



**February 2017**

## **Coeur d'Alene Basin Recreational Sites Strategy: Response to Community Input**

The Coeur d'Alene Recreational Sites Strategy presents information and a toolbox of actions for developing a Recreational Sites Implementation Plan. The goal is to address human health risks from exposure to lead and other metals while recreating in the Coeur d'Alene Basin. The strategy was developed by the U.S. Environmental Protection Agency (EPA), Idaho Department of Environmental Quality (DEQ), Panhandle Health District (PHD), and the Coeur d'Alene Trust. It is available at: [www.deq.idaho.gov/PlayClean](http://www.deq.idaho.gov/PlayClean).

The agencies want to create a sensible approach that reflects local needs and values. So, from September 6 to October 20, 2016, the agencies requested public review and input. Comments were received through: 1) public outreach activities, 2) meeting presentations, and 3) online submission forms, emails, or conversations with community members. Outreach focused on recreationalists living both within the Silver Valley and those that visit the Silver Valley.

The agencies reached out to the public using several methods. A fact sheet invited people to review the strategy and share their input. Outreach included direct mail, email notification, local newspaper advertisements, social media posts, and web postings. In addition, individual conversations were held with organizations within the Silver Valley and Coeur d'Alene.

Comments for the strategy and fact sheet were also requested from the Bunker Hill Lower Basin Technical Work Group which includes representatives from EPA, DEQ, PHD, Forest Service, Bureau of Land Management, Fish and Wildlife Service, Idaho Department of Fish and Game, and the Coeur d'Alene Tribe.

### **Public Outreach Activities**

EPA, PHD, and DEQ staffed a booth focused on recreation in the Coeur d'Alene Basin, at the September 17, 2016, Shoshone Medical Center Kid's Health Fair. The agencies provided giveaways for the children and educational information for families, including the fact sheet inviting comments on the Recreational Sites Strategy. Shoshone Medical Center estimates that 400+ children and adults attended the fair. Representatives of the agencies asked attendees about their recreation activities and values, asked people to indicate their favorite recreation locations on a map, and invited them to record their three favorite recreation activities on a poster. The following is a summary of the information collected and the questions and concerns voiced during the fair.

Four general questions were asked about recreation habits. Here is a summary of the responses:

1) Which recreational activities should get priority attention?

Activity	Count	Location (if indicated)
ATV	7	In dusty areas, mountains
Swimming	7	Kingston, Lake Coeur d'Alene, Bumblebee, Rose Lake
Biking	7	Away from society, Kellogg (2), logging roads, Big Creek
Camping	5	Big Creek
Fishing	4	Rose Lake, North Fork private property
Beach Recreation	3	
Hiking	3	Away from society
Scenic Driving	2	Woods
Walks	2	Dirt roads
Hunting	1	
Kayaking	1	
Logging	1	
Park Activities	1	
General Outdoor Play	1	
Collecting/Digging for Old Bottles	1	Old mine sites
<b>Total</b>	<b>46</b>	
Responses indicated a location, without an activity		Burke Canyon Avery, Wallace, Kingston Lakes, Rivers Lake Elsie (2) Big Creek
In addition to the four general questions, many respondents indicated that they were long-time Silver Valley residents and took the opportunity to ask other questions of EPA, DEQ, and PHD staff about the cleanup.		

**Note:** Locations mentioned more than once are indicated with the total count in parenthesis.

2) How and where do you recreate? How often?

Location	When	Count	Activity/Additional Comments
Canyon Creek	Summer	3	Swimming (2), camping
Rose Lake		3	Swimming (mom had an allergic reaction), Fishing (2)
Killarney Lake		2	Fishing, Boating
North Fork of Coeur d'Alene River		2	Grandparents own property; fishing
South Fork of Coeur d'Alene River - Smelterville	Summer	2	Grandpa bring kids to swim at hippie dam; Rope swing
Bumblebee		2	Swimming, camping
Pine Creek	Summer	1	Swimming
Cataldo	Summer	1	Swimming
Big Creek		1	Motorcycles
Old Mine Sites and Settlements		1	Bottle collecting
Kingston		1	Swim at grandparent's property
Elizabeth Park	All Year	1	ATV
Rainy Hill		1	Camp
South Fork of Coeur d'Alene River - Big Creek to Enaville		1	Kayaking
All over the Valley		1	ATVs
Glidden Lake		1	Fishing
Smelterville		1	ATVs
Enaville Silver Bridge	Summer	1	Swimming
Coeur d'Alene River (South of Kingston)		1	
<b>Total</b>		<b>27</b>	

3) What is important to you about local recreation and site conditions?

- "I want to find information online to know where it's unsafe to recreate."
- "People don't know how bad the contamination is."
- "People need to be reminded at the beginning of summer to recreate safely."
- "Go to community meetings to talk about contamination."

4) What questions and concerns do you have about healthy recreation?

- "High blood lead levels"
- "Tested river/camping property"
- "Kellogg swimming pool"

- “Smelterville rope swing”
- “Camping on North Fork”
- “Rose Lake fishing – didn’t catch anything”
- “Played in a slag pit as a child”
- “Aware of lead problem already”
- “Child had high lead levels; not sure why”
- “Outsiders take good camping spots”
- “Camp in backyard – Canyon Creek swimming”
- “Doesn’t like public pools”

Fair attendees were invited to identify their three favorite recreation activities on a poster (Figure 1) and indicate their favorite recreation locations on a map (Figure 2). A count of total favorite activities (shown on Figure 1) is summarized in Table 1.

**Table 1. Summary of favorite recreation activities**

Activity	Count
Camping/Picnicking	55
Boating/Fishing	44
Swimming/Beach Activities	42
Dirt Biking/Mountain Biking/Riding ATVs/Horseback Riding	40
Hunting/Foraging for berries, mushrooms, plants/Traditional Gathering/Cultural Ceremonies	29
Hiking/Golfing/Road Cycling/Exploring/Scenic Driving/Wildlife Viewing	26



**Figure 1. Favorite recreation activities**



Figure 2. Favorite recreation locations

## Meeting Presentations

On September 7, 2016, information was presented to the Panhandle Kiwanis Club in Coeur d'Alene. Approximately 20 people participated, including the mayor of Coeur d'Alene. Attendees provided the following information about individual recreation habits.

Activity	Participation			Frequency per year		
	Overall	In Coeur d'Alene Basin	%	0-5	5-10	>10
Fishing	4	0	0%	3	0	0
Boating	8	3	38%	0	1	0
Hiking	10	6	60%	3	1	0
Biking	7	6	86%	5	1	0
Scenic Driving	11	11	100%	8	2	0
Pet Recreation	3	2	67%	0	0	0
Camping	10	7	70%	5	2	0
Floating the River	6	5	83%	6	0	0
<b>Total</b>	<b>59</b>	<b>40</b>	<b>68%</b>			

On December 20, 2016, information was presented to the Silver Valley Kiwanis Club. Approximately 10 people participated. Attendees provided the following information about individual recreation habits.

Activity	Participation			Frequency per year		
	Overall	In Coeur d'Alene Basin	%	0-5	5-10	>10
Fishing	4	4	100%	2	1	1
Boating	5	5	100%	3	2	0
Hiking	9	9	100%	4	5	0
Biking	4	4	100%	2	2	1
Golfing	3	3	100%	2	1	0
Skiing	3	3	100%	1	2	0
Softball	1	1	100%	0	0	1
Floating the River	4	4	100%	4	0	0
<b>Total</b>	<b>33</b>	<b>33</b>	<b>100%</b>			

On October 19, 2016, information was presented to a group of nine school age children and two parents. The following information was provided by the children.

Activity	Count	Location
Play on playground and grassy areas; ride bikes and scooters	9	Near home
Swim	8	Canyon Creek near Grays Bridge
Camping	7	Moon Pass, Avery
Play in undeveloped field	6	Near home
Fishing	Unknown	Rose Lake
Hiking	Unknown	Canyon Creek or near camping area

### Submitted Comments

The following is a summary of responses for comments received through online submission forms, emails, or conversations with community members. These comments will be considered as we develop a plan to implement our Recreational Sites Strategy. We considered all of the comments submitted; however, we did not prepare responses to comments that were beyond the scope of the Recreational Sites Strategy and were not pertinent to developing the upcoming Recreational Sites Implementation Plan.

Recreational activities of interest stated within these comments included: bike riding on the Trail of the Coeur d'Alenes and local roads, picnicking, fishing, hunting, gathering of plants, bird watching, ATV/OHV (all-terrain vehicle/off-highway vehicle) trail riding, camping, floating the river, and boating/kayaking.

The following is a list of recreational information and concerns gathered during outreach and conversations with community members:

- Fishing: Catch and release is common along the main stem of the Coeur d'Alene River from the Kingston to the Cataldo areas. Consumption of fish caught is common for the Lower Basin, including the Coeur d'Alene River and Chain Lakes.
- Rafting, Floating, and Boating: In the past, most recreationalists tended to float only along the North Fork of the Coeur d'Alene River. In recent years, more recreationalists are starting in the Enaville area or along Riverview Drive to float along the main stem of the Coeur d'Alene River. Large undeveloped parking areas are being created in locations with consistent use.

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- Dispersed Camping/Picnicking Sites: In recent years, several dispersed camping sites are being used below Enaville along the main stem of the Coeur d'Alene River likely due to increased floating along the main stem and temporary closure of the Bumblebee campground located along the North Fork of the Coeur d'Alene River. Land previously used for horse grazing is now being rented as camping spots; some sites include port-a-potties. Similarly, dispersed camping sites have been and continue to be used along the river in the Lower Basin.
  - ATV/OHV: Trail riding may be the top recreational activity that attracts out of area visitors. Numerous locations are available and accessible for riders. Popular areas include heading up Canyon Creek/Burke and Moon Pass. Motor bike riding, especially along the Idaho/Montana state line, is gaining popularity but is not as popular as ATVs.
  - Berry Gathering: Popular areas for gathering berries include heading up Canyon Creek/Burke and Nine Mile Canyon.
  - Old Mission State Park: Visitors to the Cataldo Mission often are staying or camping in the Silver Valley for another reason or decided to stop when driving on I-90. Since school children often visit as part of field trips, the number of local visitors is low.
  - "Play Clean" Messaging: For all of these activities, recreationalists (both local and out of area visitors) may not know about metals contamination present along the river banks, beaches, trails, etc. They also may not know the "Play Clean" recommendations to wash hands and face before eating; eat on a picnic table or grassy area, not on the ground; clean recreational items and equipment to prevent tracking of contaminated dust and soils into their homes; etc. For more information, visit: [www.deq.idaho.gov/PlayClean](http://www.deq.idaho.gov/PlayClean) or contact Panhandle Health District at 208-783-0707.

#### Comment/Concern: Recreation Benefits

Two commenters identified that recreation is very important to health and well-being. One also commented on the positive economic impact of recreation for businesses and local governments.

#### Response:

We agree that outdoor recreation provides many benefits to individuals and the community, including economic and health benefits. We are committed to maintaining recreation opportunities while managing human health risks.

Community outreach and education are an important way to help people manage health risks while recreating in the Upper and Lower Basin. A range of activities is designed to help recreationalists limit their exposure to metals. These activities include signage, brochures, educational poster displays, exhibits at local fairs and events, children's activity books, and lead education in schools. The mascot Riley Raccoon and his family help remind people to "Keep Clean, Eat Clean, Play Clean." Facebook posts, public service announcements, and media articles also provide reminders. These efforts are part of a robust outreach and education program that has been in place for years, and we intend to continue and expand this program.

For some recreational sites, remedial actions may be determined to be necessary given the human health risks, frequency of use, level of metals concentrations, types of recreation, etc.

#### Comment/Concern: Viewpoints Regarding Health Risks

Commenters had diverse viewpoints regarding exposures to metals during recreation. One commenter stated "I have no concerns about most recreation sites and their potential impacts on human health... I do not believe that any recreational activities should get any attention, let alone prioritized." The commenter also stated, "There are no health concerns for children or adults recreation in the OU3." Another



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commenter stated that not enough is being done in the realm of “education, outreach, and cleanup of lead and heavy metal contamination exposures.”

Response:

Our goal is to manage human health risks without limiting recreational activities throughout the Upper and Lower Basin. The development and implementation of actions as part of the Coeur d’Alene Basin Recreational Sites Strategy will follow the guidelines and framework outlined in the 2012 Interim Record of Decision Amendment (RODA).<sup>1</sup> As noted above, outreach and education efforts will continue.

Recreating in an area contaminated with lead and/or other heavy metals can indeed present a health risk. Ingesting even small amounts of soil containing lead can cause health problems for young children and women who are or may become pregnant. We are most concerned with lead health effects for young children and pregnant women because they are most susceptible to lead health effects. We are also concerned for older children, adolescents, and adults.

Watchful parents can reduce exposures for their families; however, they cannot entirely prevent ingesting soil. We know from investigations by PHD that children have had elevated blood lead levels from visiting recreational sites intermittently. They don’t need to have prolonged exposure to put themselves at risk.

The National Academy of Sciences (2005) advocated for additional actions to protect people from recreational exposures in the Lower Basin:

It is logical to assume that children may be exposed to lead away from their own residences, but accurate selection of a precise fractional source contribution should not be presumed. Disparate model performance in the lower basin may be related to differing exposure profiles. For example, shoreline recreation in the lower basin may lead to significant exposure to exposed materials with high lead content and bioavailability. Neighborhood soils therefore may be a poor surrogate in the lower basin, leading to box model underprediction. As described in the OU-3 HHRA, follow-up studies of children with high levels of lead in their blood in the lower basin suggest strongly that riverbank material may be an important source of lead exposure (TerraGraphics et al. 2001). The Coeur d’Alene River basin might also exhibit spatial variation in soil lead bioavailability. Smaller particles are transported farther downstream in watersheds and generally exhibit higher lead bioavailability (Mushak 1991) than larger particles.<sup>2</sup>

Comment/Concern: Signage

Three commenters raised concerns about signage. One was concerned over the lack of signage: “There are no warning signs posted anywhere from Pinehurst to the Montana State line, eastern boundary of the Coeur d’Alene Basin educating those who ride the Rail To Trails or come within contact to the toxic repositories along I-90 from the Old Mission repository at Cataldo, Page Ponds at Smelterville, the Central Impoundment Area, Elk Creek and those further east.” Another indicated that any update of signage be done while considering residents and business owners and “Not all sites need the same sign; most do not likely need any signs, especially ones selected for remediation work.” The third stated: “Signage is important.”

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<sup>1</sup> EPA (U.S. Environmental Protection Agency). August 2012. *Interim Record of Decision (ROD) Amendment, Upper Basin of the Coeur d’Alene River, Bunker Hill Mining and Metallurgical Complex Superfund Site*.

<sup>2</sup> National Academy of Sciences. 2005. *Superfund and Mining Megasites Lessons from the Coeur d’Alene River Basin*. Committee on Superfund Site Assessment and Remediation in the Coeur d’Alene River Basin, Board of Environmental Studies and Toxicology, Division on Earth and Life Sciences, National Research Council. The National Academies Press. Washington, D.C.

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Response:

We believe that signage is important because community outreach and education can help people manage health risks while recreating. Before any sign is installed, we will carefully consider its message, its placement, its appearance, and potential impacts to local residents and businesses, as well as visitors. Our goal is to provide health and safety education that will benefit both recreationalists living within the Silver Valley and those that visit the Silver Valley. The purpose will be to provide education in a manner that complements the types of recreation, history, or ongoing remedial efforts for the area. Some signs may be temporary as site conditions can change based on progress of remedial actions or changes in recreational uses. Where applicable, we will reach out to other agencies and organizations to work together on updating or creating new signs. Priority areas and types of signage will be identified in a multi-year Implementation Plan (to be prepared in 2017) and in annual work plans prepared in future years (as needed).

Comment/Concern: Fishing and Rivers

One commenter was concerned about fishing in areas clear of contamination. Another commenter was concerned about contamination within the South Fork of the Coeur d'Alene River.

Response:

Current fish consumption advisories for Lake Coeur d'Alene and statewide advisories for bass are available at: <http://healthandwelfare.idaho.gov/>. Open the "Health" link, followed by "Environmental Health" and "Fish Advisories" or call 866-240-3553 for more information.

During the spring and summer of 2016, fish tissue samples were collected from the South Fork Coeur d'Alene River, Coeur d'Alene River and Chain Lakes, Coeur d'Alene Lake, and Spokane River in Idaho in accordance with the Idaho Fish Consumption Advisory Project (IFCAP) protocol. A Health Consultation Report will be prepared during 2017. This report will be used by IFCAP and the Coeur d'Alene Tribe to update and expand the current fish consumption advisories as needed to protect the public from adverse health risks associated with consuming contaminated fish.

To reduce concentrations of metals in the South Fork of the Coeur d'Alene River, EPA is working on plans to install a groundwater collection system and to upgrade and expand the Central Treatment Plant. Upstream cleanups at old mine and mill sites are also reducing the amount of metals going into the river. For more information on the latest cleanup projects, visit <https://yosemite.epa.gov/r10/cleanup.nsf/sites/bh> or call 206-553-1896.

Comment/Concern: Birds

One commenter was concerned with the health of birds in the Basin and where to find more information on current assessments and actions.

Response:

The Coeur d'Alene Basin Restoration Partnership has prepared summary information about successful wetland restoration and the positive impact on bird populations and habitat. To view photos, videos, and documents: <http://restorationpartnership.org> or call 208-582-4080.

The U.S. Fish and Wildlife Service's Northern Idaho Field Office (NIFO) conducts biological monitoring of the Coeur d'Alene River Basin. This includes migratory species and songbirds. For more information: <https://www.fws.gov/idaho/>.



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Comment/Concern: Wash Stations

Two commenters addressed wash stations. One commenter directly mentioned ATVs/OHVs recreation and possible routes of contamination. The other mention of wash stations was related to “those that go off trail” (in reference to biking and hiking trails) and “washing stations if I fish in the water.”

Response:

We will be looking into the installation of wash stations as an option to reduce tracking of contaminated soils and sediments from recreational sites to residential areas. Priority areas and types of wash stations will be identified in a multi-year Implementation Plan (to be prepared in 2017) and in annual work plans prepared in future years (as needed). Examples of potential options could include car wash type facilities for washing vehicles, ATV/OHV, boats, and outdoor gear, as well as possibly including HEPA vacuums to clean out interiors of RVs and vehicles. Other potential smaller wash stations could include outdoor showers at public beaches or hand washing stations along trails.

Comment/Concern: ATV/OHV

One commenter suggested the use of speed limits and vegetative barriers to control dust from ATV/OHV in heavy use areas and near homes to keep contaminants out of residential areas.

Response:

We will be looking at implementing dust control measures for ATV/OHV use in areas of concern, for example residential areas with metals contamination. Priority areas and types of actions will be identified in a multi-year Implementation Plan (to be prepared in 2017) and in annual work plans prepared in future years (as needed). Examples of potential actions could include community outreach and education such as encouraging wearing bandanas when riding in dusty areas or suggesting riding in areas without metals contamination. Other remedial action options could also be considered such as tracking reduction methods, removals/capping, and controlling access to contaminated areas.

Comment/Concern: Hiking and Biking Trails

One commenter wondered about biking and hiking trails and advising users about wash stations and minimizing exposure to dust through possible options of wearing masks and building or planting barriers to dust.

Response:

For hiking and biking trails, priority areas and types of actions will be identified in a multi-year Implementation Plan (to be prepared in 2017) and in annual work plans prepared in future years (as needed). Examples of potential actions could include continued community outreach and education, installation of new or updated signage, and implementing dust control measures tailored to the location.

Comment/Concern: Remediation Considerations

One commenter suggested a list of items to consider before remediation of a recreation site. For example, number and frequency of young children and pregnant women recreating at the site, comparison of soil sample concentrations to the lead soil standard of 700 mg/kg, remediation methods need to last many years to avoid excessive operation and maintenance costs, chemical form of lead in soil, and evaluation using the threshold and balancing criteria.

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Response:

Several factors for prioritization of areas and actions, which are similar to these remediation considerations, were identified in the Recreational Sites Strategy. These prioritization factors include: high risks to human health, effectiveness of action alternatives, feasibility of long term maintenance in areas where recontamination is likely, ownership, current property uses, type of recreational activity, coordination with other programs, traditional gathering areas significant to the Coeur d'Alene Tribe, and other factors identified by stakeholders.

Comment/Concern: Air Quality

One commenter was concerned about air quality, especially around Coeur d'Alene Lake.

Response:

Daily air quality reports can be accessed at: [www.deq.idaho.gov/daily-air-quality-reports-forecasts](http://www.deq.idaho.gov/daily-air-quality-reports-forecasts). Air quality information for the West Silver Valley is available at: [www.deq.idaho.gov/west-silver-valley-air-quality](http://www.deq.idaho.gov/west-silver-valley-air-quality).

For the Coeur d'Alene Recreational Sites Strategy, we are focusing on addressing recreational sites within the boundary of the Bunker Hill Superfund Site Institutional Controls Program. For more information about this boundary, see map in Appendix A of the Recreational Sites Strategy ([www.deq.idaho.gov/playclean](http://www.deq.idaho.gov/playclean)) or the Coeur d'Alene Basin Commission website (<http://www.basincommission.com/ICP.asp>). Coeur d'Alene Lake is not included within this boundary.

By addressing lead contamination in soil at recreation sites, the potential for lead in fugitive dust will be reduced. Presently, when remedial actions that may involve the generation of fugitive dust (e.g., removal, transport, and consolidation of contaminated soil, waste rock, or sediments) are performed, all reasonable precautions to prevent particulate matter from becoming airborne are required.