



## Superfund Program *Record of Decision*

# Milltown Reservoir Sediments Operable Unit

### of the Milltown Reservoir/Clark Fork River Superfund Site

### Fact Sheet

The U.S. Environmental Protection Agency (EPA), with concurrence from the Montana Department of Environmental Quality (DEQ), has released a *Record of Decision* for the Milltown Reservoir Sediments Operable Unit (MRSOU) of the Milltown Reservoir/Clark Fork River Superfund Site near Milltown, Montana. See location map below.

EPA is the lead agency for the MRSOU and DEQ is the supporting agency.

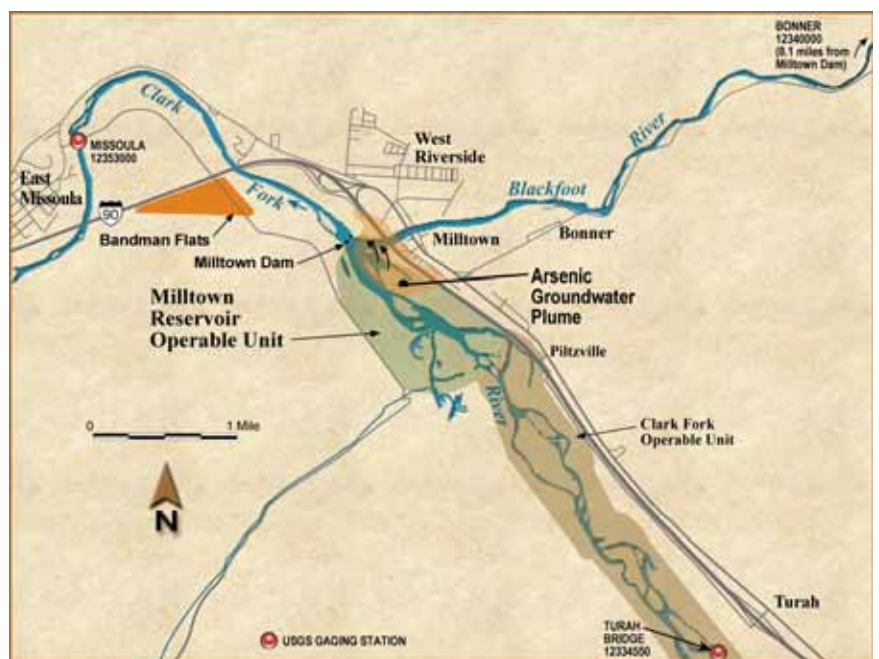
In April 2003, EPA, in consultation with DEQ, issued a *Proposed Plan* for cleaning up the Milltown Reservoir. EPA received 4,029 public comments on that *Original Proposed Plan* from members of the public; numerous groups; Local, State, and Federal agencies; the Confederated Salish and Kootenai Tribes; and the Atlantic Richfield Company (the Responsible Parties [RPs]). After reviewing the public comments, EPA made a number of substantial changes to its original proposal and issued a *Revised Proposed Plan* in May 2004. EPA received more than 800 comments, approximately 98 percent of which supported the revised proposal.

Now, after reviewing the comments on the *Revised Proposed Plan*, EPA, with concurrence from DEQ, has issued the *Record of Decision* for the MRSOU.

This fact sheet summarizes EPA's Final Cleanup Decision for the MRSOU. It is intended to provide general information about the full *Record of Decision*, and does not take the place of the full *Record of Decision*.

Copies of the complete *Record of Decision* are available in several information repositories and on the Internet at:  
<http://www.epa.gov/region8/superfund/sites/mt/milltowncfr/reservoirou.html>

This remedy is remarkable in many ways: it restores drinking water supplies, provides fish passage, and returns two rivers to their natural, free-flowing state. The remedy will be integrated with remediation and restoration activities; activities upon which redevelopment of the area may occur. Area residents, the local government, and many other stakeholders have been and will continue to be actively involved in the future of the confluence of the Clark Fork and Blackfoot rivers in southwestern Montana.



Milltown Reservoir Sediments Operable Unit Site Map



## Description of the Selected Remedy

EPA's selected remedy for the MRSOU addresses contamination from more than a century of mine waste washing downstream, creating some 6.6 million cubic yards of contaminated reservoir sediments. Those sediments have polluted the local drinking water supply and threaten the local fishery.

The remedy described in the *Record of Decision* provides many benefits:

- Permanent, long-term protection of public health and the environment
- Recovery of the Milltown drinking water supply
- Use of existing waste management areas for waste disposal
- Substantial elimination of contaminant release from ice-scouring and catastrophic events
- Return of two major waterways (the Clark Fork and Blackfoot rivers) to a free-flowing state
- Unrestricted fish passage
- Substantial improvement in the native and recreational fisheries, especially for trout
- Redevelopment possibilities for the area

These objectives will be accomplished by removing the primary source of contaminated sediment in the reservoir, removing the dam to prevent future impoundment of new sediments, and changing hydrologic conditions to accelerate natural attenuation of groundwater contamination. This approach allows natural attenuation processes to restore the aquifer over time, and ensures that remaining contaminated material is secured from uncontrolled release.

Remedial and restoration activities of significance in the cleanup plan include the following:

- Remedial elements:
  - Construct a bypass channel on the Clark Fork River arm of the reservoir capable of containing a 24-hour, 100-year peak flow event.

- Lower the pool level of the Milltown Reservoir to the lowest level possible to drain water from sediments impounded behind the reservoir.
- Build a railroad spur to allow loading of sediments from Area 1.
- Remove the sediments from the bypass channel footprint and transport to Opportunity Ponds (near Anaconda, Montana) by rail.
- Remove spillway and radial gate portion of the Milltown Dam.
- Remove the highly contaminated sediment from Area 1, load on rail cars, and transport the sediment to Opportunity Ponds.
- Build a new Clark Fork River channel and flood plain. Stabilize the new channel and flood plain through re-vegetation and other measures.
- Secure sediments containing elevated levels of metals and arsenic found in the lower arm of the existing Clark Fork River channel (Area 3) from erosion, including a 100-year peak flow event.
- Monitor surface and groundwater quality during and after remedial action.
- Monitor impacts on aquatic life during implementation of remedial action.
- Dispose of debris onsite in appropriate repositories.
- Continue the replacement water supply program and implementation of temporary groundwater institutional controls (ICs) until the Milltown aquifer recovers using monitored natural recovery, which is expected to take about 4 to 10 years after dam and contaminated sediment removal.
- Conduct long-term operation and maintenance of the remedial action and monitor the pre-existing waste repositories, any newly created repositories, and wastes left in place.



- Ensure that there is no net loss of wetlands.
- Ensure that protected historic and cultural resources are addressed in accordance with the National Historic Preservation Act.
- Replace any drinking water supply that exceeds groundwater performance standards as a result of remedial action implementation.
- Replace or retrofit domestic wells that are found to be unusable by EPA because of the lowering of the groundwater.
- Clean out any downstream irrigation intakes if constricted by sediments released during remedial action.
- Implement best management practices (BMPs) and engineering controls.
- Implement requirements for protection of listed species established in the U.S. Fish and Wildlife Service (USFWS) Biological Opinion, as they pertain to interim dam operation or conduct of remedial action.
- Preserve the structural integrity of the five bridges located between Milltown Dam and Stimson Dam, and the Interstate 90 embankment adjacent to Milltown Reservoir, to Montana Department of Transportation requirements.
- Restoration elements:
  - Remove the divider block/power house/north (right) abutment.
  - Match remedial channel design with the restoration flood plain and channel alignment.
  - Implement soft stabilization techniques and appropriate revegetation activities to stabilize the new channel.
  - Conduct short-term maintenance and monitoring of the revegetated streambank.
- Other related elements:
  - Although not part of the remedy, the Stimson Dam (located approximately 1 mile upstream on the Blackfoot River) will be removed prior to removal of the Milltown Dam. This is being done through a cooperative effort under the USFWS National Fish Passage Program.
  - Restoration activities will also be taken by the State outside of the primary remedial action area to facilitate flood plain and channel transition into and out of the primary remedial action area and to provide additional habitat and streambank improvements.

The Selected Remedy is similar to Combined Feasibility Study Alternative 7A2 modified. Four to five construction seasons are estimated to implement the Selected Remedy.

## Consideration of Significant Public Comments

EPA made many substantial changes to its *Original Proposed Plan*, changes which were reflected in the *Revised Proposed Plan*. The major changes documented in the *Record of Decision* are:

- The disposal location for the sediments will now be at Opportunity Ponds, part of the Anaconda Smelter Superfund Site. Sediments will be transported by rail.
- Sediment removal will be by mechanical excavation.
- Sediment removal will occur at the lowest reservoir pool level.
- The railcar loading area has been moved to the river side of I-90, farther away from a residential area.
- A bypass channel will be constructed on the Clark Fork arm of the Reservoir. This will be done before the Dam is removed to isolate the sediments from the active river and eliminate significant scouring and downstream discharge of contaminated sediments from this portion of the reservoir.
- After cleanup and restoration, the rivers will be free-flowing and natural.



## How to Find Documents

The *Administrative Record* for this Superfund Site contains documents that have been used to make the decision about how to best clean up the MRSOU. The *Administrative Record* can be reviewed at:

EPA's Record Center  
10 West 15<sup>th</sup> Street, Suite 3200  
Helena, MT 59626  
Phone: (406) 457-5046  
Monday to Friday

You may also call the Records Center for a complete copy (paper or CD) of the *Record of Decision*.

The *Record of Decision* is available on the Internet at: <http://www.epa.gov/region8/superfund/sites/mt/milltowncfr/reservoirou.html>

For information about the Milltown Reservoir/Clark Fork River Superfund Site or

to review a copy of the *Record of Decision*, please visit any of the following information repositories:

Hearst Free Library  
4<sup>th</sup> and Main Street  
Anaconda, MT 59711  
(406) 563-6932

Missoula City-County Library  
301 East Main Street  
Missoula, MT 59802  
(406) 721-2665

Bonner School Library  
9045 Highway 200  
Bonner, MT 59823  
(406) 258-6151

Mansfield Library  
University of Montana  
Missoula, MT 59812  
(406) 243-6860



*Artist's rendition of post-remedy confluence, looking upstream from the bluff above Milltown Dam*

## For More Information

Please call or write:

Diana Hammer, EPA  
(406) 457-5040  
[hammer.diana@epa.gov](mailto:hammer.diana@epa.gov)

Russ Forba, EPA  
(406) 457-5042  
[forba.russ@epa.gov](mailto:forba.russ@epa.gov)

Keith Large, DEQ  
(406) 841-5039  
[klarge@state.mt.us](mailto:klarge@state.mt.us)