



## Animas River Agriculture FAQs

March 16, 2016

For more information:

[www2.epa.gov/goldkingmine](http://www2.epa.gov/goldkingmine)

[www.colorado.gov/pacific/cdphe/animas-river-spill](http://www.colorado.gov/pacific/cdphe/animas-river-spill)

[sjbhd.org/public-health-news/gold-king-mine-incident](http://sjbhd.org/public-health-news/gold-king-mine-incident)

### ***Water Quality:***

- Water quality in private wells is not regulated in the State of Colorado, and the responsibility of ensuring that a well is safe rests with the owner. It is advisable that all residents of the Animas Valley get their wells tested. Test results will indicate if the well is safe for drinking water, agricultural, and/or gardening use, and steps the well user can take to ensure safe water quality. Contact San Juan Basin Health at (970)247-5702 for more information about well testing.
- Water quality in the Animas River during the spring does not regularly exceed Colorado's standards adopted to protect agricultural use. This spring, water in the Animas River will be monitored upstream of major ditches and wells by local, state, and federal partners. If conditions change from the historic baseline, local agricultural water users will be notified. Residents will be able to sign up on the La Plata County Code Red System to receive updates and alerts about the condition of the river.
- The Colorado Department of Agriculture State Veterinarian's Office has indicated that water from the Animas River can be used to water livestock.

### ***Soil Conditions:***

- Heavy metals are found naturally in all soils. They are only a problem where they are present in concentrations exceeding health standards. Levels of heavy metals in the Animas Valley are often elevated due to the mineralized geology of the San Juan Mountains and the area's mining history. Recent testing indicates that some river sediments, which can make their way to agricultural fields, have elevated heavy metals.
- Colorado State University (CSU) recommends farmers, ranchers, and home gardeners have their soils tested for nutrients including plant available metals. Soil test kits can be obtained at the CSU Extension Office at the La Plata County Fairgrounds, 2500 Main Ave., Durango.
- There is no single standard for agricultural soil in Colorado, but CSU Extension can help interpret your test results and determine what uses are safe for your soil.
- Growers of annual crops may want to consider using tillage equipment that will thoroughly mix existing soil to more evenly distribute elevated metals originating in the Gold King Mine spill. Growers may also want to incorporate soil amendments like compost into their soil. Colorado State University advises that alkaline soils with a pH level greater than 7.2 will reduce any plant uptake.

### ***Impact on Crops:***

- It is always recommended to wash fruits and vegetables thoroughly prior to consumption. It is also advisable to peel root crops, and for leafy crops, discard old, outer leaves.
- Different metals are taken up into crops at different rates. This makes soil testing important to determine exactly what steps you should take to maintain the health of your crops. It is

advisable to test your soils for nutrients, including plant-available metals.

- Based on soil test results, it may be advisable to amend your soil with compost in order to reduce potential impacts on crops.
- Overall, levels of heavy metals in soil and water are similar to previous years, and it is unlikely that heavy metals will make their way into crops at levels that are risky to human or livestock health.

***Long-Term Effects on Livestock:***

- It is recommended that farmers and ranchers know the copper and sulfur levels in their hay and pastures. Typically, Colorado hay is low in copper. The amount of sulfur increases in the environment from exposure to water from mine tailings over the last several decades. An increase in sulfur decreases the availability of copper. Molybdenum, another heavy metal often present in mine waste, can also decrease the availability of copper. Therefore, cattle ranchers and farmers may need to supplement copper for their cattle.
- The Soil, Water, and Plant Testing Laboratory at Colorado State University can test hay for copper and molybdenum, as can several private laboratories.