

BASIN BULLETIN



Updates on the Coeur d'Alene River Basin Cleanup

March 2019

Blood Lead Averages Continue to Decrease in Silver Valley

Panhandle Health District's Institutional Controls Program (ICP) completed its annual blood lead screening this past August in the Silver Valley, and the results are encouraging.

"We continue to see an increase in people who come in to be tested, which is something we want to strongly encourage," said Andy Helkey, ICP Program Manager. "The blood lead averages among those coming in to be tested were down significantly from 2017."

A total of 320 residents came in to be tested during the 2018 blood lead screening week. The average lead level in children ages 0-6 living within the Bunker Hill Box was 2.6 micrograms per deciliter ($\mu\text{g}/\text{dL}$) and 1.6 $\mu\text{g}/\text{dL}$ among residents ages 7-83. The average lead level in children ages 0-6 living within the Coeur d'Alene Basin was 2.4 $\mu\text{g}/\text{dL}$ and 2.0 $\mu\text{g}/\text{dL}$ among residents ages 7-70.

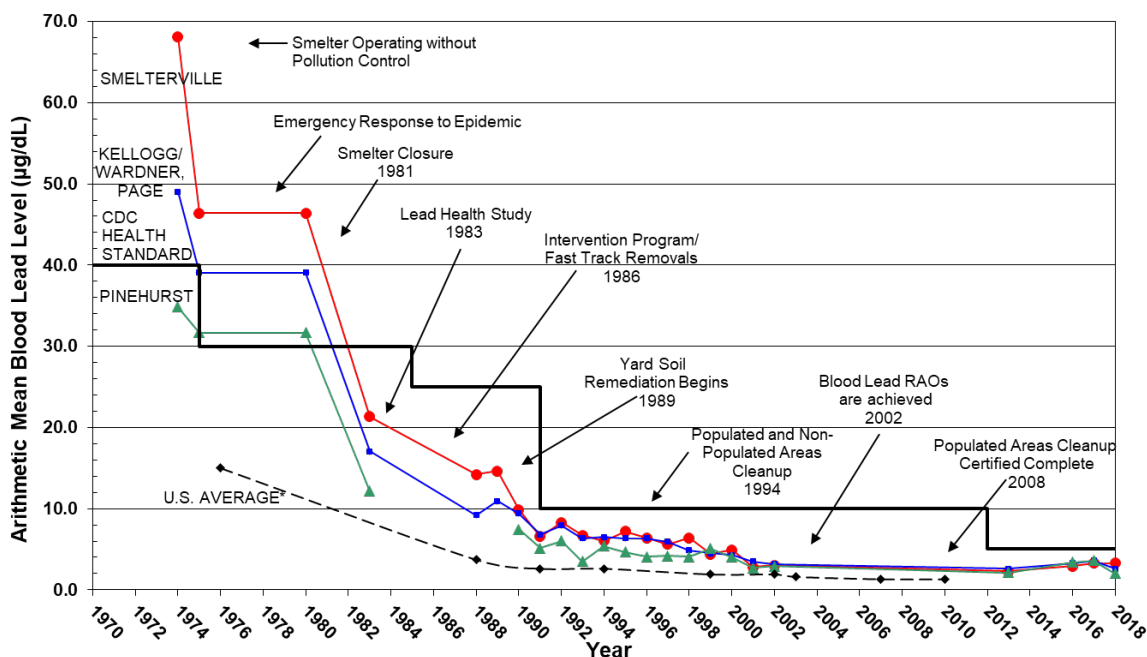
Testing is done through a quick and simple blood test. Results are available immediately. Each summer, PHD offers a week of free testing for anyone living within the Bunker Hill Superfund site, plus a \$30 incentive for testing children ages 6 months to 6 years old. Anyone living in the area can come in year-round to be tested for

free, as well.

"We like to collect the tests in late summer to ensure we are capturing the peak of outdoor activity when people commonly come into contact with lead in the environment," said Helkey.

Lead can be found in the paint of older homes, especially those built before 1978.

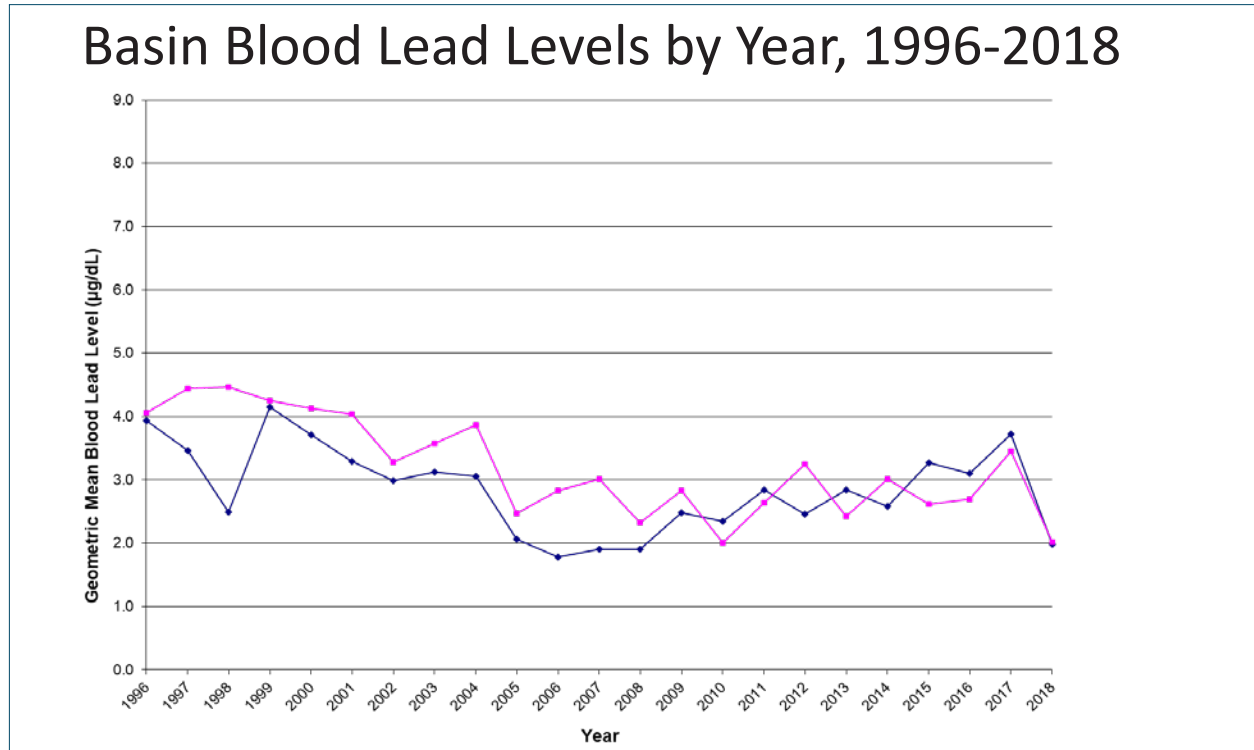
Bunker Hill Box Average Blood Lead: 1974-2018



*Ref.=(Mahaffey et al. 1982; Pirkle et al. 1994; Pirkle et al. 1998; Lofgren et al. 2000; CDC 2013)

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Blood Lead Averages Continue to Decrease in Silver Valley

If your home was built before 1986, it is more likely to have lead-based plumbing pipes, fixtures, and solder.

Soils and sediments along the South Fork and Lower Coeur d'Alene River and their tributaries contain harmful levels of lead, arsenic, and other heavy metals. Young children and pregnant mothers are at the greatest risk from exposure. It is easy to reduce exposure by following these safety tips:

- Wash your hands and face with clean water or wipes before eating or drinking.
- Wash toys, bottles, and pacifiers if they come into contact with soil, sand, or dust.
- When recreating, remove dirt from clothes, toys, pets, cars, boats and camping equipment before you leave. Wash all items when you return home.
- Drink, cook, and wash with bottled water or water from home. Do not use river water.
- Eat at a table or on a clean blanket, not bare ground.
- Follow fish consumption advisories, especially for pregnant mothers and children. Find current advisories at: www.fishadvisory.dhw.idaho.gov
- Play in grassy areas and avoid loose soil, sand, dust, and muddy areas.

"If we find that a child has an elevated blood lead level, we want to investigate and make sure that we find the source," said Helkey. "We offer free confidential property assessments to identify exposure sources inside and outside of the home."

Although results continue to improve year to year, Panhandle Health District will continue to educate and monitor blood lead levels. According to the CDC, health effects associated with lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body, especially the nervous system. No safe level of lead exposure has been identified. Lead is especially dangerous for young children, whose bodies are still developing. Lead poisoning even at high levels often shows no symptoms. A simple blood lead test is the only way to know if you have been exposed.

CONTACT: **Andy Helkey**, Panhandle Health District • 208-783-0707 • ahelkey@phd1.idaho.gov

Central Treatment Plant Upgrades and Groundwater Collection System Project Moving Forward

Last year, notable progress was made on upgrades to the Bunker Hill Central Treatment Plant (CTP), and Groundwater Collection System project. At the CTP, demolition of major features was completed, and treatment operations have shifted to a temporary system. At the Central Impoundment Area next to I-90, the groundwater containment wall is 90 percent complete. Installation of the liner at the Sludge Impoundment Area is nearly finished. Last fall, crews continued with capping and restoration work around the wall. They will begin to install extraction wells in late March. We expect the final sections of the containment wall will be completed by fall 2019, after the pipeline and extraction wells are installed. The Groundwater Collection System, along with the upgraded CTP, will improve water quality downstream by significantly reducing metals pollution going into the South Fork of the Coeur d'Alene River.

EPA has received reports of unexpected turbidity plumes in the South Fork of the CDA River, north and west of Kellogg. The turbidity plumes appear to be occurring near a segment of the groundwater cut-off wall. In February, a section of Interstate 90 that runs past the Central Impoundment Area construction near milepost 48.6 began to subside, or dip, across both eastbound and westbound lanes. Dips in this section of the freeway have been occurring for several decades. Idaho Transportation Department levelled out the freeway by adding layers of asphalt to the depressions. EPA is working closely with the State of Idaho and the Army Corps of Engineers to investigate groundwater dynamics near the site of the I-90 subsidence. We're drilling new monitoring and extraction wells, which are expected to offer more and better data about local groundwater dynamics and what may be impacting the Interstate. This new data will help us figure out what may be causing the turbidity plumes and freeway dips. As we learn more, we will share information with our partners (Panhandle Health District, Coeur d'Alene Tribe, IDEQ, ITD, USGS) and the public through updates on our web page: www.epa.gov/superfund/bunker-hill.

CONTACT: Kim Prestbo, EPA • 206-553-0239 • 800-424-4372, ext. 0239 • prestbo.kim@epa.gov



Installing monitoring wells north of I-90.

Hold the Date! April 25 Public Open House on Site Reuse

EPA's Superfund Redevelopment Initiative will hold a public open house on Thursday, April 25 from 6:00 p.m.-7:30 p.m., location to be determined. Come give your ideas on the potential future uses of undeveloped IDEQ-owned properties that are part of the Bunker Hill Superfund Site. What are the opportunities and limitations? What are reuse opportunities given the larger area, site-specific considerations, and the reuse themes: economic development, open space, and recreation and housing? The open house will begin at 6:00 p.m. with a brief presentation, followed by time to visit stations to share your ideas.

Note that EPA does *not* decide or pay for the future land use of properties after a cleanup, but supports the safe redevelopment of Superfund sites through tools and technical assistance. Last year, the Bunker Hill Superfund Site, also called the Coeur d'Alene Basin Cleanup, was one of four Pacific Northwest sites chosen for EPA's Superfund Redevelopment Focus List. Sites on this list have the greatest expected redevelopment and commercial potential. Please stay tuned for more information on time and location of the open house.

CONTACT: **Kira Lynch**, EPA R10 Superfund Redevelopment Coordinator • 206-553-2144 or 800-424-4372, ext. 2144 • lynch.kira@epa.gov



Photo courtesy Rene Gilbert.

Basin Yards Cleanup Continues to Protect Health



The Basin Property Remediation Program will continue sampling and cleanup of yards and other properties in 2019. Participation and support from local residents and elected officials have made the cleanup program a big success. About 96% of eligible parcels in the Upper Basin and about 87% of eligible parcels in the Lower Basin have been sampled and cleaned up, if necessary. In the Box (the initial Bunker Hill Superfund Site), about 99 percent of eligible parcels have been sampled and cleaned up.

Property cleanups protect people's health by reducing exposure to lead and other harmful metals. During a property remediation, generally the top 6-12 inches of contaminated soil is removed, and replaced with clean soil.

If you believe your property may be eligible and you'd like to have it sampled for mining-related metals, please contact: **IDEQ** • 208-783-5781 — or **Alan Davis**, Coeur d'Alene Work Trust • 208-783-0222.

Recreation Sites Update

Work on recreation areas in 2018 included sampling, cleanup, and public education/outreach activities.

New signs are now placed at a number of local recreation areas. The signs remind people to take steps to reduce exposure to lead and other harmful metals while enjoying the outdoors. Some of them combine health education with history of that specific location. You'll find the new large signs at the Bull Run, Medimont, and Killarney boat ramps; the Burke swimming hole; the Frisco Mine site; and Thompson Lake, among other locations. 10 smaller signs were installed at mine and mill sites in the Pine Creek basin where ATV use, hiking, hunting, camping, and shooting have been observed. Twelve new signs also were installed along the Trail of the Coeur d'Alenes where there is evidence of the trail being used to access off-trail recreation areas.



Sampling and Cleanup Work

EPA, alongside the other recreation site team members, which include Panhandle Health, IDEQ, the Coeur d'Alene Tribe, and the CDA Work Trust, completed the following 2018 sampling and cleanup work in the Basin: Burke Road AVISTA substation parking area, Ninemile Fishing Pond, Cataldo Boat Launch, and three CDA River pull-outs. Cleanup was completed at the AVISTA substation and three river pull-outs. Cleanup was started at the Nine Mile Fishing Pond and will be completed in 2019. Sampling was completed at Cataldo Boat Launch and cleanup is expected to start in July. We expect to add other recreation sites for either sampling and/or cleanup later this year.

More Handwashing Stations Coming This Summer

A pilot program also was initiated to evaluate the effectiveness of hand washing stations at formal recreation sites. Temporary hand washing stations were provided at three locations for 10 weeks. The sites selected included public boat launches, trailheads, and picnic areas that do not have running water. More locations will be added to this pilot program for the 2019 summer recreation season.

CONTACT: **Bonnie Arthur**, EPA • 206-553-4072 or 800-424-4372, ext. 4072 • arthur.bonnie@epa.gov



Work to Protect Cleanup Barriers Continues



The Coeur d'Alene Work Trust plans to construct four remedy protection projects in 2019, completing remedy protection work in the Basin. Box Remedy Protection projects were completed in 2015. These projects keep cleaned-up areas clean. Improvements will help protect people and the environment by reducing erosion and contamination from storm water runoff, tributary flooding, and heavy rain and snowmelt. Work in 2019 will include ① continuing to install a storm water pipe beneath 8th and Fir Streets in Mullan, ② installing a culvert on Blackcloud Creek under Ninemile Creek Road, ③ resurfacing the parking area and installing

subsurface storm water pipes near the Star Complex in the Canyon Creek drainage, and ④ installing a subsurface stormwater pipe in the Gem area of Canyon Creek drainage.

CONTACT: Anne McCauley, EPA • 206-553-4689 • 800-424-4372, ext. 4689 • mccauley.anne@epa.gov

2019 Paved Roads Program Gearing Up to Begin

The Paved Roads Program in the Silver Valley is winding down. The Paved Roads Program has funded over \$35 million in local paved roads reconstruction projects through 2018. Around 500 road segments have been completed throughout the valley to date.

Wallace, Pinehurst, and Osburn completed their individual programs last season, joining the East Side Highway District, Wardner, Mullan, and Smelterville. The work continues to be coordinated with other utility and infrastructure improvements. Projects have been combined with water, sewer, and drainage infrastructure. Over \$5 million of paved roads work is planned for 2019 in Kellogg and Shoshone County:



- The City of Kellogg will finish paving the remaining roads associated with their sewer and water line replacement projects, and will also rebuild McKinley Avenue from City Hall to Government Gulch Road.
- Shoshone County will complete work on Pine Creek Road, Nine Mile Road, Nuchols Gulch, Silver Valley Road near Big Creek, and several residential streets in Woodland Park.

Paving road surfaces serves as a barrier to heavy metals contamination and protects cleaned-up properties from re-contamination. The local jurisdictions are responsible for maintaining the completed road segments going into the future.

CONTACT: **Dan McCracken**, IDEQ Kellogg Remediation Program Manager • 208-783-5781
dan.mccracken@deq.idaho.gov

Waste Repositories Open for Season

To protect people and the environment, EPA, IDEQ, and the Panhandle Health District employ several methods of containing contaminated materials.

Limited Use Repositories (LUR) are specifically designated areas, operated up to three years. LURs accept waste only from replacement of local paved roads under the Coeur d'Alene Basin Cleanup. These locations are engineered to securely hold contaminated materials, reducing impacts to people and the environment. Typically, waste deposited in a LUR has lower concentrations of metals such as lead or zinc. The LURs are often designed to blend into the surrounding area. Once closed and capped, they provide new level ground to support redevelopment. Recently closed LURs include the Shoshone County Transfer Station, East Osburn, and East Zanetti Yard. The Government Gulch LUR in the Box remains open for use by the City of Kellogg in 2019.



An **Institutional Controls Program (ICP)** waste collection site takes in soil from residential properties. When home/property owners and contractors conduct routine activities that generate soil or soil-bearing materials, like tree stumps, they can take these materials to an ICP waste collection site. The ICP material is then transferred to the large waste repositories, where it is mixed with waste from cleanup activities.

The **Community Fill Program (CFP)** was created to allow local residents and developers to consolidate contaminated soils in already-contaminated low-lying areas. CFPs require clean caps and are then available for development. There are specific requirements associated with the CFP.

Lastly, **Waste Repositories** are used to collect and securely store soils and materials excavated during cleanup projects. Repositories are expressly designed and engineered to ensure contaminants are contained, and do not migrate to the surrounding environment. Waste repositories, and their associated ICP waste collection sites, are located at East Mission Flats, Big Creek and Big Creek Annex, Lower Burke Canyon, and Page in the Box. There is also an ICP collection site in Mullan.

Getting Access to the ICP waste collection site and CFP: Permits and 24-hour ICP access cards are provided through PHD. For more information, please contact **Andy Helkey** • 208-783-0707.

CONTACT: **Patrick Hickey** • EPA • 206-553-6295 • 800-424-4372 ext. 6295 • hickey.patrick@epa.gov

Upper Basin Projects Update

Upper Basin design investigation and cleanup projects are now in the planning stages for the upcoming field season. Eliminating sources of heavy metals from historical mine and mill sites will help improve water quality and protect the local ecology and people downstream. The Coeur d'Alene Work Trust plans to finish cleanup work at the Success Mine, start hauling mine waste from the Interstate Millsite to the Waste Consolidation Area, and start construction at the Canyon Complex Repository. The Trust is also planning design investigations at up to 10 Upper Basin sites, and will continue operation of the repositories (see article above). This cleanup and investigation work employs many local workers. For the 2018 field season, the Trust employed a total of 276 seasonal construction workers. Crews perform such work as drilling, mine waste hauling, sample pit excavation, road oiling, hydro-seeding and cultural resource investigations. 72 percent of the seasonal workers are from the local area. The Trust also employs 26 full-time local workers who work year-round to plan and design the investigations and cleanup.

CONTACTS: **Bonnie Arthur** • EPA • 206-553-4072 • 800-424-4372 • ext. 4072 • arthur.bonnie@epa.gov or
Tamara Langton • EPA • 206-553-2709 • 800-424-4372 • ext. 2709 • langton.tamara@epa.gov

Come to the Annual Environmental Science and Health Fair April 11

The second annual Environmental Science and Health Fair will be held **April 11, 2019** from **10:00 a.m.** to **4:00 p.m.** at the Kellogg Community Center, 790 Bunker Avenue, Kellogg, Idaho. The community is invited to learn about the work that's being done to protect, preserve, and reclaim the environment, as well as protect public health. Over 20 different booth hosts will be ready to answer questions about the science, technology, equipment, and data collection techniques they use in and around the Coeur d'Alene River drainage. Some of those hosts include Alta Science and Engineering, Silver Valley Analytical, The University of Montana, North Wind, Idaho Forest Group, Pioneer Technical Services and the U.S. Forest Service. This is also a unique opportunity for students to learn more about job opportunities that exist in the region.

This event is hosted by Panhandle Health District, Idaho Department of Environmental Quality, and the University of Idaho.

Comings and Goings

Welcome Patrick!

Last November, **Patrick Hickey** began working for EPA Region 10's Seattle office as a new Remedial Project Manager. One of his assignments is the Coeur d'Alene Basin Cleanup Project, also known as the Bunker Hill Superfund Site. Patrick has developed a strong and diverse environmental and compliance background over the last 12 years. As a Navy veteran, he attended North Carolina State University and received his B.S. degree in Natural Resources. He then attended the University of Idaho at Moscow, where a master's degree program allowed him to study, analyze and become familiar with the Lower Coeur d'Alene Basin's wetlands. Patrick then went on to serve as the Lassen National Forest's Soil Scientist, Nellis Air Force Base's Environmental Fuels and Storage Tanks Program Manager, and the Puget Sound Naval Shipyard's Air Quality Program Manager. His first task is to take the reins from Craig Cameron with the Basin repositories management. Craig will be focusing his attention on the Hanford Superfund Site in Washington State.



Patrick still resides in Bremerton, Washington and commutes to Seattle. He truly enjoys his trips to Idaho. "My years in Idaho were some of the best years I have had, and I look forward to getting back whenever I am able. The state is truly a gem and I am very much looking forward to helping protect its natural resources and its people." Please join us in welcoming Patrick to the project team.

Welcome Keri!

Keri St. John began work at the IDEQ Kellogg office in August of last year as a Remediation Project Manager for the Bunker Hill Superfund Site. Keri's background is in Metallurgical and Materials Engineering, with her B.S. and M.S. from Montana Tech. She has spent the last eight years as a Research Engineer, working on improving mining equipment design, allowing her to write her thesis on optimizing flotation cell design and commission the world's largest flotation cell. She is currently working on projects that include recreation sites and the upgrade work at the Central Treatment Plant. In general, Keri is familiarizing herself with cleanup work taking place in the Silver Valley.



She enjoys working and living in the Silver Valley, and hopes to bring a different perspective to the mining cleanup projects with her background in mining and minerals processing. We are happy to have Keri on the team!

Want Timely Updates? Visit us on Facebook!



One of the best ways to stay up-to-date on the cleanup work is to sign up for our Facebook page. Watch for two or three short posts a week. We invite you to check it out!

 <https://www.facebook.com/CDAbasin>

Documents

North Idaho College Library

Molstead Library
1000 Garden Avenue – Coeur d'Alene, ID 83814
208-769-3355

Wallace Public Library

415 River Street – Wallace, ID 83873
208-752-4571

Spokane Public Library

906 West Main Avenue – Spokane, WA 99201
509-444-5336

EPA Field Office

1910 Northwest Boulevard, Suite 208
Coeur d'Alene, ID 83814
208-664-4588

EPA Seattle Office

Superfund Record Center
1200 Sixth Avenue – Seattle, WA 98101
206-553-4494 or 800-424-4372

St. Maries Library

822 W. College Avenue – St. Maries, ID 83861
208-245-3732

Kellogg Public Library

16 West Market Avenue – Kellogg, ID 83837
208-786-7231

Opportunities to Get Involved

Basin Environmental Improvement Project Commission (BEIPC)

EXECUTIVE DIRECTOR:

Terry Harwood

208-783-2528

<http://www.basincommission.com>

Citizens Coordinating Council (CCC)

CHAIR:

Jerry Boyd

509-220-1453

<http://www.basincommission.com/cc>

The Basin Bulletin is published by the U.S. Environmental Protection Agency three times a year. The Basin Bulletin offers updates on the Superfund cleanup in the Coeur d'Alene Basin. For mailing list changes, to send comments on this newsletter, contact the editors, or submit articles for consideration, contact Debra Sherbina as noted. Mention of trade names, products, or services does not convey, and should not be interpreted as conveying, official EPA approval, endorsement, or recommendation.

Alternative formats are available.

For reasonable accommodation, please call

 *Debra Sherbina at 206-553-0247*

 *TTY users, please call the Federal Relay Service at 800-877-8339.*



EPA Community Involvement Contact

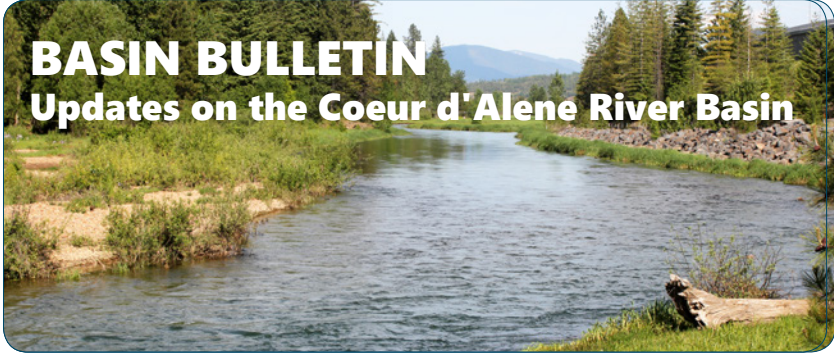
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 sherbina.debra@epa.gov  1-800-424-4372 ext. 0247



***Learn More About the
Coeur d'Alene Basin Cleanup
on the Web***

www.epa.gov/superfund/bunker-hill



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