

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

FISHERIES DIVISION  
JOB PERFORMANCE REPORT

STATE: MONTANA PROJECT TITLE: STATEWIDE FISHERIES INVESTIGATION  
PROJECT NO.: F-46-R-4 STUDY TITLE: SURVEY AND INVENTORY OF COLDWATER LAKES  
JOB NO.: II-a, Segment 1 JOB TITLE: NORTHWEST MONTANA COLDWATER LAKES INVESTIGATIONS  
PERIOD COVERED: JULY 1, 1990 THROUGH JUNE 30, 1991

BACKGROUND

The coldwater lake fisheries resource in northwest Montana is comprised of 412 coldwater lakes, ranging from low elevation valley floor lakes to high elevation mountain lakes. About 346,000 man/days of fishing effort were expended on coldwater lakes in the 1985-1986 fishing year. The survey and inventory of this fishery resource is an ongoing effort to update the management programs to maintain or improve coldwater lakes fisheries.

OBJECTIVES AND DEGREE OF ATTAINMENT

1. To manage lake and reservoir water levels to minimize impacts on fish populations. Objective accomplished utilizing state funding.
2. To maintain water quality at present levels as measured by Water Quality Bureau. Objective accomplished utilizing state funding.
3. To maintain aquatic habitat at a level capable of sustaining existing populations. Objective accomplished using state funding.
4. To increase the opportunity to catch larger trout (14" at 0.5 fish/hour) in specified lakes. Objective accomplished.
5. Provide lake fisheries to sustain an increase of 32,600 angler days by 1992 through natural reproduction and hatchery plants. Provide kokanee fisheries for 12"-14" fish at a catch rate of 1 fish per hour. Objective accomplished. A supplemental report of the Lake Mary Ronan summer creel census will be completed in FY92.
6. To provide a variety of trout sizes and species for angling and prey on stunted salmon. Objective accomplished.
7. To manage regulations and stocking to protect or expand species of special concern. Objective accomplished with state funding. A supplemental report on restoration of westslope cutthroat trout in selected high mountain lakes in the South Fork Flathead River drainage has been submitted.
8. To develop management plans to adapt to the introduction of Mysis and other unwanted species. Objective partially accomplished.
9. Coordinate with other agencies to maintain fisheries and water quality at or above present levels. Objective was accomplished using state funding.

10. To encourage public participation in understanding the problems and strategies of resource management. Objective accomplished.
11. Attempt to acquire and provide facilities on all lakes and reservoirs capable of sustaining more than 300 man days of fishing per year on a priority basis at the rate of one lake per year. Objective was accomplished using state funding.

#### RECOMMENDATIONS

The biologist who was in charge of this project retired in March, 1991 and his position will be transferred to Libby, Montana, effective July 1, 1991. This position transfer to Libby requires a substantial reallocation of budgetary resources and work emphasis. Recommendations are listed below:

1. Data not included in this year's report will be compiled and included in the FY92 report.
2. Monitoring of the Lake Mary Ronan fishery in FY92 will be de-emphasized to include only collection of information on spawning kokanee from the spawning crew and continuation of the spring and fall gill net series.
3. Continue monitoring of kokanee populations in region lakes (16) every one to four years on a scheduled basis to detect noticeable changes. Much of this data can be obtained from fish caught by the Department's spawning crew.
4. Continue regulating water levels in Ashley Lake to provide good flow for downstream fisheries without deleterious effects upon the lake fishery.
5. Monitor success of planting kamloops rainbow trout in a wide variety of lake habitats. Lakes recently planted with kamloops range from several thousand surface acres to less than ten surface acres. Competing species range from none to kokanee, brook trout, suckers, whitefish, bass, bluegill, northern pike, yellow perch, pumpkinseed and redbreasted sunfish.
6. Evaluate westslope cutthroat trout stocking methods in Holland Lake.
7. In cooperation with the U.S. Forest Service chemically rehabilitate Upper Sunday Lake and research feasibility of rehabilitating Lion Lake.
8. Continue surveying small lakes within the region as the need or opportunity arises.
9. The major emphasis for the new Libby biologist will be to determine the status of rainbow and cutthroat trout populations in Lake Koocanusa. This will be done by: (1) sampling the lake proper in a manner to collect the trout and largely avoid kokanee; and, (2) determine strength of trout spawning populations in appropriate spawning tributaries by trapping and/or redd counting. These data can be compared to information collected in the 1978-1981 period which is before kokanee became firmly entrenched in Lake Koocanusa.

Prepared by: Joe E. Huston  
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