

DRAFT

MEPA/NEPA/HB495 GENERIC CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of Proposed State Action:** Lake Rehabilitation Using Rotenone
2. **Agency Authority for the Proposed Action:** MCA 87-1-201
3. **Name of Project:** Whale Lake Fish Rehabilitation
4. **Name, Address and Phone Number of Project Sponsor (if other than the agency):** Fisheries Biologists Grant Grisak, Mark Deleray, & Scott Rumsey
MT Fish, Wildlife & Parks
490 N Meridian Road, Kalispell, MT 59901

5. **If Applicable:**

Estimated Construction/Commencement Date: October 2000

Estimated Completion Date: November 2000

Current Status of Project Design (% complete): 50%

6. **Location Affected by Proposed Action (county, range and township):**

T 35 N, R 24 W, S 9

7. **Project Size (Estimate the number of acres that would be directly affected that are currently):**

(a) **Developed:**
residential..... __ acres
industrial __ acres

(b) **Open Space/Woodlands/
Recreation** __ acres

(c) **Wetlands/Riparian
Areas**..... __ acres

(d) **Floodplain**..... __ acres
surface 5acres

(e) **Productive:**
irrigated cropland..... __ acres
dry cropland..... __ acres
forestry __ acres
rangeland __ acres
other..... __ acres

Flathead

8. Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

9. **Narrative Summary of the Proposed Action or Project Including the Benefits and Purpose of the Proposed Action:** To remove a population of exotic trout, namely Yellowstone cutthroat trout and Yellowstone cutthroat x cutthroat hybrids, and replace with a population of genetically pure westslope cutthroat. This project will serve to eliminate the threat of hybridization to westslope cutthroat trout in the Whale Creek drainage and ultimately the North Fork Flathead River drainage.

10. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction:

(a) Permits:

<u>Agency Name</u>	<u>Permit</u>	<u>Date Filed/#</u>
MT Dept. of Environmental Quality	319	5/24/00

(b) Funding:

<u>Agency Name</u>	<u>Funding Amount</u>
In-house	

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Agency Name</u>	<u>Type of Responsibility</u>
US Forest Service	Land management

11. List of Agencies Consulted During Preparation of the EA:

US Forest Service
 MT Dept. of Environmental Quality

PART II. ENVIRONMENTAL REVIEW

A. Evaluation of the Impacts of the Proposed Action Including Secondary and Cumulative Impacts on the Physical and Human Environment:

PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u> Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT (continued)

2. <u>AIR</u> Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Emission of air pollutants or deterioration of ambient air quality?		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture or temperature patterns, or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT (continued)

3. WATER Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, turbidity or pathogens?			X		Yes	
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of flood water or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in the risk of contamination of surface or groundwater?			X		Yes	
i. Violation of the Montana Non Degradation Statute?		X				
j. Effects on any existing water right or reservation?		X				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
l. Effects on other users as a result of any alteration in surface or groundwater quantity?			X		Yes	
m. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

Items a & h: Application of the piscicide Rotenone will temporarily produce water quality conditions that are lethal to fish and some zoo planktin organisms. Rotenone is a derris root analogue, which is a naturally occurring organic compound indiginous to South America. It serves to disrupt oxygen transfer across a gill membrane. Animals not having gills are not affected, including, but not limited to, birds, mammals, and reptiles. Rotenone detoxifies naturally over time by dilution, organic synthesis (biogenic precipitation) and ultraviolet light.

Item l: Temporary loss of fishery during rehabilitation period. Will be restocked with pure westslope cutthroat trout within 12 months of treatment.

PHYSICAL ENVIRONMENT (continued)

4. <u>VEGETATION</u> Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered plant species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT (continued)

5. <u>FISH/WILDLIFE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?			X		X	
c. Changes in the diversity or abundance of non-game species?			X		X	
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?			X		X	
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

Item b: The project is intended to eliminate all fish, specifically hybrid trout, in preparation for stocking with genetically pure westslope cutthroat trout.

Item c: The project will greatly reduce the number of plankton in the lake, but density will increase to normal levels in approximately one year

Item f: The few remaining genetically pure westslope cutthroat trout will be eliminated incidental to the removal of hybrid and exotic trout. This will be mitigated for by stocking genetically pure westslope cutthroat trout the following year.

HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Increases in existing noise levels?			X			
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

Item a: Short-term (1 day) increase of noise from use of helicopters. (Not believed to be of significance.)

HUMAN ENVIRONMENT (continued)

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT (continued)

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X			
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. Other: __						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

Item a: A helicopter will be used to ferry all equipment and chemicals to project site. A chemical spill could occur only in the event of the helicopter crashing.

HUMAN ENVIRONMENT (continued)

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?			X		X	
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other: ___						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

Item a: The removal of the fish population will eliminate recreational use by anglers for approximately 1.5 years. Timing of the proposed action and proximity of adjacent fisheries will serve to offset the temporary loss of angling opportunities at Tom Tom Lake.

HUMAN ENVIRONMENT (continued)

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Have an effect upon the local or state tax base and revenues?		X				
c. Result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Result in increased used of any energy source?		X				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT (continued)

11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)			X			
d. Other: _		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

Item c: A temporary loss of angling opportunities will be experienced at Whale Lake (see 9a).

HUMAN ENVIRONMENT (continued)

12. <u>CULTURAL/HISTORICAL RESOURCES</u>	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
Will the proposed action result in:						
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural or historic values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed)

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?	X					
f. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed)

PART II. ENVIRONMENTAL REVIEW

1. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented: The proposed action is the next step in reducing and/or eliminating the threat to westslope cutthroat trout populations in the North Fork Flathead River. This program began with swamping (overstocking) hybrid populations with pure westslope cutthroat trout. Whale Lake is one of several that did not respond favorably to swamping. It is therefore necessary to chemically rehabilitate the lake in order to achieve the desired effect: a pure population of westslope cutthroat trout. The final, and least favorable, alternative would be to not conduct any management on the Whale Lake trout population. It is important to note that the final alternative would risk contaminating adjacent pure westslope cutthroat trout populations with exotic genetic material. This project is believed to be paramount in preserving the integrity of westslope cutthroat trout in the North Fork Flathead River drainage.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency: Whale Lake currently has a daily limit of 5 trout and possession limit of 10 trout. Due to the remote location of the lake, it is believed that lifting daily bag limits prior to treatment would be minimally beneficial.

3. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: Adverse impacts are temporary and can be mitigated for.

4. Describe the level of public involvement for this project, if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances: This project, in its entirety, has been discussed publicly on radio broadcasts, interagency professional meetings, and is being addressed by the Flathead Lake citizens review panel. Public comment will be solicited via newspaper releases and distribution of the draft EA to interested parties in the area.

5. Duration of comment period if any: 30 days

Name, title, address and phone number of the person(s) responsible for preparing the EA:

Grant Grisak, Fisheries Biologist
MT Fish, Wildlife & Parks
490 N Meridian Road
Kalispell, MT 59901
(406) 751-4541

PART III. NARRATIVE EVALUATION AND COMMENT

Whale Lake is, at this time, the only known lake in the North Fork Flathead drainage that continues to harbor a viable population of Yellowstone and Yellowstone X westslope cutthroat hybrids. Given the previous method of swamping has been largely unsuccessful at removing the exotic genetic material from the system, it is believed that chemical rehabilitation is the final solution to eliminating the threat that the Whale Lake exotic fish population poses to the integrity of the westslope cutthroat trout in the North Fork Flathead River drainage.

PART IV. EA CONCLUSION SECTION

After implementing previous methods and weighing the potential impacts to a no action alternative, FWP recommends implementing the final solution: chemical rehabilitation with the use of Rotenone. This project is believed to be fundamental in safeguarding the genetic integrity of the westslope cutthroat trout in South Fork Flathead drainage in addition to maintaining a valuable native fish sport fishery.