Animas River water quality information to the public.

“Because we know that people are curious to see the data, MSI has posted water quality monitoring results and an explanation of those results on our website, www.MountainStudies.org” said Marcie Bidwell, MSI’s director. “By posting updated information on our website, we hope to keep the public informed as the season progresses. Links will also be available on the City’s website, www.durangogov.org.”

Results from the spring samples indicate some encouraging news. Metals of concern for human health (Arsenic, Lead, and Mercury) and those thought to be most harmful to aquatic life (Copper, Zinc, and Selenium) were found to be at levels considered safe by Colorado Department of Health and the Environment (CDPHE) water quality standards. All metals analyzed from these two spring samples were at levels considered safe for agriculture and domestic water supply use (based on CDPHE water quality standards). Additionally, all metals were below Environmental Protection Agency’s recreational screening levels, which represents the level at which no adverse health effects are expected to occur in humans consuming 2 liters of filtered water per day, from the Animas, orally, for 64 days each year for a total of 30 years.

However, the yellow-brown color of the Animas River at Rotary Park in Durango on February 15th did contain high levels of certain metals. Concentrations of Aluminum and Iron surpassed chronic water
quality standards set by CDPHE to protect aquatic life from persistent, long-term exposure to metals. The brief exceedances of chronic water quality standards from one sample on one day do not necessarily indicate potential harm to aquatic life unless these levels persist continuously over a 30-day period.

The visible yellow or orange color of the river is mostly Iron and Aluminum. Iron particles of various sizes are suspended in the water column. Other metals, such as Zinc, readily bond to the Iron particles.

“MSI’s data supports the conclusions of local, state and federal partners that, from a public health standpoint, this year’s spring runoff is unlikely to be different from previous years. Monitoring and notification procedures are also in place to notify the public if conditions change.” said Liane Jollon, executive director of San Juan Basin Health (SJBH). “SJBH advises the public that it is always good practice to wash with soap and water after exposure to any untreated body of water, including the Animas River. Further information and more health tips for river users are available on our website at http://sjbhd.org/public-health-news/animas-river-health-updates/.”

In a partnership with the City of Durango, MSI plans to continue to monitor the water quality of the Animas River throughout 2016, focusing on understanding chronic exposure to aquatic life before runoff, during runoff, and into the summer season.

*Please keep in mind that these observations are from only one location (Rotary Park in Durango) on the Animas River and may not be indicative of the entire Animas River watershed.*

Visit [www.MountainStudies.org](http://www.MountainStudies.org) to learn more about MSI’s monitoring efforts and results.

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