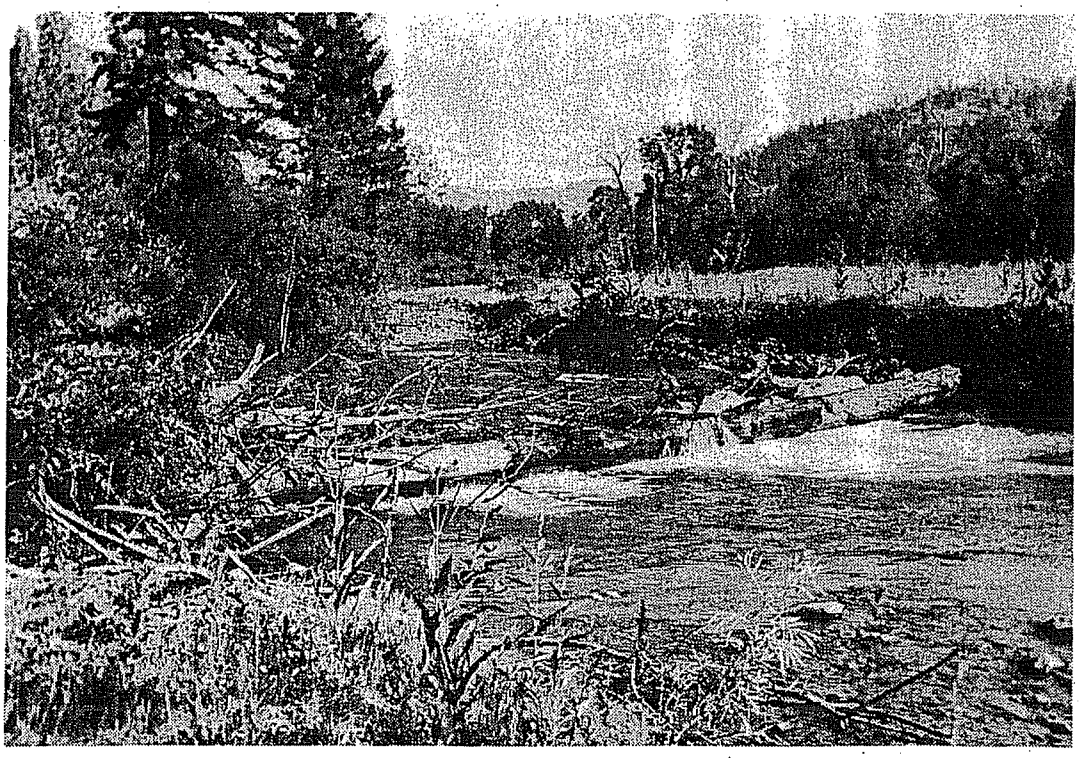
WA 193

FINAL ENVIRONMENTAL IMPACT STATEMENT

Lake and Stream Rehabilitation Program

1988-1989

Volume 2



Washington Department of Wildlife
Serving Washington's wildlife and people- now and in the future.

JULY 1988

CURT SMITCH
Director

STATE OF WASHINGTON
DEPARTMENT OF WILDLIFE
600 North Capitol Way, GJ-11 • Olympia, Washington 98504-0091 • (206) 753-5700

TO ALL INTERESTED AGENCIES AND INDIVIDUALS

This final environmental impact statement (EIS) for the Washington State Department of Wildlife's 1988-1989 Lake Rehabilitation Program is prepared in accordance with the Washington State Environmental Policy Act of 1971 (Chapter 43.21C, Revised Code of Washington) and SEPA Guidelines (Chapter 197-11, Washington Administrative Code).

Your comments on the draft EIS or the proposal have been incorporated into the final statement.

Sincerely,

Curt Smitch

Curt Smitch
Director

CS:clc
Enclosure

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FACT SHEET

Title: 1988-1989 Lake and Stream Rehabilitation Program

Proposal: The Washington Department of Wildlife proposes to continue the Lake and Stream Rehabilitation Program to eliminate fish in selected waters by use of rotenone. Waters are restocked with various fish species after treatment.

Location:

Hog Canyon and Williams Lake (Spokane County); Gillette Lake, Hatch Lake, Heritage Lake, and Keogh Lake (Stevens County); Leo Lake (Stevens/Pend Oreille Counties); McDowell Lake, Sherry Lake, Thomas Lake (Steven County); Curlew Pond and McNary NWR Ponds (Walla Walla County); Herman Lake, Quail Lake, and Lyle Lake (Adams County); Blythe Lake, Upper Caliche Lake, Chukar Lake, Corral Lake, Crab Creek Marsh Unit 1, Desert Wildlife Area Ponds, Ephrata Lake, Goldeneye Lake, North Teal Lake, Pit Lake, and Scaup Lake (Grant County); South Teal Lake (Adams/Grant Counties); Alta Lake, Blue Lake, Crawfish Lake, and Crumbacher Lake (Okanogan County); Flo Rito Lake (Kittitas County); Wilderness Lake (King County); Eric Lake (Skagit County); Greenwood Lake (Lewis County); Beaver Pond/Black Slough, Beaver Pond/Goat Ranch, and Beaver Ponds/Scarification 1 & 2 (Mason County); Bay Lake (Pierce County).

Proponent: Washington Department of Wildlife

Implementation Date: Fall 1988

Lead Agency:

Washington State Department of Wildlife
600 North Capitol Way
Olympia, Washington 98504

Responsible Official:

Curt Smitch, Director, Department of Wildlife

List of Licenses Required:

Water Quality Variance, Washington Department of Ecology
Approval by Washington Wildlife Commission

Comments and Requests for Information Should be Addressed to:

Paul Mongillo, Program Manager
Fisheries Management Division
Washington Department of Wildlife
600 North Capitol Way
Olympia, Washington 98504
(Phone: (206) 753-2895)

Authors and Principle Contributors:

This document was prepared by the Regulatory Services Program, Habitat Management Division, and various staff of Fisheries Management Division, Washington Department of Wildlife.

Location of Background Information:

SEPA Public Information Center
Department of Wildlife
Habitat Management Division
600 North Capitol Way
Olympia, Washington 98504

Public Hearings or Meetings: A public hearing and final action by the Wildlife Commission is tentatively scheduled for August 10, 1988 at the Ridpath Motor Inn in Spokane, Washington.

Cost to the public for this EIS: None

Date of issue of this final EIS: July, 1988

SUMMARY

Washington Department of Wildlife maintains a program which uses rotenone ($C_{23}H_{22}O_6$) to eliminate all fish in a particular lake or stream prior to restocking the water with fish species selected for management. This species is usually, but not always, a variety of trout. Rotenone is dispersed into a lake or stream with boats or spray pumps at a concentration of 0.5 to 2.0 parts per million. Aircraft may be used in some cases.

The objective of this action is to improve public fishing. Populations of fish which compete with a preferred management species are eliminated to minimize competition for food and space. Rotenone has been used for lake and stream management in Washington for the past 44 years. It is used because of its effectiveness in eliminating fish, low toxicity to mammals, non-residual quality, and cost. The proposed action has taken place on many popular sport fishing lakes and a few streams throughout the state. Lake and stream rehabilitation today is almost entirely a maintenance program.

Summary of Environmental Impacts

1. Rate and distribution of lake soil sedimentation may be altered with changes in species abundance and diversity.

2. Adverse odors may be present while killed fish decompose.

3. Temporary changes in bacteria levels, turbidity, phytoplankton, and water taste/odor usually occur.

4. Algae blooms may occur. They generally last one-two months and do not recur the following year.

5. Zooplankton are almost completely eliminated. Complete recovery usually takes between two and 12 months.

6. Benthic fauna are reduced in numbers. Recovery time is usually two months.

7. Fish are completely (or nearly) eliminated. Species to be managed are usually restocked within two to six months.

8. Fish species diversity is diminished and total numbers are reduced.

9. Fishing for a selected species is enhanced.

10. Larval amphibians and some adults are killed. Adult amphibians and reptiles may be indirectly affected by temporary loss of aquatic insects and fish which are food sources.

11. Birds and mammals which depend on fish or benthic animals for food may be temporarily impacted by this program.

12. Humans in direct contact with rotenone powder may experience temporary skin, eye, and mucous membrane irritations.

13. Aesthetic qualities are temporarily affected while water is brown in color. This usually lasts a few hours to a few days. Floating or beached fish also decrease aesthetic values.

14. Increases in human activities as a result of enhanced fishing may cause erosion; air, water, and noise pollution; trampling of vegetation; or other impacts to recreation, religious, or scientific use of the area.

Summary of Alternatives

1. No action.

2. Stocking with legal-sized fish.

3. Use of different fish toxicants.

4. Partial treatment.

5. Control of water levels.

6. Netting and trapping.

7. Dams and barriers.

8. Baits

9. Electrofishing.

10. Hook-and-line fishing.

11. Predator stocking.

12. Removing congregations of spawning fish.