SOUTH FORK FLATHEAD WATERSHED WESTSLOPE CUTTHROAT TROUT CONSERVATION PROGRAM

Environmental Impact Statement

Record of Decision

Montana Fish, Wildlife & Parks

Region 1
490 North Meridian Road
Kalispell, MT. 59901

May 2006

Executive Summary

An interdisciplinary team involving Montana Fish, Wildlife & Parks (MFWP), Bonneville Power Administration (BPA) and the United States Forest Service (USFS) completed the Environmental Impact Statement for the South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program. After a review of the EIS, public correspondence, and MFWP statutes and policies, I have made a decision to implement the South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program, as described in the Environmental Impact Statement (EIS) and this Record of Decision (ROD), as the appropriate strategy for conserving the westslope cutthroat trout in the South Fork Flathead River drainage.

The South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program decision adopts the preferred alternative that was described and evaluated in the EIS, dated July 2005, and is within the scope of that analysis. MFWP will proceed to implement this conservation program according to the EIS. Implementation of the program by MFWP is contingent upon decisions by the cooperating federal agencies (Bonneville Power Administration and Forest Service) to implement those agency's respective decisions as described in the EIS and the associated RODs for those agencies.

The effective date of the Conservation Program is immediate upon issuance of this decision and the federal agencies' decisions described herein. Insofar as the Conservation Program and EIS states or elaborates upon the reasons for or the methodologies used to reach this decision, those document**s** are incorporated into this ROD by this reference.

Rationale for the Decision

The westslope cutthroat trout is a vital component to the fishing heritage of Montana. The species has been reduced to about 9 percent of its historic range. The South Fork Flathead River drainage is a stronghold for this species, representing nearly half of the large, interconnected westslope cutthroat habitat in Montana. This area is also an important recreational fishery for the public. For some time the South Fork Flathead cutthroat trout population has been facing the threat of hybridization from non-native trout that reside in headwater lakes and streams. The issue of hybridization was first recorded in MFWP file documentation in the late 1950's and was addressed at that time principally by changing fish management practices to stocking native trout only.

In 1973, the Montana Legislature passed the Non-game and Endangered Species Conservation Act that established the "species of interest or concern" policy to preserve sensitive species with the hope that no Montana fish species would be listed at threatened or endangered under the federal Endangered Species Act. The westslope cutthroat trout was among the first species to be placed on the states list. In 1977, Governor Thomas Judge signed the law designating the westslope cutthroat trout as Montana's official state fish, recognizing it as part of our natural heritage. Part of the purpose was to bring attention to the species, so conditions for these fish could be improved. In the 1980's MFWP stepped up its commitment to conserving this species in the Flathead basin by: 1)

developing a genetically pure and genetically diverse hatchery stock of westslope cutthroat trout suitable for conservation purposes, 2) implementing management concepts such as genetic swamp out, 3) instituting more restrictive angling regulations, and 4) actively removing non-native trout using piscicides. These measures are principally responsible for the slow rate of progression and in some cases the reduction of hybridization; nevertheless the threat still exists.

In 1996, Governor Marc Racicot convened a cutthroat trout summit to identify the status, distribution, threats to, and conservation needs of the westslope cutthroat trout in Montana. In 1999 a Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout in Montana (Conservation Agreement) was developed and signed by Montana Fish, Wildlife & Parks, U.S. Fish & Wildlife Service, Bureau of Land Management, Forest Service, Natural Resources Conservation Service, Montana Department of Environmental Quality, Montana Department of Natural Resources and Conservation, Westslope Cutthroat Trout Technical Committee, Montana Chapter of American Fisheries Society, and Montana Wildlife Federation. The goal of the Conservation Agreement is to ensure the long term, self sustaining persistence of the species within each of the five major river drainages they historically inhabited in Montana, and to maintain the genetic diversity and life history strategies represented by the remaining local populations. The agreement lists five objectives to achieve this goal; primary among them is to protect all genetically pure westslope cutthroat trout populations. In 1999 the "species of concern" list status of the westslope cutthroat trout was elevated to category S2 meaning that the species is imperiled because of rarity or because of other factors demonstrably making it very vulnerable to extinction throughout its range. This project will be carried out in accord with the guidelines of the most recent Conservation Agreement in consultation with the Cutthroat Technical team.

From 1997 through 2005 the westslope cutthroat trout has been the subject of numerous petitions, analyses, decisions, appeals and rulings for consideration for protection under the federal Endangered Species Act (ESA). Despite these actions by plaintiffs, this species has not been listed under the ESA and, at the time of this ROD, remains under the management jurisdiction of the state of Montana. Montana Fish, Wildlife & Parks is responsible for, and mandated by statute MCA 87-1-201[9ai] to, manage wildlife, fish, game and non-game animals in a manner that prevents the need for listing under MCA 87-5-107 or under the federal Endangered Species Act, and [ii] manage listed species, sensitive species, or a species that is a potential candidate for listing by the state (87-5-107) or under the federal Endangered Species Act in a manner that assists in the maintenance or recovery of those species.

It is therefore my determination that implementing the South Fork Flathead Watershed Westslope Cutthroat Trout Conservation Program would; 1) substantially reduce or completely eliminate the threat of hybridization to the westslope cutthroat populations in the South Fork Flathead River drainage, 2) ensure the long-term persistence of the westslope cutthroat trout throughout a major portion of its range, thus is consistent with Montana's commitment to the Conservation Agreement by protecting the genetically pure populations in the South Fork Flathead River drainage, 3) fulfill statutory mandate

under MCA 87-1-201[9ai], 4) aid the state of Montana in maintaining management authority for the species, and 5) maintain quality angling throughout the South Fork Flathead River drainage.

Context For The Decision

In January 2003, MFWP completed a specialist report that analyzed potential methods of addressing westslope cutthroat trout hybridization in the project area. This report was used to help formulate a proposed action. In 2003 MFWP met with various groups and individuals to determine the issues the public had with the proposed action. From that process comments were used to formulate the scope of the Draft EIS upon which MFWP sought public comment in 2004. Those comments did not identify any other reasonable alternatives that were not identified in the Draft EIS, or alternatives that could be reasonably implemented to meet the objectives. However, information and suggestions gathered from the scoping process were used to complete the EIS.

Alternatives Considered

The EIS evaluated three action alternatives that could likely be implemented to address the problem of hybridization in the South Fork Flathead drainage, as well as a fourth "No Action" alternative:

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

In addition, the EIS disclosed several issues and alternatives that had been suggested by commenters during the scoping process, but were beyond the scope of the proposal or could not reasonably meet the objectives of the proposal and therefore were precluded from further analysis. The EIS briefly explained the rationale for that determination. The EIS disclosed and evaluated additional alternatives that were suggested during public comment to the EIS.

Advantages and Disadvantages of the Alternatives

The EIS lists the advantages and disadvantages of the alternatives. The preferred alternative, while controversial to some, offers the greatest probability of success at achieving the objectives, while balancing and minimizing environmental and social impacts.

Alternative Considered Environmentally Preferable

Within the decision space of MFWP, the No Action alternative is the environmentally preferred alternative because it would have the least amount of impact in the short term. The status quo management would continue and no piscicide would be applied to the lakes or streams, no motors would be used in wilderness, no fisheries would be impacted, outfitters, clients, and other anglers would not be displaced to adjacent fisheries. However, hybridization of the westslope cutthroat trout would continue, more restrictions would likely be placed on angling, and could contribute to the loss of management authority for the state. The project objectives would not be met.

Under the guidance of ARM 12.2.431, MFWP considered the significance of impacts associated with the proposal and made the determination that the proposal had basis for necessitating and preparing an EIS. Therefore, in developing the alternatives and deciding upon a preferred alternative the agency considered many of the items listed in ARM 12.2.431 including environmental resources, human environment, importance to the state and society, the value of a species, and impacts to each that may be beneficial, adverse or both.

Using pesticides to kill certain organisms can be controversial and offensive to some, but can result in long-term benefits. MFWP believes that the long-term benefits of this project will outweigh the short-term impacts associated with the preferred alternative, or the long term and perhaps permanent implications of the No Action alternative.

MFWP considered public comment, socioeconomic issues and environmental issues when drafting alternatives, selecting the preferred alternative, and making this decision. Nearly one-half of the project area is located in wilderness. Wilderness areas promote certain intrinsic values such as minimal influence by man, natural ecosystems, and refuge for native species of fish, wildlife and plants. Wilderness areas also promote certain social values and attract recreationists for fishing, hunting, trapping, camping, hiking, horseback riding, photography, scenic viewing and water sport. Management decisions in wilderness areas must consider a wide range of issues and strive to find a balance in affect or impact, which may result in minor impacts to many value categories rather than major impacts to a few value categories. MFWP believes that the preferred alternative strikes this balance by reducing, to the greatest extent possible, impacts to certain environmental and value categories in a manner that will allow the objectives to be met.

Implementing the action in the fall is designed to minimize user conflicts, the sequence of lake treatments are spatially separated to minimize cumulative localized social and environmental impacts, restocking with fish will be rapid and in some cases involve stocking larger westslope cutthroat trout to restore recreational fishing and natural reproduction quicker, neutralizing piscicides will help contain the treatments to designated areas, and monitoring the treatments will help minimize impacts to non-target organisms and may provide a basis for modifying subsequent treatments.

In wilderness, the preferred alternative incorporates traditional transportation methods, as much as possible, to maintain certain value standards. The preferred alternative required considering a wider range of piscicides and developing new techniques for application.

Using helicopters and airplanes to transport materials and equipment in non-wilderness areas will minimize ground impacts to trails that are not designed for heavy transport with livestock. Aircraft and motorized equipment will facilitate expediting the project, thus minimizing the duration of this management activity in each drainage. Removing grayling from Handkerchief Lake prior to treatment and replacing them afterwards will reduce the impacts to that fishery.

Effects of the Decision

The effects of this decision may be adverse, beneficial or both but are intended to be beneficial in conserving the westslope cutthroat trout. The decision will have both short term and long-term impacts to the environment, socioeconomic resources, and wilderness values. Although the preferred alternative is referred to in various places in the EIS and this document, the major effects are:

- The preferred alternative will result in a long term benefit to the westslope cutthroat trout by removing, to the greatest extent possible, sources of hybrid trout in the project area,
- The preferred alternative will result in short term loss of angling opportunity and angling quality in localized areas. Spatially separating the treatments, restocking westslope cutthroat trout, and stocking larger cutthroat in some lakes will mitigate this and restore natural reproduction and angling. Anglers may utilize neighboring fisheries during the recovery process,
- The preferred alternative will cause short-term impacts to wilderness values such as solitude and natural processes, but will have long-term benefits by increasing the trend toward naturalness in wilderness by using a native fish and reducing fish stocking,
- The preferred alternative will cause short-term impacts by displacing some recreationists and outfitters to adjacent areas for fishing and other recreation during implementation and recovery processes.

Policy Considerations

Implementing this program fulfills MFWP's statutory obligation under MCA 87-1-201[9ai, ii].

Practical Measures to Minimize Environmental Harm

As intended, a project that incorporates the use of pesticides to achieve its objective will kill certain organisms. However, the South Fork Flathead Westslope Cutthroat Trout Conservation Program includes the following practical measures to minimize the potential for environmental impacts while still being consistent with the purpose and need for the project:

- Hybrid trout removals will occur during the fall when recreation use is low to minimize user conflicts. Some recreationists will be displaced during implementation. Fall treatments will minimize impacts to some non-target organisms.
- The immediate project area will be closed during the treatments to minimize exposure to recreationists.
- Applicators will use proper safety equipment to reduce exposure to the pesticides.
- In addition to rotenone, the project includes the use of antimycin, which detoxifies more rapidly in flowing systems. This will allow for greater safeguarding of downstream non-target organisms such as the bull trout.
- Detoxification stations using potassium permanganate will be used to ensure the treatment is contained within the specified boundaries.
- Single Engine Air Tanker (SEAT) airplanes have been tested and will be used to transport and apply large quantity of material to some lakes to minimize ground disturbance and minimize the amount of time necessary for application at some lakes.
- As much as possible, dead fish will be sunk and/or removed from lakeshores and stream segments to minimize potential for animal conflicts and secondary exposure.
- Four-cycle engines will be used in the wilderness portion of the project to minimize air emissions and noise.
- 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.
- On-site assays will be performed to determine the proper amount of piscicide and neutralizing agent necessary to accomplish the objectives.

Implementation Plans, Monitoring and Mitigation

The EIS provides a framework for implementation planning. A plan will be developed for each treatment that includes a listing of a clear chain of command, communication network, objectives, milestones, measurements and calculations, spill contingency, and emergency response. This plan will be reviewed before each treatment and will be prefaced by planning sessions, assigning areas of responsibility for each person involved in the implementation, and education, safety and training sessions.

The EIS provides a framework for project monitoring. By its nature, a program that uses adaptive management requires monitoring and adjustments as new information is obtained. The EIS identifies the factors that the agencies will use in monitoring to determine if the project has met the desired objectives, the status of non-target organisms, and if the biological and social objectives of the westslope cutthroat trout restocking have been achieved. MFWP will evaluate the monitoring factors annually to determine if they can be reasonably met or measured and if the goals of the project were met. MFWP will hold a public informational meeting each year working through the Region 1 Citizens

Advisory Committee to present the status of the project, to evaluate the implementation and results of each year's progress.

Part of project monitoring includes coordinating with and reporting to the Montana Department of Environmental Quality and the Montana Department of Agriculture.

Decisions to liberalize daily and possession fish limits pre-treatment are under the jurisdiction of the Fish, Wildlife and Parks Commission with recommendations from the MFWP Fisheries and Enforcement divisions. The Commission has been willing on past occasions to allow anglers to remove as many fish as possible. Regulation changes would be recommended 1-2 seasons pre-treatment to allow anglers to access remote locations.

A summary of implementation plans, monitoring, and mitigation, that will be the responsibility of MFWP in whole or in part, is provided at the end of this document. Both the USFS and BPA ROD's contain similar summaries called Mitigation Action Plans and are included in this ROD by reference.

Endangered Species Considerations

There are seven species of fish, wildlife and plants under protection of the ESA that do occur, or could occur in the project area. On April 19, 2002 Montana Fish, Wildlife & Parks and Bonneville Power Administration submitted a biological assessment to the U.S. Fish and Wildlife Service [Service] in compliance with Section 7 of the Endangered Species Act that evaluated the likely impacts the proposed project may have on these species. The biological assessment concluded that the preferred alternative in the EIS 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)* due to no known occurrences and no suitable habitat identified within the project area.

On May 15, 2002, the Field Supervisor for the 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. Montana FWP and BPA will update the Service annually throughout the program implementation, including reporting activities that may result in incidental take under Section 6 ESA reporting.

Decision to Restock Lakes

I have decided that re-stocking the lakes and some stream segments with genetically pure westslope cutthroat trout will serve the best interest in meeting the project goals, maintain established social practices and recreation opportunity, and minimize socioeconomic impacts. The M012 westslope cutthroat trout, currently the only certified source for state restoration projects, will be planted in most locations. Comments received on the EIS

requested that MFWP develop within-drainage stocks for use in certain locations where the aboriginal stock differs from the M012 stock to preserve genetic diversity in South Fork Flathead River drainage populations. MFWP is committed to developing within-drainage stocks where feasible. Genetic conservation measures will be designed with input from fisheries geneticists and advice from the Cutthroat Technical Committee. Methodologies and facilities required to produce alternative stocks are currently under development. Implementing the preferred alternative will allow for a change in the status quo management and move toward reducing the number and frequency of fish stocking in some wilderness lakes, and move toward a trend of naturalness in wilderness.

James Satterfield s/s — 5/1/2006

James R. Satterfield Jr., PhD. — Date
Region 1 Supervisor

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. All restocking activities will comply with the ESA, including monitoring for listed species in the area.	**MFWP**
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	**MFWP**

Resource Category	Implementation plans, monitoring, mitigation	Responsible Agency
	permanganate. Stream water will be monitored using caged sentinel fish to determine toxicity/neutrality.	
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**
	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**

Resource Category	Implementation plans, monitoring, mitigation	Responsible Agency
	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**