VIII. Incidental Take Statement- U.S. Environmental Protection Agency

Section 9 of the Endangered Species Act (ESA) and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined as an intentional or negligent act or omission that creates the likelihood of injury to listed wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of an Incidental Take Statement.

The measures described below are not discretionary, and must be undertaken by the U.S. Environmental Protection Agency (USEPA) so that they become binding conditions of any grant, permit or contract issued to any party, as appropriate, for the exemption in section 7(o)(2) to apply. The USEPA has a continuing duty to regulate the activity covered by this incidental take statement. If the USEPA (1) fails to assume and implement the terms and conditions or (2) fails to any party to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the USEPA must report the progress of the action and its impact on the species to the Service as specified in the Incidental Take Statement [50 CFR §402.14 (I)(3)].

The Revised Proposed Plan (USEPA and MDEQ 2004) describes the current selected remedy, and proposes actions that, when implemented, are likely to adversely affect bald eagles (*Haliaeetus leucocephalus*) and bull trout (*Salvelinus confluentus*). The Service anticipates that activities conducted under the selected remedy may impart a level of adverse effect to individual bald eagles and bull trout to the extent that take occurs. The Service notes, however, that specific actions that are anticipated to result in adverse effects to bald eagles to the extent that incidental take occurs do not directly involve the USEPA, as incidental take of bald eagles is anticipated to result from Natural Resource Trustee restoration actions only. Incidental take of bald eagles will be addressed in a subsequent Incidental Take Statement issued to the appropriate entity.

The Service recognizes that some individual elements of the Revised Proposed Plan will be refined and further developed as project planning progresses. The Service will be directly involved in the refinement and further development of individual elements of the Revised Proposed Plan, and will incorporate additional measures to minimize adverse impacts to bald eagles and bull trout, as appropriate, as described in the CERCLA Technical Assistance National Interagency Agreement between the Service and USEPA.

Amount or extent of incidental take

The Service is unable to anticipate all possible circumstances or outcomes related to implementation of the Revised Proposed Plan. Those measures proposed by the USEPA to minimize elevated concentrations of total suspended solids (TSS), metals and arsenic to bull trout habitat in the Clark Fork River will likely be effective to varying degrees. These measures include:

- A gradual, monitored drawdown of the Milltown Reservoir of not more than 2 feet per day during Stage 1;
- A staged, permanent drawdown of Milltown Reservoir over a 12 to 14 month period in Stages 1, 2 and 3;
- The incorporation of a full bypass channel for the Clark Fork River through sediment accumulation area 1 (SAA1), isolating SAA1 sediments from river flow;
- The construction of temporary barriers between SAA1 sediments and the Blackfoot River during the removal process; and
- The isolation of SAA 3 sediments with elevated concentrations of metals left on site from the 100-year floodplain and protection of SAA 3 sediments with riprap or other containment material.

The Service anticipates that incidental take of bull trout will occur in the form of harm as a result of mechanical actions at and below the highwater mark of the Blackfoot and Clark Fork rivers, and within the current and reduced pool of Milltown Reservoir. The Service also anticipates that incidental take of bull trout may occur from unavoidable fluctuations in concentrations of TSS and dissolved metals, specifically copper. However, the best scientific and commercial information are not sufficient to enable the Service to estimate a specific amount of incidental take to the species for the following reasons:

- The current population level of bull trout in the Clark Fork River and associated tributaries are not known with a high degree of certainty. Adult bull trout are considered rare downstream from Milltown Dam, and thought to occur at a density of one to three fish per mile. Habitat use likely exhibits seasonal variability;
- The rate and frequency of downstream movement of bull trout from upstream spawning and rearing areas into the project area (the area of potential impact) is not known; and
- Take may occur in the form of alteration of habitat.

The Service anticipates that incidental take of bull trout may occur through mechanical impacts stemming from the operation of heavy equipment in Milltown Reservoir, the Clark Fork and Blackfoot Rivers within the implementation area. Incidental take may occur through stranding individual fish in isolated pockets or pools during the staged drawdown. Isolated pools are likely to occur on a limited basis immediately following the initiation of stages 1, 2 and 3 of the

permanent drawdown, and may last for 1 to 2 weeks. The incidental take associated with these actions is anticipated to occur throughout various periods of the 4 to 5 year implementation phase of the Revised Proposed Plan.

The Service also anticipates that incidental take of bull trout may occur from elevated concentrations of TSS and, to a lesser extent, dissolved copper, associated with the drawdown of Milltown Reservoir and the removal of the Milltown Dam spillway. Impacts from TSS and dissolved copper are likely to be greatest immediately downstream from the Milltown Dam site and grow progressively less downstream to the Bitterroot River, a distance of approximately 18 miles. The Service suggests that from 18 to 54 bull trout may be harmed by elevated concentrations of TSS and dissolved copper between the Milltown Dam site and the Bitterroot River as described under section V.B. The Service further anticipates that incidental take of bull trout will likely occur from elevated concentrations of TSS and dissolved copper until approximately 60 days after the initiation of Stage 3, or March 31, 2007, which ever occurs first. Actual levels of incidental take would be difficult to detect due to:

- The actual finding of dead or injured individual bull trout and relating that death or injury to implementation of the Revised Proposed plan is extremely unlikely given the high flow volume of the Clark Fork River below Milltown Dam.

- Dead or impaired bull trout may be washed downstream of the site where the impact occurred, fish decompose very rapidly and may be consumed by scavengers;

- Losses of bull trout may be masked by seasonal fluctuations in numbers or other causes; and

- The high flow conditions and high suspended sediment concentrations associated with Reservoir drawdown and dam removal will preclude the observation of injured or dead bull trout.

The Service further anticipates incidental take to occur as a result of the inability to trap migrating bull trout at Milltown Dam and move these bull trout upstream to the Clark Fork and Blackfoot Rivers. The progeny of from one to nine female bull trout would be lost to the population(s) of these rivers for 1 to 2 years.

Effect of the take

In the preceding biological opinion, the Service determined the level of anticipated incidental take associated with actions implemented under the selected remedy is not likely to jeopardize the Columbia River basin bull trout Distinct Population Segment.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the potential of incidental take of bull trout.

RPM1. Identify and implement means to reduce the potential for incidental take of bull trout resulting from mechanical activities in the implementation area, increases in sedimentation and contamination of the Clark Fork River that result from implementation of the Revised Proposed Plan.

RPM2. Develop and implement comprehensive monitoring program to identify when predicted concentrations of total suspended solids, metals and arsenic are exceeded.

RPM3. Implement reporting requirements as outlined in the terms and conditions below.

Terms and Conditions

The following terms and conditions implement the reasonable and prudent measures as described above. Terms and conditions TC1 through TC6 implement reasonable and prudent measure 1:

TC1. The USEPA shall append the August 2004 biological assessment for bull trout or the October 2004 biological assessment for terrestrial species when changes, alterations or refinements to the Revised Proposed Plan are proposed, and the changes, alterations and refinements have the potential, as determined by the Service, to impact Federally-listed threatened or endangered species. Appendices shall include those elements of a biological assessment as described in 50 CFR §402.12 necessary to determine if adverse effects to threatened or endangered species are likely to occur.

TC2. By January 31, 2005, the USEPA shall convene a technical committee to review the design and operation of the full bypass channel for the Clark Fork River. This committee shall include representatives of Montana Fish, Wildlife and Parks, the U.S. Army Corps of Engineers, Confederated Salish and Kootenai Tribes, the Service and other parties at the discretion of the EPA. This technical committee shall provide timely recommendations to address TC3, below, for the duration the full bypass channel is in place and functioning. All recommendations of the committee will be subject to approval by the Service prior to submittal to the EPA.

TC3. The USEPA shall design and construct the full bypass channel of the Clark Fork River to provide for the upstream passage of adult bull trout at appropriate seasons and flows as determined by the Service, and downstream passage of all bull trout at all flows. The USEPA shall monitor river flow within the bypass channel to ensure that the volume and velocity during appropriate seasons, specific to the design and constructed configuration of the bypass channel, are adequate to provide for the passage of bull trout.

TC4. The USEPA shall, following complete implementation of the Revised Proposed Plan, ensure that any constructed device, material or debris left in the thalwag of the Clark Fork or Blackfoot rivers, specifically at the location of the spillway and radial gate of Milltown Dam, the Interstate Highway 90 or Montana State Highway 200 bridges, does not impede the upstream passage of fish at flows less than or equal to the 1.5 year event and downstream passage of fish at the lowest recorded flow of these rivers.

TC5. The USEPA shall reinitiate consultation with the Service if the spillway of Milltown Dam is not removed and the Blackfoot and Clark Fork Rivers are not returned to a free-flowing condition by March 31, 2008.

TC6. In close coordination with the Service, the USEPA shall develop soil and water best management practices that are specific to the treatment area and proposed treatment activities as a component of the Remedial Action Work Plans for stages 1, 2 and 3. Soil and water best management practices will include those actions that are designed to further reduce impacts to the Clark Fork River and associated aquatic and terrestrial resources stemming from construction, equipment operation, mobilization, demobilization and other activities associated with implementation of the Revised Proposed Plan.

Term and condition TC7 implements reasonable and prudent measure 2:

TC7. The USEPA shall develop and implement a comprehensive plan to monitor the concentrations of TSS, dissolved copper and dissolved arsenic, generated by the staged drawdown of Milltown Reservoir and construction activities, and the impact of TSS, dissolved copper and dissolved arsenic concentrations on aquatic biota. This monitoring plan shall compare concentrations of TSS, dissolved copper and dissolved arsenic as described in the *Final Technical Memorandum Milltown Reservoir Dry Removal Scour Evaluation* and subsequent related documents with those measured at the United States Geologic Survey gaging station in East Missoula, and shall establish, to the extent practicable, 'real time' concentrations of dissolved copper. This monitoring plan shall be subject to review by the technical committee as established under TC2, above and subject to approval by the Service. Components of this monitoring strategy shall include:

TC7a. A prioritized list of actions that would be implemented to reduce concentrations of TSS, dissolved copper and dissolved arsenic following the initiation of each stage of the permanent drawdown, if concentrations described in the *Final Technical Memorandum Milltown Reservoir Dry Removal Scour Evaluation* and subsequent related documents are exceeded.

TC7b. A procedure to initiate actions to reduce concentrations of TSS, dissolved copper and dissolved arsenic downstream from the implementation area that exceed those described in the *Final Technical Memorandum Milltown Reservoir Dry Removal Scour Evaluation* and subsequent related documents.

TC7c. A caged fish monitoring plan to evaluate the impacts of elevated concentrations of TSS, dissolved copper and dissolved arsenic conducted at various locations upstream from, within and downstream from the implementation area. The caged fish impact evaluation shall be correlated to concentrations of TSS, dissolved copper and dissolved arsenic measured at the United States Geologic Survey gaging station in East Missoula.

TC7d. A fisheries habitat use monitoring plan to evaluate bull trout displacement and passage through the project area using radio telemetry, mark/recapture or similar means.

The habitat use evaluation shall be correlated to concentrations of TSS, dissolved copper and dissolved arsenic measured at the United States Geologic Survey gaging station in East Missoula.

Terms and conditions TC8 and TC9 implement reasonable and prudent measure 3:

TC8. The USEPA shall provide to the Service information generated by the monitoring plan as described above in a timely and regular fashion. Following the initiation of each of stages 1, 2 and 3, reports that document concentrations of TSS, dissolved copper and dissolved arsenic resulting from the staged drawdown and construction activities shall be provided to the Service. Reports that document the results of caged fish and habitat use monitoring shall also be provided to the Service. The format, level of completion and submission frequency of reports shall be developed jointly by the USEPA and Service prior to the initiation of Stage 1.

TC9. Upon locating dead, injured or sick bull trout, or upon observing destruction of redds, notification must be made within 24 hours to the Montana Field Office at 406-449-5225. Record information relative to the date, time, and location of dead or injured bull trout when found, and possible cause of injury or death of each fish and provide this information to the Service.

IX. Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery programs, or to develop information.

CR1. To avoid duplication of effort and increase coordination, we encourage cooperation and collaboration with the Natural Resource Trustees in implementation of the Restoration Plan to restore riverine and wetland habitat in and adjacent to the Clark Fork and Blackfoot rivers. This includes salvaging and stockpiling materials such as large logs, rootwads, large rock, sod and topsoil from the demolition of Milltown Dam and from SAAs 1, 2 and 3 for the Natural Resource Trustee restoration.

CR2. To progress toward bull trout recovery in the Clark Fork River Recovery Unit, the Service encourages the USEPA to incorporate recommended recovery tasks of the draft and subsequent final bull trout recovery plan (USDI 2002b).

CR3. So that the Service is kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, we request notification of the implementation of any conservation recommendations.

X. Reinitiation notice and closing statement

This concludes formal consultation and conference on the actions outlined in the Revised Proposed Plan (USEPA and MDEQ 2004). As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

R. Mark Wilson 12-16-04

R. Mark Wilson Date
Field Supervisor