

Frequently Asked Questions about water quality in the Coeur d'Alene Basin area



Coeur d'Alene Basin Cleanup

July 2023

The Silver Valley and Coeur d'Alene Basin are great places to live, work and play. However, past mining practices dumped large volumes of lead and other heavy metals into the South Fork of the Coeur d'Alene River and some of its tributaries. The Bunker Hill smelter also released lead, impacting area soils, water, sediment, and the ecosystem. Metals can be harmful to people and animals when they are swallowed. Since the 1980s, the U.S. Environmental Protection Agency and our partners have reduced risks from the contamination by cleaning up residential, commercial, and public properties, roads, rights of way, and mine and mill sites. Although we continue to perform cleanups to protect people and the environment, potentially dangerous levels of lead and other metals remain in the Coeur d'Alene River, floodplains and other areas that have not been cleaned up.



USGS sampling surface water at the mouth of Canyon Creek.

Photo courtesy USGS.

Every year, the U.S. Geological Survey samples surface water in the Coeur d'Alene Basin as part of the Basin Environmental Monitoring Program.

The sampling helps the agencies understand the surface water concentrations of lead and other metals, as well as other things like phosphorus and general water quality. Below are some frequently asked questions and the responses to limit your exposure and safely enjoy this beautiful environment.

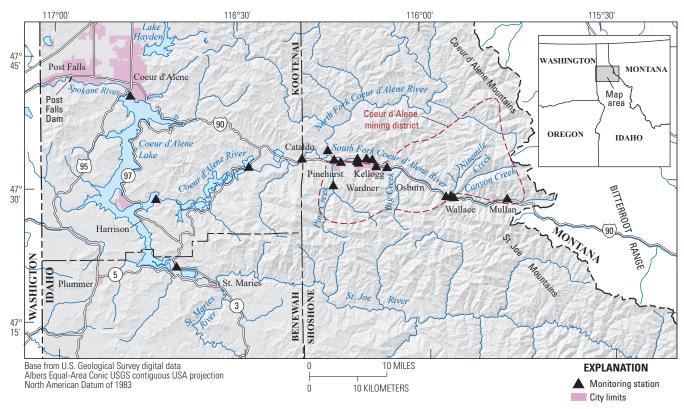
Where is USGS sampling? In what lakes and waterways?

The USGS operates 11 real-time streamflow gages and collects surface water quality samples two to 12 times annually at 20 monitoring sites (see map on Page 2) in the South Fork, North Fork, and mainstem Coeur d'Alene Rivers, in the Spokane and St. Joe Rivers, and in some tributaries to the South Fork. Some tributaries to the South Fork, and the South Fork and mainstem Coeur d'Alene Rivers have been extensively polluted by historic mining activities and are being cleaned up, whereas the North Fork Coeur d'Alene and St. Joe Rivers were not polluted by historic mining.

How is the water quality?

Although metals in the South Fork and mainstem Coeur d'Alene River have decreased after years of cleanup, they are still at concentrations harmful to people and animals. Water quality changes during the year - when streamflows are high, streams carry high concentrations of sediment-bound metals, whereas concentrations of dissolved metals are usually highest during low streamflow conditions.

See map, next page \$\Rightarrow\$



USGS surface water sampling locations.

Map courtesy of US Coast and Geodetic Survey

Is it safe to swim in the local Silver Valley waterways?

Swimming should be approached with caution by following instructions posted at many recreational areas. Risks from swimming vary depending on the location and the level of contamination. Swimmers can be exposed to lead and arsenic by accidentally swallowing water, soil, or sand. Lead and other heavy metals in the water do not freely absorb through a person's skin. Exposures can be reduced by following the tips listed below for playing along the Coeur d'Alene River and lateral lakes.

Is it safe to drink the river water?

No. Do not use river or lake water to drink, even if using a filter. Standard filters do not remove all of the contaminants, like lead and other heavy metals, in the area. This is because some metals are dissolved into the water and can pass through a filter.

What about playing on the banks of the South Fork and mainstem Coeur d'Alene River or along the shores of the Chain Lakes?

Sediments (sand) in the river and on shore can contain high levels of lead and other heavy metals. To prevent exposure through swallowing, it's important to:

- Prevent children from playing or digging on the shore and riverbank.
- Lay down a blanket or towel, or bring a chair to sit on, if you are hanging out on the shore.
- Do not eat or drink while recreating on the beaches.
- Wash your hands before you eat and drink after visiting the beaches.
- Wipe your feet or your shoes and clean your dog's paws and fur after leaving the beaches.
- After visiting shore areas, rinse off your feet, boots, waders, and other sandy materials with clean water before returning to your car or home.

What about playing on the banks of the South Fork and mainstem Coeur d'Alene River or along the shores of the Chain Lakes?

Young children are especially vulnerable to health effects from exposure to lead. Do not let your little ones play in the sand. Children often put their hands to their mouth, inadvertently swallowing contaminated soil or sand. Be extra careful of children using pacifiers, sucking thumbs and teething as they have more frequent hand to mouth contact than older children. If items fall on the ground, rinse thoroughly with clean water.

Is it safe for my dog to drink river water?

No. Prevent your dog from drinking river water and wipe their fur and paws when leaving the beach to prevent them tracking contaminated sediments into your car and home.

What are the agencies doing to prevent deaths of swans and other waterbirds from swallowing lead-contaminated sediments? This die-off usually takes place in the wetlands around Harrison, Idaho.

EPA's Office of Research and Development and Region 10 continue to collaborate with Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, and the Coeur d'Alene Tribe to measure how and where swans are exposed to contaminated sediment. During the swans' stopover in the Coeur d'Alene Basin, they frequently move between wetland areas. Read about the March 2023 study investigating ways to measure swan lead exposure at https://bit.ly/3yKGVbQ

EPA creates clean feeding habitat for waterfowl and other wildlife in the Lower Basin by restoring former agricultural fields to healthy wetland habitat for tundra swans, wood ducks, and more at projects such as Gray's Meadow.

Learn more about the Coeur d'Alene Basin Cleanup in EPA's **Basin Bulletin** newsletter, published three times per year with updates on the Superfund cleanup and opportunities to get involved. Contact **Rafi Ronquillo** at Ronquillo.Rafi@epa.gov to join the Basin Bulletin mailing list.

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If you need materials in another language or an alternative format, please contact **Rafi Ronquillo** at 206-553-7051.

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