

EPA INVITES YOUR COMMENTS: PROPOSED UPPER BASIN CLEANUP PLAN



Fact Sheet for the Upper Coeur d'Alene River Basin Proposed Plan

United States Environmental Protection Agency Region 10

North Idaho

July 2010

**OPPORTUNITIES
FOR YOU
TO GET
INVOLVED!**

Informal Q&A	Recorded Comments
Open House	Public Meeting
August 4, 2010	August 4, 2010
5:00 – 6:30 p.m.	7:00 – 8:30 p.m.
Submit written comments	Give oral and written testimony
SHOSHONE MEDICAL CENTER HEALTH & EDUCATION CENTER 858 COMMERCE DRIVE SMELTERVILLE, ID 83868	

You are invited to review the Proposed Plan for cleanup of mining-related contamination in the Upper Basin of the Coeur d'Alene River. The Upper Basin is part of the Bunker Hill Mining and Metallurgical Complex Superfund Site. Comments are due August 25, 2010.

After reviewing and responding to comments on the Proposed Plan, EPA will issue its final cleanup decision in a ROD Amendment later in 2010. **In response to the high level of public interest, EPA has set a comment period of 45 days instead of the usual 30 days. EPA is accepting written comments on the Proposed Plan from July 12, 2010 through August 25, 2010.** In addition, you may provide oral or written comments on the Proposed Plan at the formal Public Meeting.

The Public Meeting on August 4 from 7:00 to 8:30 p.m. is your chance to provide comments for the record. We want to hear from you and will pay serious attention to what you have to say. Just before the Public Meeting, there will be an Open House — an informal opportunity to meet project staff, see displays, and ask questions. You can also submit written comments on the Proposed Plan at the Open House. Drop in any time between 5:00 p.m. and 6:30 p.m. There will be no formal presentations or recording of oral comments at the Open House. **We encourage you to come.**

**Send comments on the
Proposed Plan by August 25, 2010**

to:

cdabasin@epa.gov

or

*Coeur d'Alene Basin Team
U.S. Environmental Protection Agency
1200 6th Avenue, Suite 900, MS ECL-113
Seattle, WA 98101*

This Fact Sheet summarizes the new cleanup actions in the Proposed Plan for the Upper Basin. The Upper Basin includes areas of mining-related contamination located along the South Fork Coeur d'Alene River (SFCDR) and its tributaries downstream to about a mile west of where the South and North Forks combine, to include the town of Kingston. The U.S. Environmental Protection Agency (EPA) is proposing actions to protect human health and the environment from risks posed by contamination.

See the Proposed Plan

To view the entire Proposed Plan online, visit EPA's Record of Decision (ROD) Amendment page at <http://go.usa.gov/igD>

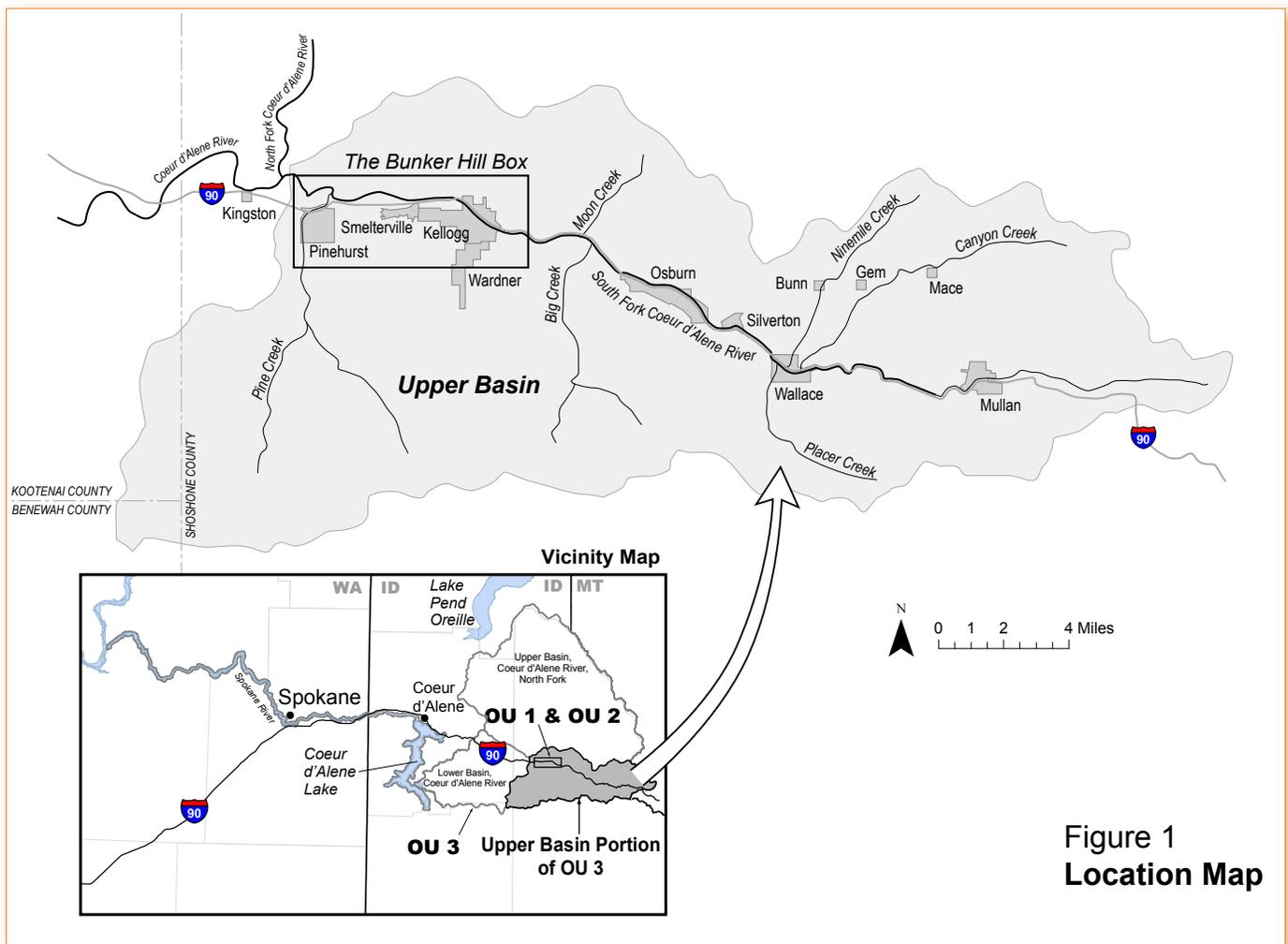


Figure 1
Location Map

A Comprehensive Cleanup Plan for the Upper Basin

The Coeur d'Alene Basin has been one of the leading silver-, lead-, and zinc-producing areas in the world. Surface water, groundwater, soil, and sediments in large portions of the Basin have been severely contaminated. Despite much cleanup work over the last 20 years, the Basin still contains high concentrations of lead, zinc, cadmium, arsenic, and other metal contaminants.

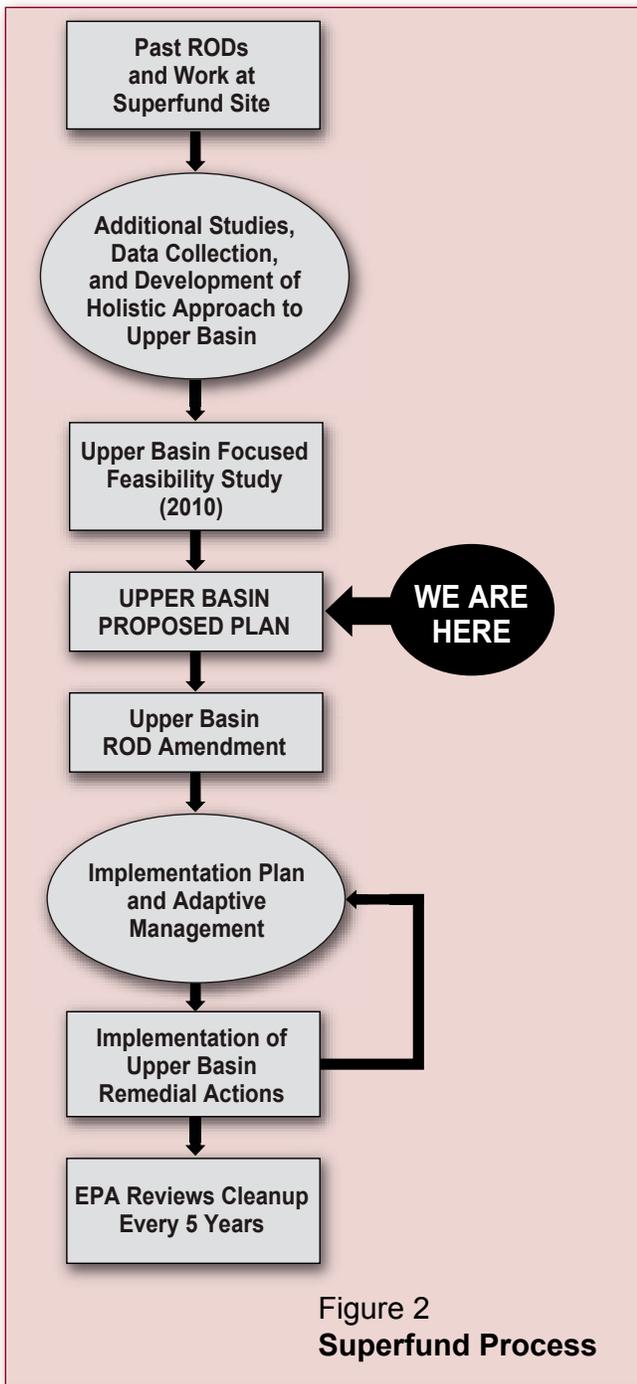
There are three Operable Units (OUs) at the Bunker Hill Superfund Site. OU 1 (Populated Areas) and OU 2 (Non-Populated Areas) are located in the Upper Basin within the Bunker Hill “Box”, a 21-square-mile area surrounding the former smelter complex.

OU 3 includes all areas of the Coeur d'Alene Basin outside the Bunker Hill Box where mining-related contamination is present. OU 3 extends from near the Idaho-Montana border into the State of Washington.

It includes floodplains, communities, lakes, rivers, and tributaries. As noted earlier, the SFCDR portion of the Upper Basin watershed is the focus of this Proposed Plan. This area of historical mining and industrial activities is the primary source of downstream metals contamination.

EPA has already issued RODs for various portions of this Superfund Site. Since the most recent ROD was issued in 2002, much more knowledge has been gained about the contamination in the Upper Basin.

The Proposed Plan builds on the remedies identified in the previous RODs and new information and data obtained since 2002. The cleanup actions will add to the previous cleanup plans for the Upper Basin described in RODs for OUs 1, 2, and 3. The cleanup will take a comprehensive approach to protecting human health and the environment in the Upper Basin.



Why a ROD Amendment is Needed

A ROD Amendment is needed now to protect human health and the environment. The ROD Amendment will document the final remedy for surface water and for soil, sediments, and source materials where cleanup actions are taken in the Upper Basin. This ROD Amendment also includes actions to protect portions of the human health remedies selected in previous RODs.

A greater understanding of the Upper Basin has been gained over the last 8 years from site investigations, groundwater modeling, research into groundwater-surface water interactions, and ecological studies.

A holistic approach can now be taken to address contamination in the Upper Basin. This effort is also intended in part to address recommendations from the National Academy of Sciences. The ROD Amendment will present a comprehensive remedy for the Upper Basin that

- Aggressively addresses contaminant sources (such as mine tailings, waste rock, and contaminated floodplain sediments),
- Improves surface water quality in the SFCDR and its tributaries, and
- Protects previously selected human health remedies that could be vulnerable to erosion and recontamination.

Cleanup Goals

The cleanup goals for the Upper Basin include protecting human health, the environment, and wildlife from metals contamination. More specifically, the goals are:

- Protect human health by reducing metal concentrations in surface water to levels that are safe for drinking purposes;
- Protect the environment and wildlife by reducing metal concentrations in surface water to below site-specific water quality standards;
- Protect human health and the environment by reducing metal concentrations in soil, sediments, and source materials to below site-specific benchmark cleanup criteria at locations where cleanup actions are taken;
- Protect previously selected human health remedies that could be vulnerable to erosion and recontamination.

Proposed Cleanup Actions

EPA has completed a “Focused Feasibility Study” to evaluate cleanup options called “remedial alternatives” for the Upper Basin to identify a Preferred Alternative.

This Preferred Alternative includes both remedial actions (cleanup work) and remedy protection actions (keeping clean areas clean).

Remedial Actions

EPA developed and evaluated ten remedial alternatives to identify a Preferred Remedial Alternative.

This Alternative, called 3+(d), includes extensive cleanup in the Bunker Hill Box and elsewhere along the SFCDR and its main tributaries. (See figure on Page 4). Those tributaries include Canyon Creek, Ninemile Creek, Big Creek, Moon Creek, and Pine Creek.

Highlights of the Proposed Remedial Actions

In the Upper Basin outside the Bunker Hill Box:

- Excavation, capping, regrading and revegetation of waste rock, tailings, and contaminated floodplain sediments.
- Actions along stream reaches to reduce the flow of contaminated groundwater into the SFCDR and its tributaries, and to keep clean water clean by reducing the flow of surface water through contaminated floodplain sediments.

Text continues on Page 6

WHAT THIS FIGURE SHOWS

For the main and upper parts of the South Fork Coeur d'Alene River and major creeks, this figure shows the number of individual locations where remedial actions have been planned and the amount of material, such as contaminated tailings, waste rock, and floodplain sediments, that would be cleaned up. The "pie charts" for each portion of the river and creeks show the general breakdown of the proposed actions. The volume (cubic yards) listed for each watershed includes all material addressed by the Preferred Alternative.

The bigger the pie chart, the more contaminated materials are planned to be addressed.

Cap – Includes engineered or soil covers, or regrading and planting.

Excavation – Includes removing materials and either consolidating locally or transporting to a separate repository.

Hydraulic Isolation – Includes preventing contaminated water (seeps, adit drainage, or groundwater) from entering the river and creeks.

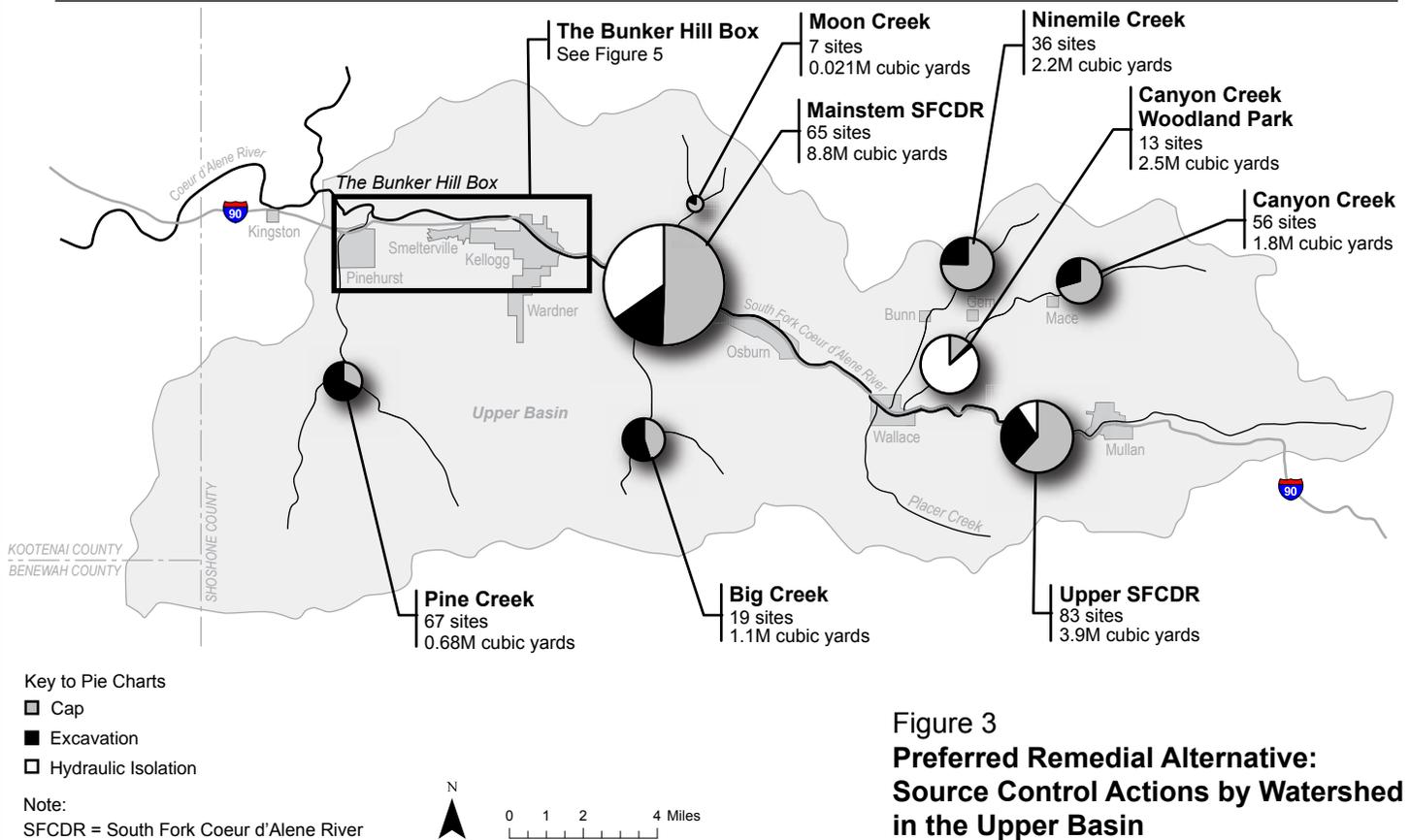


Figure 3 Preferred Remedial Alternative: Source Control Actions by Watershed in the Upper Basin

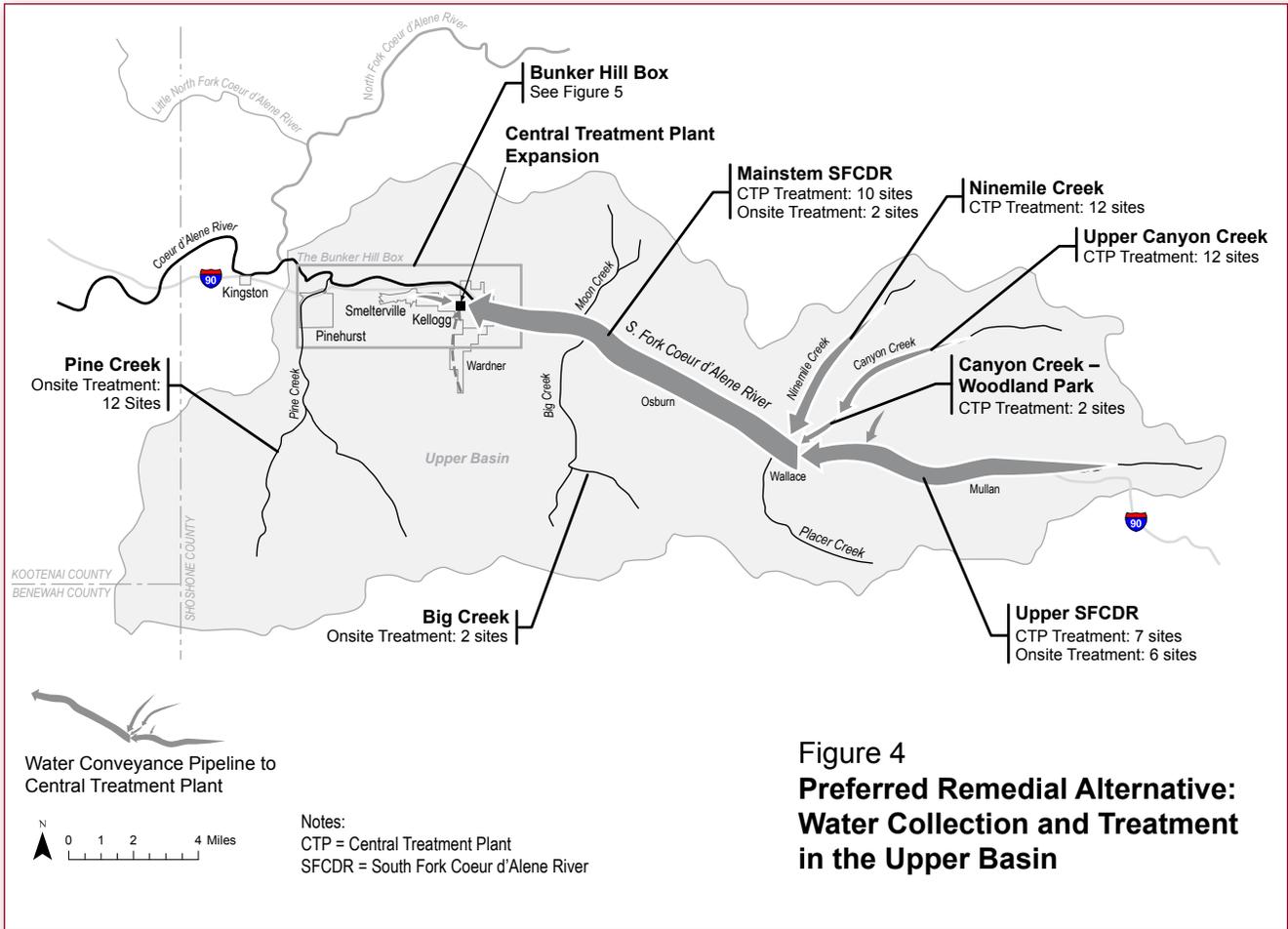


Figure 4
**Preferred Remedial Alternative:
 Water Collection and Treatment
 in the Upper Basin**

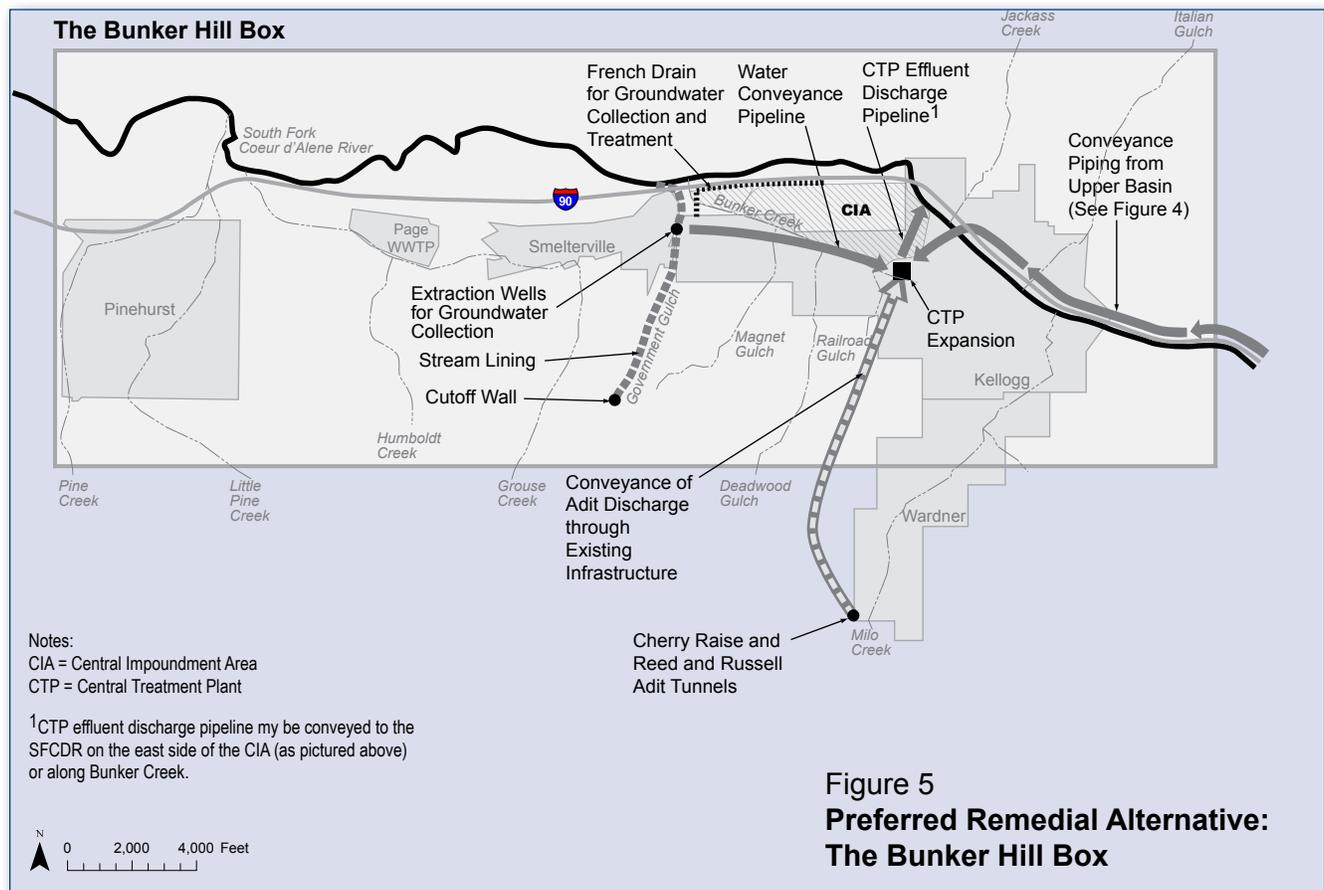


Figure 5
**Preferred Remedial Alternative:
 The Bunker Hill Box**

- Collection and treatment of contaminated adit discharges, seeps, and groundwater.
- Stream and riparian (streamside) cleanup actions in every major Upper Basin watershed.

Within the Bunker Hill Box:

- Actions to reduce the flow of contaminated groundwater entering the SFCDR and to keep clean water clean.
- Collection and treatment of contaminated groundwater near the Central Impoundment Area in Kellogg.
- Water management actions to reduce the flow of contaminated adit discharges near the Reed and Russell Mines.

Remedy Protection Actions

EPA proposes to take actions to protect the existing human health remedies within Upper Basin communities that could be vulnerable to erosion or recontamination due to tributary flooding and heavy rain or snowfall. EPA evaluated two remedy protection alternatives to identify a Preferred *Remedy Protection Alternative*.

Highlights of this Alternative, called RP-2, include:

- Actions to reduce the potential for erosion and recontamination of existing clean barriers installed within portions of the Upper Basin residential and community areas.
- Stormwater control actions such as culvert replacements, channel improvements, and installation of asphalt ditches.

The remedy protection actions focus on localized stormwater issues, including tributaries to the SFCDR (*see Figure 6*).

The specific actions identified for the communities are detailed in the Proposed Plan.

Benefits of New Cleanup Actions

Key benefits of the proposed cleanup actions include:

- Greater protection of human health by reducing the risk of exposure to contaminated soil, sediments, source materials, and surface water.

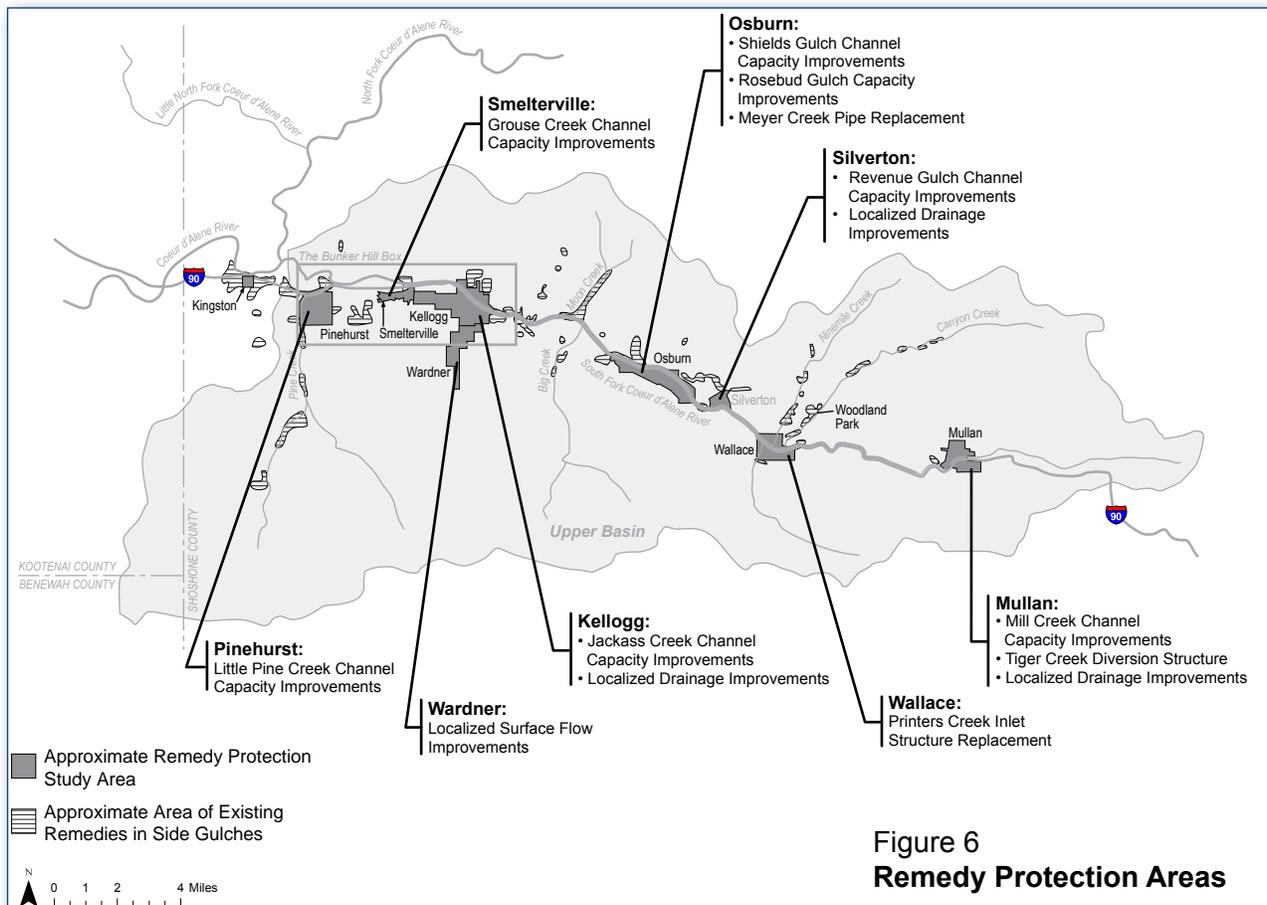


Figure 6
Remedy Protection Areas

- Ecological protection (plants, animals, and fish).
- Significant reduction of the transport of metal contaminants into the Coeur d'Alene River system from the Upper Basin, including reduction of particulate lead loading to the Lower Basin. (In other words, prevent contaminants from moving downstream.)
- A proactive approach to long-term protection of human health and the environment in Upper Basin residential and community areas by protecting the existing human health remedies that could be vulnerable to erosion or recontamination. (In other words, working to keep clean areas clean.)

HOW MUCH WILL THE CLEANUP ACTIONS COST?

Source Control and Water Treatment Cleanup Actions in the Upper Basin (outside the Bunker Hill Box)	\$917 M
Cleanup Actions in the Bunker Hill Box	\$39 M
Upper Basin Stream and Riparian Cleanup Actions	\$354 M
Upper Basin Remedy Protection Actions	\$34 M
Total Cost of Cleanup Actions:	\$1.34 B
<i>Note: Costs are rounded in millions of dollars.</i>	

Carrying Out the Selected Remedy

Under this Proposed Plan, cleanup will take longer and cost more than the actions identified in current cleanup plans. More expense and time will be needed. That's because, unlike the previous cleanup plans, this Proposed Plan represents a comprehensive, holistic approach to cleanup in the Upper Basin. It will provide a final remedy for surface water, and for soil, sediments, and source materials where actions are taken.

“Implementation Plan”

EPA has already begun the critical process of carefully planning and prioritizing individual cleanup actions. The outcome of this effort will be an Implementation Plan. This plan will be a “living document”, separate from the ROD Amendment. It will identify priority projects and guide cleanup actions into the future. The Implementation Plan will identify distinct phases of cleanup work from the ROD Amendment that will be conducted in the near term. These actions will then be evaluated to determine whether cleanup goals are being met. EPA will develop and modify the Implementation Plan in close cooperation with state agencies, other federal agencies, Tribal representatives, and other involved parties, including the Coeur d'Alene Basin Natural Resource Trustees.

EPA will consider current and potential mining-related activities as it performs cleanup work in the Upper Basin. Also, the agency will coordinate remedial actions, including their timing and who would do the work, with the owners of property in these areas.

Because these cleanup actions will take years and conditions will change over time, EPA will use an “adaptive management” process to make decisions along the way. This means decisions will take into account new information on the effectiveness of earlier cleanup actions as it becomes available. The Implementation Plan will be updated regularly to guide future decisions and to document changes to project priorities. Cleanup actions will be prioritized based on factors such as:

- The potential for people and wildlife to be exposed to contaminated materials,
- How much contamination is expected to be removed or reduced as a result of the action,
- The potential for recontamination of cleaned-up areas, and the need for repository space and restoration work,
- Construction staging, and
- Design needs.

A Collaborative Effort

The Proposed Plan is the result of a collaborative process among EPA, governments with jurisdiction in the Upper Basin, and the public. The Basin Environmental Improvement Project Commission (the Basin Commission), the Idaho Department of Environmental Quality, the Coeur d'Alene Tribe, the federal Natural Resource Trustees (the U.S. Fish and Wildlife Service, the U.S. Bureau of Land Management, and the U.S. Forest Service), the Spokane Tribe, the State of Washington, local governments, and other interested parties have all helped to develop this plan.

The Proposed Plan must protect human health and the environment. It must meet applicable laws and regulations, unless certain waivers are warranted. It must also address the concerns of governmental agencies and the affected communities. EPA has attempted to strike a balance among these varied interests and propose a reasonable and scientifically sound approach to cleaning up the Upper Basin.

Community Participation and the Path Forward

Community participation has played an integral role in developing the Proposed Plan. The project spans a large geographic area that includes unique communities with diverse interests and points of view. EPA is committed to meaningful public involvement in this process.

To that end, the agency has held public workshops and briefings, issued fact sheets and news articles, met with local officials and organizations, requested public review of draft documents, launched a webpage, worked with the media, and coordinated closely with the Basin Commission and its subgroups.

EPA is committed to continuing to involve the public throughout the remaining cleanup work in the site. The Agency remains open to input on its community involvement efforts. Following the comment period for the Proposed Plan, EPA will carefully consider and respond to all comments. EPA plans to issue the Upper Basin ROD Amendment in late 2010.



Cleanups like this one at the Rex Mine and Mill Site protect people's health – and the environment

The selected remedy may be the same as the Preferred Alternative or change based on new information and/or public comments. Therefore, the public is encouraged to review and comment on all the alternatives and the cleanup actions presented in the Proposed Plan.

The ROD Amendment will include a **Responsiveness Summary** with EPA's responses to the comments on the Proposed Plan.

After the ROD Amendment is issued, design and implementation of cleanup actions will begin. The collaborative process among the

- Agencies
- Tribes
- Local governments, and
- Community members

will continue to be critical during this phase of the cleanup effort.

FOR MORE INFORMATION

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Web sites

<http://go.usa.gov/igD>

OR

<http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/bh+rod+amendment>



Documents

The Proposed Plan and other select documents about the cleanup can be found at:

 **Molstead Library**
(Contains the Administrative Record)
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 Ave.
St. Maries, ID 83861
(208) 245-3732

 **Kellogg Public Library**
16 West Market Avenue
Kellogg, ID 83837
(208) 786-7231



Alternative formats are available. For reasonable accommodation, please call Andrea Lindsay at (206) 553-1896. TTY users, please call the Federal Relay Service at (800) 877-8339.



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July 2010

YOU ARE INVITED

*Comment on the Proposed Plan for Cleanup of
 the Upper Coeur d'Alene River Basin
 July 12 – August 25, 2010*

READ INSIDE FOR DETAILS

**EPA'S PROPOSED UPPER BASIN CLEANUP PLAN
 SUMMARY INSIDE**

SHARE YOUR COMMENTS

Open House

August 4, 2010

5:00 – 6:30 p.m.

Public Meeting

August 4, 2010

7:00 – 8:30 p.m.

**Shoshone Medical Center
 858 Commerce Drive
 Smelterville, ID 83868
 Health & Education Center**

Send comments on the Proposed Plan by August 25, 2010

**to cdabasin@epa.gov or
 Coeur d'Alene Basin Team,
 U.S. Environmental Protection Agency
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 Seattle, WA 98101**



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