## RIVER RESTORATION NEAR MILLTOWN DAM: AN EXAMPLE OF INTEGRATION WITH SUPERFUND REMEDIATION<sup>1</sup>

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The of Montana will restore the confluence of Clark Fork and Abstract. Blackfoot rivers following the removal of the Milltown Dam and some of the contaminated sediments located there. The Restoration Plan for the Clark Fork River and Blackfoot River Near Milltown Dam - October 2005, describes the restoration actions that are currently being planned (WestWater Consulting et al., 2005). In order for the restoration activities to occur, a portion of the project needs to be integrated with the EPA Superfund remedy for the Milltown Reservoir Sediments Operable Unit (USEPA, 2004). EPA, the State of Montana, ARCO, Northwestern, and Envirocon all participated in this integration process through the negotiation of the consent decree and it's attachments, principally the Statement of Work, which outlines who will implement various aspects of the remedial and restoration actions (Envirocon, 2005). The integration limits full restoration of all the natural river processes, but this is a concession that is outweighed by the benefits and cost savings of integration. All river and stream restoration projects have site constraints, e.g., landownership, roads, property lines, etc. The Milltown restoration project's integration with remediation results in additional constraints beyond the typical ones: legal constraints required by a consent decree, contaminated material remaining within the restoration work area, geographic limits to the project area, and negotiated actions. In order, to be successful the State and the other natural resource trustees have established goals and objectives for this project that considers the integration.

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- <u>Overall Project Goal</u>: Restore the confluence of the Blackfoot and Clark Fork Rivers to a naturally functioning, stable system. This goal can be achieved with the understanding that:
  - <u>1. Goal</u>: Improve water quality by reducing the erosion of contaminated sediments.
  - <u>2. Goal</u>: Provide channel and floodplains that will accommodate sediment transport and channel dynamics appropriate for the geomorphic setting.
  - <u>3. Goal</u>: Provide high quality habitat for all native fishes and other trouts, including continuous upstream and downstream migration while minimizing habitats that will promote undesirable fish species.
  - 4. Goal: Provide functional wetlands and riparian communities, where feasible.
  - <u>5. Goal</u>: Improve visual and aesthetic values through natural channel design, revegetation and the use of native plants and materials.
  - <u>6. Goal</u>: Provide safe recreational opportunities compatible with other restoration goals, such as channel and floodplain stability, sediment transport, and fish habitat. (WestWater Consulting et al., 2005).

## **References**

- USEPA, 2004. Milltown Reservoir Sediments Operable Unit of the Milltown Reservoir/Clark Fork River Superfund Site - Record of Decision Part 2: Decision Summary. Helena, Montana.
- Envirocon. 2005. Appendix C, Consent Decree for the Milltown Site Remedial Design/Remedial Action Statement of Work.
- WestWater Consultants, Inc., River Design Group, Inc., Geum Environmental Consulting, Inc., 2005. The Restoration Plan for the Clark Fork River and Blackfoot River Near Milltown Dam. Prepared for State of Montana. Helena, Montana.