BONNEVILLE POWER ADMINISTRATION

South Fork Flathead Watershed
Westslope Cutthroat Trout Conservation Program

RECORD OF DECISION

Summary

The Bonneville Power Administration (BPA) has decided to fund Montana Fish, Wildlife, and Parks Department's (MFWP) South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program. This program is the Proposed Action in the South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program EIS (DOE/EIS-0353, July 2005). BPA will fund the program pursuant to its authority under the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) to protect, mitigate, and enhance fish affected by the Federal Columbia River Power System (FCRPS) in the Columbia River Basin. The project constitutes a portion of the Hungry Horse Mitigation Program.

The need for the project is to preserve the genetic purity of the westslope cutthroat trout (*Oncorhynchus clarki lewisi*) populations in the South Fork of the Flathead River drainage. The Montana Fish, Wildlife, and Parks Department will remove hybrid trout from identified lakes in the South Fork Flathead drainage on the Flathead National Forest and replace them with genetically pure native westslope cutthroat trout over the next 10-12 years. Some of these lakes occur within the Bob Marshall Wilderness and Jewel Basin Hiking Area. These activities will occur on lands administered by the U.S. Department of Agriculture, Forest Service (USFS). The USFS is a cooperating federal agency.

Supplementary Information

Background and Scope of the Decision. The South Fork Flathead River drains 1,681 square miles of land on the Flathead National Forest and is apportioned into several land use areas: the Bob Marshall Wilderness, the Great Bear Wilderness, and the Jewel Basin Hiking Area, all of which are administered by the USFS. The South Fork drainage includes 355 lakes and approximately 1,898 miles of stream habitat. The South Fork drainage was isolated in 1952 by the construction of Hungry Horse Dam approximately five miles upstream of its mouth.

As early as 1960 fish managers detected unknown sources of rainbow trout in the Big Salmon drainage and were concerned that hybridization could impact the westslope cutthroat trout populations in the South Fork Flathead River drainage. About 1980, conservation efforts in Montana increased to protect the westslope cutthroat trout; and in 1983, MFWP commissioned a status review of westslope cutthroat trout west of the Continental Divide. The status review determined that hybridization was the primary threat to the South Fork Flathead populations. This threat was especially predictable in drainages that had a lake in the headwaters because many of the water bodies had,

historically, been stocked with non-native trout that were escaping downstream. The South Fork Flathead is a critical stronghold of genetically pure westslope cutthroat trout, representing 50 percent of the statewide range for genetically pure, large, interconnected populations.

In 1999, eight state and federal agencies (excluding BPA) developed and signed the Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout in Montana, which provides a framework for cutthroat conservation strategies in Montana.
In 1999, MFWP stepped up its commitment to westslope cutthroat conservation in the South Fork Flathead. From 1999 to 2002, MFWP developed a plan to remove hybrid trout populations that threaten to expand and hybridize with pure populations from lakes and streams throughout the South Fork drainage.

The South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program constitutes a portion of the Hungry Horse Mitigation Program. The purpose of the Hungry Horse Mitigation Program is to mitigate for the construction and operation of Hungry Horse Dam through restoring habitat, improving fish passage, protecting and recovering native fish populations, and reestablishing fish harvest opportunities. The target species for the Hungry Horse Mitigation Program are bull trout, westslope cutthroat trout, and mountain whitefish. The program is, in part, designed to preserve the genetically pure fluvial and adfluvial westslope cutthroat trout populations in the South Fork drainage of the Flathead River.

Authority. BPA has prepared the South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program EIS and this ROD pursuant to the process specified in the National Environmental Policy Act (NEPA), regulations of the Council on Environmental Quality (40 CFR Part 1505), Implementing Procedures of the Department of Energy (DOE) (57 FR15122; April 24, 1992); and under the authorities of the Northwest Electric Power Planning and Conservation Act, 16 U.S.C. § 839b et seq. BPA is issuing this ROD for its own actions only.

The USFS is a cooperating federal agency. The USFS has jurisdiction and responsibility for the use and management of National Forest lands, including the Bob Marshall Wilderness and the Jewel Basin Hiking Area, all of which occur on the Flathead National Forest. The USFS will issue a ROD for its actions separately.

The MFWP is also a cooperating agency and has jurisdiction and responsibility to manage all fish and wildlife resources that occur on the state, federal, and private lands of Montana. MFWP will issue a separate ROD on this project as a cooperating agency.

EIS and Public Process

Proposed Action. The Proposed Action was Alternative B in the EIS. MFWP will apply piscicides to remove hybrid trout from lakes and designated portions of their outflow streams, and then restock the lakes and streams with genetically pure westslope cutthroat trout. MFWP will use a combination of motorized/mechanized (i.e., aircraft, motor boats)

and non-motorized/non-mechanized (i.e., livestock, hiking) means to access all project sites. Before re-stocking with fish, MFWP will install sentinel fish cages in each lake to determine if the water conditions are appropriate. If so, the lake and stream will be stocked in order to establish genetically pure cutthroat populations in sufficient quantities to dominate any hybrid fish that might remain and to re-establish the fishery. MFWP will determine future stocking amounts and frequency on a case-by-case basis. MFWP will monitor the restocked lakes for several years to determine population viability and associated characteristics, and determine program success such as presence and degree of natural reproduction, genetic purity, angling quality, and growth rates.

The following 21 lakes and their outflow streams with hybrid populations have been identified and will be treated with piscicides to remove hybrid trout.

- Black
- Blackfoot
- Clayton
- George
- Handkerchief
- Koessler
- Lena
- Lick
- Lower Big Hawk
- Lower Three Eagles (genetic analysis pending)
- Margaret
- Necklace Chain of Lakes ("Smokey Creek Lakes") – counted as four lakes
- Pilgrim
- Pyramid
- Sunburst
- Upper Three Eagles
- Wildcat
- Woodward

Other lakes may also be included as additional information is discovered. The determination to treat lakes and streams other than those 21 listed above will be made only if hybridization is determined to be occurring through genetic analysis.

Alternatives Considered. In addition to the Proposed Action, the No Action Alternative and two other action alternatives were considered in reaching this decision:

- Alternative A: No Action (Status Quo Management)
- Alternative C: Fish Piscicides -Motorized/Mechanized Delivery and Application Methods
- Alternative D: Suppression Techniques and Genetic Swamping

These alternatives are evaluated in detail in Chapter 3 of the EIS. Chapter 2 of the EIS more fully describes each alternative, as well as alternatives eliminated from further consideration.

The No Action Alternative would maintain current management practices, including current fish stocking practices, angling regulations, and future fish stocking.

Alternative C is similar to the Proposed Action (Alternative B), but differs in the method used to transport materials, equipment and supplies to the project sites and in the application of piscicides to the lakes. The main difference in Alternative C is in the use of aircraft as the sole means of transport.

Alternative D proposes the combined use of two or more mechanical removal strategies to reduce hybrid trout numbers in an effort to protect downstream genetic purity of the westslope cutthroat. This alternative would rely on the use of mechanical fish collection methods as a means to suppress the hybrid trout populations by removing as many fish as possible. When population levels are adequately reduced, intensive fish stocking would commence on a "frequent or annual" basis (swamping) in an attempt to dominate the remaining hybrid trout in the lakes.

Environmentally Preferable Alternative. Over the short-term, the No Action Alternative is the environmentally preferable alternative because it would have the fewest impacts in the near term. Current management practices would continue and no piscicides would be applied to lakes and streams. In the long term, hybrid fish would continue to live in lakes and streams and threaten the westslope cutthroat trout. The No Action Alternative would not provide any efforts to conserve the westslope cutthroat trout.

Endangered Species. There are seven species of fish, wildlife and plants under protection of the Endangered Species Act that do occur, or could occur in the project area. On April 19, 2002 MFWP and BPA submitted a biological assessment to the U.S. Fish and Wildlife Service, in compliance with Section 7 of the Endangered Species Act, that evaluated the likely impacts the proposed project could have on these species. The biological assessment concluded that the preferred alternative in the FEIS was not likely to adversely affect the bald eagle (*Haliaeetus leucocephalus)*, grizzly bear *(Ursa horribilis)*, Canada lynx (*Lynx Canadensis)*, gray wolf *(Canis lupus),*and bull trout *(Salvelinus confluentus)*, and would have no effect on the Water Howellia (*Howellia aquatilis)* and Spalding Campion (*Silene spaldingii)* since no known occurrences and no suitable habitat were identified within the project area.

On May 15, 2002, the Field Supervisor for the Montana Field Office of the U.S. Fish and Wildlife Service concurred with the determination of "not likely to adversely affect." From the time between the 2002 biological assessment to this Record of Decision, subtle changes to the proposed project have warranted updating the biological assessment. MFWP and BPA will update the Service annually throughout program implementation, including reporting activities that may result in incidental take, and will comply with any requirements from the U.S. Fish and Wildlife Service.

Mitigation. BPA minimized potential short-term and long-term environmental and social impacts of the Proposed Action through program design and development of mitigation measures. Mitigation measures presented in the Draft EIS and updated in the Final EIS for the selected alternative are presented in the attached Mitigation Action Plan. All practicable means to avoid or minimize environmental harm are adopted. A complete list of these measures is in the Mitigation Action Plan attached to this ROD.

Decision Factors. There is a need to protect the genetic integrity of the genetically pure populations of native westslope cutthroat trout that currently exist in the South Fork Flathead River Watershed. The factors considered in making the decision on whether to fund the Proposed Action are as follows:

- The ability of the alternative to meet the need.
- Consistency with the Northwest Power and Conservation Council's Columbia Basin Fish and Wildlife Program.
- Efficiency and cost effectiveness.
- The ability of the alternative to achieve the biological objectives to preserve westslope cutthroat trout populations in the South Fork drainage and eliminate non-native trout that threaten the westslope cutthroat trout.
- The environmental impacts of the alternative on the following resources: fisheries, wildlife, water resources, soil and vegetation, land use, wilderness resources, recreation, socioeconomics, air quality, noise and human health. Chapter 2 of the Draft EIS summarizes the impacts of the alternatives on these resources.

Decision. Having considered the environmental impacts described in detail in the Draft and Final EISs and the responses to comments in Chapter 1 of the Final EIS and in this ROD, I find the benefits of the Proposed Action outweigh the potential adverse environmental impacts.

- The greatest potential impact (favorable and adverse) from the Proposed Action will be to fish. Non-native fish will be removed. Native westslope cutthroat trout will be planted to replace them.
- The genetic refuge for westslope cutthroat trout created by Hungry Horse Dam will be reinforced by the elimination of introduced species and restocking with genetically pure westslope cutthroat trout stock.
- Though piscicides will be used to kill targeted fish, mitigation measures will be used to reduce impacts to non-targeted species of fish, wildlife and humans.
- The project will be done over 10 or more years. MFWP plans to adapt its techniques, mitigation, and restocking plans based on information gathered as the project progresses.
- Temporary losses of fishing opportunities will impact some recreationists at 2-3 lakes per year over a large area, but as the westslope cutthroat trout recover, opportunities will recover or increase.

I have decided to proceed with the funding for the Proposed Action and adopt all mitigation measures. The Proposed Action best meets the need and purposes stated in the

EIS. The Proposed Action is the best course of action because it has the best chance of meeting the need to preserve westslope cutthroat trout populations in the South Fork Flathead River drainage; it is consistent with the Council's Columbia Basin Fish and Wildlife Program; it is an efficient and cost-effective use of resources; most adverse impacts are short-term and dispersed over a large area; and most of the potential environmental impacts can be avoided or reduced with the mitigation measures proposed. In addition, it will help mitigate for impacts of Hungry Horse dam on native westslope cutthroat trout. It is the best among the alternatives because, to the greatest extent possible, it balances environmental impacts with mitigation to reduce or avoid impacts, while meeting the need for action.

The environmentally preferable alternative, the No Action Alternative, does not meet the need for this project because it does not include any efforts to preserve the westslope cutthroat trout.

Public Comment. BPA published a Notice of Intent to Prepare an Environmental Impact Statement on May 5, 2003 in the Federal Register (68 FR 23705). BPA issued a South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program Draft EIS in June 2004 (DOE/EIS-0353). A Notice of Availability of the Draft EIS was published in the Federal Register on June 18, 2004 (69 FR 34161). A public comment period for the Draft EIS was open until August 20, 2004. BPA held a public meeting on July 12, 2004 in Kalispell, Montana to accept public comment on the draft document. During the comment period, 40 individuals, groups or agencies submitted remarks that resulted in 560 comments. BPA issued the Final EIS in July 2005 (DOE/EIS-0353). A Notice of Availability of the Final EIS was published in the Federal Register on August 19, 2005 (70 FR 48704). Chapter 1 of the Final EIS contains all comments made on the Draft EIS and includes responses to them.

After the Final EIS was released, some parties informed BPA that the Final EIS did not include comments they submitted during the Draft EIS comment period. BPA reopened the wait period before acting on the Final EIS and accepted comments for 45 days, until December 12, 2005. BPA received a total of 21 additional letters after the Final EIS was released. Most letters raised concerns previously identified in comments on the Draft EIS that BPA responded to in the Final EIS. Two commenters raised new concerns that merited additional response. The comments (summarized) and responses to these comments follow.

Commenter: Environmental Protection Agency

Comment: The EPA questions the adequacy of the pre and post treatment evaluations of amphibians, aquatic insects and plankton.

Response: MFWP has committed to surveying the lakes in the Flathead Basin to gather information about the biological community, including the range of abundance of amphibians, aquatic insects and plankton. After each treatment the amphibians will be monitored using visual counts of adults, egg masses and tadpoles; plankton and insects will

also be monitored. The results will be compared to pretreatment baseline levels. MFWP has included in its proposal to replace amphibians, if necessary, as part of its post-treatment action. By including pre-treatment evaluations in the plan, the agencies recognize its appropriate place in the NEPA process.

Comment: Potential impacts to non-target species, including impacts to non-fish species from restocking of treated lakes, should be within the scope of the environmental analysis.

Response: We apologize for any confusion. EPA's comment in the Final EIS (11.11) requested that we "…evaluate the ecological effects of stocking fish in lakes that were originally fishless…" We responded to this comment by pointing out that evaluating an action that occurred nearly 70 years ago was beyond the scope of this project, because the action of stocking fish 70 years ago was not part of this project. We indicated in the Final EIS that present conditions are considered the baseline by which to compare post-treatment conditions. We also did not commit to an additional comprehensive pre-treatment monitoring program because MFWP is presently conducting a comprehensive monitoring program. The results of that program will be the pre-treatment standard by which to compare the post treatment recovery of the lake ecosystems.

Since BPA received this comment, MFWP has expanded their monitoring program even more to include multiple sampling of 86 lakes and 111 streams in the project area. We think that instituting another comprehensive monitoring program would only be duplicating that effort. EPA also requested that we evaluate the effects of re-stocking formerly fishless lakes that had fish removed under this program. We responded to that request in the Final EIS by stating the effects of re-stocking would not be any different than before the treatment, because these lakes had fish in them prior to the treatments. The primary effects of this project stem from applying piscicide. We have evaluated the effects of this action including impacts to non-target organisms, fisheries, wildlife, water quality, soil and vegetation, land use, wilderness and recreation. We have also assessed the potential socioeconomic impacts to regional guides and outfitters and associated tourism during the periods proposed for treatment.

Comment: That MFWP personnel involved in the collections of amphibians must have knowledge and understand amphibian behaviors so that meaningful efforts to find and collect amphibians take place at each lake prior to treatment.

Response: MFWP personnel will use accepted protocols for amphibian collection. The staff proposed to do the collection and mitigation have the education, training and experience required to conduct research and manage aquatic resources. Specific information about staff qualifications and protocols is available from MFWP, but was deemed too detailed for inclusion in the Final EIS.

Comment: Recommend that at least some of the historically fishless lakes be left fishless for long-term monitoring and ecological comparison with lakes that are restocked. We note that decisions were made in the past to introduce non-native trout to these lakes

without careful, thoughtful evaluation, and full consideration of potential ecological effects.

Response: Thank you for your comment. Creating fishless lakes is not a goal of this project and was not proposed by the project sponsor (MFWP). Impacts to historically fishless lakes occurred when they were originally stocked decades ago. Please see the Final EIS for our responses to comments 11.10, 11.11, 37.62 and 40.26. MFWP has proposed monitoring the lakes that will be treated and restocked.

Comment: It may be easier to treat the more accessible non-wilderness lakes first and conduct comprehensive monitoring on non-target species with such treatments on these more accessible lakes.

Response: MFWP is considering treating lakes outside of the wilderness that have easier access in the first two years. The reasons for doing this include technical complexity, social, and biological reasons. Although ease of post treatment monitoring was not part of this scheduling consideration, the post treatment monitoring program will start off with lakes that are relatively easy to access.

Comment: With the restocking of fish to lakes that were originally fishless, additional biomass is added to the lakes that can influence nutrient cycling, and can have unintended effects to water quality and the biological integrity of the lake and downstream waters.

Response: As stated before, evaluating an action that occurred nearly 70 years ago is not part of this project. The biomass added to the originally fishless lakes was added nearly 70 years ago. When MFWP removes the hybrid trout, they will re-stock the lakes with genetically pure fish and the biomass will reach equilibrium consistent with the carrying capacity of each lake. The EIS also states that MFWP has been stocking high numbers of fish in some of these lakes as part of the genetic swamp out management concept. In the absence of this management practice, if the proposed alternative is implemented, then the EIS states that stocking numbers (biomass) will be reduced in some lakes and the fisheries will move toward a trend of natural equilibrium in wilderness.

Commenter: Edward Sohl

Comment: The hybrid cutthroat have superior viability.

Response: Your comment about hybrid vigor, or heterosis, doesn't apply in this instance. Neither hybrid vigor nor its qualities can ever be predicted and it cannot be maintained at its maximum because it starts reducing with the first generation in which random mating occurs. Attempting to maintain a high degree of favorable attributes requires constant and laborious cross breeding, an event that will not occur during random mating in the wild. With each successive generation, out breeding depression (mating between distally related species or parents) occurs and the best attributes of each species are lost. The hybridization that is occurring in the South Fork of the Flathead is diminishing the genetic integrity of the native westslope cutthroat trout.

Comment: Applying a poison to the lake surface will not be effective because of the amount needed, the depth of the lakes and other reasons.

Response: Westslope cutthroat trout, Yellowstone cutthroat trout, rainbow trout and hybrids of these three are spring spawners. They deposit their eggs in flowing water gravel soon after the ice melts from the lakes (June). The fertilized eggs require about 600 cumulative thermal units to hatch (daily cumulative thermal unit = mean daily temperature in ^{o}F minus 32). In mountain lakes of the South Fork Flathead, the time to hatch can range from 46 to 61 days, depending on the water temperature. Piscicide application in these areas occurs in the fall so that the young of spring spawning trout will have hatched and will be living in areas that will be treated with piscicides. Treated water will be pumped throughout the lake at a variety of depths, not just the surface.

The EIS points out the known limitations of the effectiveness of piscicides, and provides examples of successful projects (see Section 2.4.1, Section 2.4.5 and Appendix D of the Draft EIS. See response to Comments 32.2, 35.16, 37.109, 40.22, 40.28 in the Final EIS). The product labels for antimycin and rotenone provide directions for applying in deep water and methods of ensuring complete mixing. The amounts of piscicide prescribed for this project are based on successful use of the products, on-site tests and legal limits prescribed by the product labels.

Eggs from trout inhabiting these lakes cannot survive in lake bottom sediments due to their high oxygen demands and the need to have flowing water deliver oxygen to the eggs and remove carbon dioxide and nitrates from the eggs. Adult trout likewise cannot survive in bottom sediments because they are ram ventilators and typically have high oxygen requirements. Your point about trout seeking refuge in spring areas is recognized in the EIS (see Section 2.4.2.2 and 2.4.4 of the Draft EIS and the response to Comment 11.45 in the Final EIS). Any known springs will be treated with piscicides.

Comment: The same scientific knowledge and monoculture fishery could be obtained from treatment of a single lake.

Response: Your point about creating monoculture fisheries has been accomplished in lakes in the project area. The EIS lists several examples where hybrid trout have been removed and replaced with genetically pure westslope cutthroat trout (see Section 2.4.1 and Appendix D of the Draft EIS). There are also several examples of natural monocultures that are sustaining viable populations in the project area.

Comment: There is no urgency to embark on this program.

Response: The EIS lists the steps the state of Montana has taken to reduce or eliminate the threat of hybridization in this area, as well as the statutory obligation the state has in safeguarding species that are sensitive or are candidates for protection under the Endangered Species Act (Chapter 1 of the Draft EIS). On this basis, the urgency was

identified years ago and the state has taken numerous practical steps in dealing with the issue of hybridization in the project area.

Public Availability. This ROD will be available to all interested parties and affected persons and agencies. It is being sent to all stakeholders who requested a copy. Copies of the South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program Draft and Final EISs and additional copies of this ROD are available from BPA's Public Information Center, P.O. Box 3621, Portland, Oregon, 97208-3621. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line: 1-800-622-4520, or by accessing BPA's project Web site: http://www.efw.bpa.gov/environmental_services/Document_Library/South_Fork_Flathead/.

Conclusion. Based on a review of the EIS and public comment, I have decided to provide funding for this project.

Issued in Portland, Oregon.

/s/ Stephen J. Wright
Stephen J. Wright
Administrator and
Chief Executive Officer

May 1, 2006
Date

South Fork Flathead Watershed
Westslope Cutthroat Trout Conservation Program
Mitigation Action Plan

Resource Category	Implementation plans, monitoring, mitigation	Responsible Agency
Pre-Treatment Planning and Monitoring after Treatment	A treatment plan will be completed for each lake or stream to be treated. The plan will outline dosage levels and application measures, fish and amphibian collection, safety measures and monitoring of water quality, fish kill, aquatic insects and plankton levels.	**MFWP**
	Each January, MFWP and the USFS will meet to review the treatment plan for the upcoming year. The treatment plan will identify the lakes and/or streams slated for treatment in the current year and the lakes or streams being considered for the next year. Access restrictions, outfitter scheduling, monitoring needs, public involvement, and other planning topics will be discussed.	**MFWP/USFS/BPA**
Fisheries/Aquatic Resources	Fisheries will be monitored after the treatment to determine population viability, presence and degree of natural reproduction, genetic purity, angling quality and growth rates of fish. Stocking rates will be determined on a case-by-case basis.	**MFWP**
	Fish of catchable size will be stocked in some lakes to restore angling quicker and restore natural reproduction quicker.	**MFWP**
	Grayling will be removed from Handkerchief Lake by traps, held in a net pen in Hungry Horse Reservoir, and then restocked after the treatment in order to maintain the quality of the grayling fishery.	**MFWP**

Resource Category	Implementation plans, monitoring, mitigation	Responsible Agency
	After each treatment the amphibians will be monitored using visual counts of adults, egg masses and tadpoles; plankton will be monitored with Wisconsin nets tows; and insects will be monitored using kick netting and Surber sampling. The results will be used to compare to pretreatment levels. Amphibians will be collected from the lakes and streams pre-treatment, if possible, and released after the treatment. Effects to amphibians will be surveyed 2 years after treatment. If the survey shows unexpected effects to amphibian populations, amphibians impacted will be replaced by transplanting egg masses and young and/or adult amphibians from adjacent populations.	**MFWP**
	Treatments will be conducted in the fall when most amphibians have metamorphosed and move to other habitats, or can withstand or avoid the treatments.	**MFWP**
	Dead fish, as much as possible, will be collected from lakes and streams and sunk in the lakes or disposed of off site.	**MFWP**
	Bull trout are not present in any lakes proposed for treatment, but do occur in drainages downstream of some lakes. Antimycin will be used to treat most of these lakes because it can better provide a safe buffer for bull trout populations downstream. Antimycin has been field tested successfully and detoxifies more rapidly in flowing systems. This will allow for greater safeguarding of downstream non-target organisms such as the bull trout.	**MFWP**

Resource Category	Implementation plans, monitoring, mitigation	Responsible Agency
	All restocking activities will comply with the ESA, including monitoring for listed species in the area.	
Water Quality	Stream water will be tested with a colorimeter prior to treatment to determine organic demand for proper detoxification. Treated water in streams will be detoxified using potassium permanganate. Stream water will be monitored using caged sentinel fish to determine toxicity/neutrality.	**MFWP**
Soil and Vegetation	Aircraft will be used to transport supplies and materials and in some cases will be used to apply piscicide to some lakes to reduce livestock trampling. No new system trails will be created to implement this project.	**MWFP**
Land Use and Wilderness	Livestock will be used to transport materials and equipment to most of the wilderness lakes to conform to wilderness values. Project sites that have no system trails will be accessed using aircraft so no new trails will be created as a result of this action. Four-cycle engines will be used in the wilderness portion of the project to minimize air emissions and noise.	**MFWP with USFS authorization**
Recreation, Public Health, and Socioeconomics	The recreating public (private parties and outfitted parties) will be advised in advance of the action so that they can plan recreation activities. MFWP will inform the public via press releases.	**MFWP**
	The USFS administers outfitters' permits and will review their planned activities and use patterns to identify any conflicts and possible alternative locations that could be used during the treatment periods.	**USFS**

Resource Category	Implementation plans, monitoring, mitigation	Responsible Agency
	Trailheads will be signed immediately before treatment.	**MFWP and USFS**
	Aircraft used will avoid flying over camps and trails if possible.	**MFWP and USFS**
	The immediate project area will be closed 1-2 weeks during project implementation to minimize hazards to recreationists.	**USFS**
	Bag limits may be lifted prior to the treatments to allow the public to utilize fish from the lakes.	**MFWP**
	Treatments will be staggered over 10 years or more to mitigate localized impacts to angling quality and quantity.	**MFWP**
	Treatments will occur in the fall when angler use is less.	**MFWP**
	Catchable sized fish will be restocked in some lakes to expedite restoring angling.	**MFWP**
	Some recreationists will be displaced during implementation.	**MFWP**
Cultural/Tribal Resources	Tribes will be contacted prior to lake treatment so that site-specific issues may be addressed and tribal members may be notified of short-term disturbances.	**BPA**
Safety	All personnel involved in the treatment process will be trained to use the specific product and will be required to wear protective equipment to avoid unintended exposure.	**MFWP**
	The immediate project area will be closed 1-2 weeks during project implementation to minimize hazards to recreationists.	**USFS**