

Pollutants from an old mine have recently been released into the Animas River. This is a compilation of the most frequently asked questions that we have gathered from concerned individuals.



This river provides drinking water throughout the Durango and Farmington area. How is it safe to drink?

A: There are several types of “water” being considered and it is important to distinguish between them. Drinking water in the public water system comes from various sources and is treated before being delivered to homes and businesses.

Depending on the source of water for a public water system, drinking water may be unaffected or only partly affected by the mine release. Durango water system uses water from the Animas River and the Florida River. The state health department has notified Durango officials that the water is safe for drinking after treatment in the drinking water treatment facility.



Can I get in the River?

A: YES. The Colorado Department of Public Health and Environment has collected and analyzed sediment from the Animas River. The data show levels of contamination are below what would be a concern for human health during typical recreational exposure. Based on this, Sheriff Sean Smith has reopened the river to recreational use with a health advisory from the health department. The river re-opened for recreation on Friday, August 14, 2015 at noon.

Sediment is just one indicator of a healthy river, and there is some level of contamination in most Colorado rivers because of past mining activities and the geology of the state. The Colorado Department of Public Health and Environment does not anticipate adverse health effects from exposure to contaminants detected in the water and sediment during typical recreational activities. The Agency for Toxic Substances and Disease Registry recommends the following recommendations are prudent public health practices regarding contact with sediments and surface water:

- Don't drink untreated water from the river
- Wash hands thoroughly with soap and water after contact with the sediment and surface water.
- Avoid contact in areas where there is visible discoloration in sediment or river water.
- Wash clothes after contact with sediments and surface water.



What about agricultural uses?

A: La Plata County has flushed and allowed use of some irrigation ditches for watering crops such as wheat and alfalfa. The county is systematically working to reopen all ditches. Operators of ditches that use water from the Animas River are asked to call the County Call Center at 970-385-7592 so officials can coordinate reopening of all river head gates. Flushing may cause local, temporary discoloration of the river and should clear quickly.

Gardeners who use water from the river and grow leafy vegetables and root crops should call the CSU Extension office at 970-382-6463. Answers to questions are site and crop specific.

The Colorado Department of Agriculture State Veterinarian's Office is confident that water from the river can be used to water livestock. "The information we have received shows that water quality levels are comparable to those prior to the spill," said Dr. Carl Heckendorf, state veterinarian. "We will continue to monitor the situation and will provide updates if it becomes necessary."



Does contamination from the mine release move down river?

A: Much of the groundwater impact from mine drainage is near a mine. Water can collect in the mine from rocks and fractures at the mine. Chemical reactions within the mine cause the water to become acidic and may contain dissolved metals and sediment with elevated metals concentrations.

Following the release from the mine, water with high concentrations of metals flowed out through Cement Creek and the Animas River. This water continued to travel downstream carrying the concentrations of metals. As the water flows downstream, the metals and sediment can drop out along the banks of the river. You can see this in some places where the banks have changed color. The orange color is due to iron from the mine rocks, the same as rust.

The pH and water chemistry will continue to change as the water flows further away from the mine. Some dissolved metals will combine with the iron oxide and become part of the sediment that may drop along the banks. The concentrations of contaminants in the sediment decreases as it travels down river.



I live in this area, is my drinking water safe to drink? What if I have a well?

A: The Colorado Department of Public Health and Environment advises concerned citizens to determine their source of drinking water. Some citizens are served drinking water by a regulated public water system. Citizens that receive water from a public system should contact the system with concerns.

Other citizens may get drinking water from a private well or a small water company which is not large enough to be regulated. Concerned citizens near the Animas River should know the source of their drinking water to understand how the water may be impacted by the mine release.

Private wells or unregulated water companies in the area affected by spill

- If you use a well located within a mile of the Animas River and have not had your water tested, we recommend testing. Residents should not take their own samples; technicians will be sent to sample the water. The state health department is available to help residents understand test results. If you would like a sample collected, please call the La Plata County Call Center at 970-385-7592.
- There is no risk from showering with well water.
- Concentrations of iron and manganese reported so far are lower than EPA risk-based screening levels. Since manganese's effects on the developing nervous system have not been adequately studied, it is especially prudent that drinking water for pregnant women and young children be below the manganese action level (500 ug/L).
- Do not use well water to make infant formula at this time if your water has been tested and shows manganese levels above 430 ug/L. Use bottled water. Certain baby formulas contain manganese, and if those formulas are prepared with water that also contains manganese, the infant may get a higher dose than the rest of the family. In addition, young children appear to absorb more manganese than older age groups but excrete less. This adds up to a greater potential for exposure in the very young.
- Pregnant and breastfeeding women should avoid drinking well water with manganese levels above 500 ug/L.
- High manganese levels may have existed before the mine accident, so private well owners who have high levels should compare current results with any past test results.
- Private water well owners with questions can call Andrew Ross at 303-692-3395 or visit the San Juan Basin Health Department website for more information.

The USEPA is offering free sampling to affected drinking water wells through www.NMEDRiverWaterSafety.org. If your well tests positive for one of the metals of concern - You should seek an alternative source of water until your well is safe to drink.



Are wells impacted immediately?

A: River water can flow through soil and fill a well. For old very shallow wells very near the river, the water quality is likely similar to the river water. Wells a bit further from the river but in the sands of the Animas alluvium adjacent to the river may be impacted by the high river flow, but any spill related waters in the alluvium are expected to flush rather quickly - not quite as fast as the river, but within days or a couple of weeks. As groundwater wells become farther away from the river and deeper, potential impacts from the spill become less. Not all wells will be affected by the spill. The department recommends testing your well for the water quality indicators outlined.



Will the sediment impact the river?

A: The sediment can impact the river. Rain storms or high currents can wash sediment into the river or stir up some sediment, just like when sediment is disturbed from the bottom of a stream and the water becomes cloudy. The chemistry of the sediment is expected to be fairly stable in the river water so additional dissolving of the metals is not expected to be significant. The department will continue to monitor the water quality.



Why are the results so different at the same or similar location?

A: The mine release traveled as a very large plume of water with color changing impacts and also high concentrations of pollutants. As the plume heads downstream, the concentrations of pollutants will decrease so sample results must be compared to other sample locations and sample dates. For example, results during the event at one location would see results increase as the plume approaches and decrease after the plume passes.

The river below Silverton will begin to reduce in levels sooner than downstream portions of the river in Durango. It is expected that there will be different concentrations at different locations in the river on the same day, and different concentrations at the same location from day to day.