

## Sediment Screening Levels

The screening levels for surface water and sediment/soil for the Gold King Mine spill were based on older children and adults who would be hiking or camping near the river during the summer months (Memorial Day to Labor Day). The campers and hikers would be in the area all day long and would get all of their drinking water from the river and all of their sediment/ soil exposure from the riverbanks. The exposure assumptions used in the screening levels are based on a child and adult who gets the highest amount of exposure that is considered reasonable.

These conservative exposure assumptions are then compared to long term toxicity values, which represent contaminant levels a person can be exposed to every day over their lifetime and not be harmed. These screening levels represent a high end estimate for recreational users.

This means they are more conservative than screening levels for fisherman, rafters, swimmers, or other recreational users of the river primarily because their consumption of water and soil/ sediment is higher. These values don't take consumption of fish from the river into consideration.

Example:

Contaminant	Screening Level	Sediment Sample Test Result
Arsenic	4,200 mg/Kg	11 mg/kg

In this example, a person would need to ingest water from an area with sediment contaminated at a level of 4,200 milligrams of arsenic per kilogram of sediment over a long period of time. In this example, taken from real sample data on 8/14, the actual level in the tested sample is only 11 milligrams of arsenic per kilogram of sediment. This actual value is considerably lower than the "screening level" and thus shows very little to no risk of adverse health effects.