MONTANA DEPARTMENT OF FISH, WILDLIFE, AND PARKS

FISHERIES DIVISION
JOB PERFORMANCE REPORT

STATE: MONTANA PROJECT TITLE: STATEWIDE FISHERIES INVESTIGATIONS

PROJECT NO.: F-46-R-4 STUDY TITLE: SURVEY AND INVENTORY OF COLDWATER STREAMS

JOB NO.: I-a JOB TITLE: NORTHWEST MONTANA COLDWATER STREAM INVESTIGATIONS

PROJECT PERIOD: JULY 1, 1990 THROUGH JUNE 30, 1991

BACKGROUND

The coldwater fisheries resource of northwest Montana includes about 3,500 miles of streams ranging in size from average flows of less than 1 cfs up to 18,000 cfs. Stream dwelling Salmonidae include brook, brown, bull, cutthroat, rainbow trout, and mountain whitefish. Other species found in streams includes suckers, northern squawfish, peamouth, redside shiners, and sculpins. This array of stream habitat and species mix with proper management should support an estimated angler use of 163,000 days by 1992. This survey and inventory project is an ongoing effort to update management programs to maintain or improve the coldwater streams fisheries.

OBJECTIVES AND DEGREE OF ATTAINMENT

1. To determine and maintain, within legal limits, the flows necessary to maintain or enhance existing fish populations. This objective accomplished utilizing state funding.

2. To maintain streambanks and channels in present or improved condition. This objective met utilizing state funding. During FY91 project personnel reviewed a total of 179 construction projects affecting streams. Two project personnel continued to be team members on "best management practices" (BMP's) timber harvest audits.

3. To maintain water quality at or above present levels as measured by the state Water Quality Bureau and the U.S. Geological Service. Objective accomplished using state funding.

4. To maintain aquatic habitat and associated fish populations at or above present levels. This objective was met. Near or above average precipitation since late fall 1989 has returned stream flows to near normal and it is anticipated that fish populations depressed by the 1985-1989 drought will rapidly expand barring other natural or man-made deleterious events.

5. To maintain fish populations and harvest at acceptable levels to provide 163,300 angler days of use by 1992 and a catch rate of 0.5 fish/hour or greater. This objective partially met. Many miles of northwest Montana's streams can be affected by man-made events such as hydroelectric impoundments. Normal or above normal stream flows generally results in deep reservoir drawdowns which affect reservoir fish populations which in turn negatively affects adfluvial Salmonidae populations and angler opportunity.

6. To maintain a population of 1,300 rainbow trout per mile with five percent being larger than 14 inches in the Kootenai River. Objective was not met. Fish population sampling in September 1990 indicated a decline in numbers of rainbow trout compared to previous years. Kootenai River flow is regulated by Libby Dam and this regulated flow regime is considered the major factor controlling fish population in Kootenai River.

7. To maintain or expand populations of species of special concern (westslope cutthroat trout, bull trout and inland rainbow trout). Objective was met and a special segment report has been submitted.

8. Secure public access on currently used sites on private ground. Provide floating accesses 4-6 hours apart on major streams. Objective met using state funding.

RECOMMENDATIONS

A biologist position, currently vacant, will be transferred to the Libby, Montana area when a new person is hired. This position transfer will require a substantial reallocation of budgetary resources and work emphasis. Recommendations for work to be done in Fiscal Year 1992 including the Libby area are presented below by drainage. The Libby area biologist would have direct responsibility for work in the Kootenai River drainage.

1. Clark Fork River - The Clark Fork River between the towns of Paradise and Plains should be surveyed to determine if brown trout planted in the area are surviving. Sections of Thompson River in the lower, middle and upper reaches should be surveyed to determine status of planted brown trout. Fishtrap Creek, tributary to Thompson River, downstream from West Fork Fishtrap Creek to its mouth should be examined for spawning bull trout. Samples of cutthroat trout from Fishtrap Creek near the West Fork and near Radio Creek should be collected for genetic analysis.

2. Kootenai River drainage - Number of bull trout spawning in tributaries of Kootenai River between Libby Dam and Kootenai Falls should be determined by making redd counts. Number of rainbow trout spawning in these same tributaries should be determined by redd counts, trapping of adults as they enter the creeks or a combination of methods. Populations of rainbow trout and mountain whitefish should be estimated in one or two sections of Kootenai River below Libby Dam. Rainbow trout redds should be counted in main stem Kootenai River between Libby Dam and Fisher River. Estimation of sculpin populations in two areas of Lake Creek should be continued.

3. Swan River - Fish populations inhabiting Swan River between Holland Lake and the Ferndale Bridge should be sampled to determine effectiveness of Onchorhynchus catch and release fishing regulations and westslope cutthroat trout recovery efforts.

4. South Fork Flathead River - Fish population estimates should be made in two sections of the South Fork Flathead River above Hungry Horse Reservoir. One section is below the Bob Marshall Wilderness boundary and one section within the wilderness.

5. North Fork Flathead River - A slot limit on cutthroat trout was imposed on the North Fork Flathead River upstream from the Polebridge Bridge. Sampling should be done to evaluate the effectiveness of this regulation.

6. Data not included in this performance report will be included in the FY92 progress report.

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