

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

FISHERIES DIVISION

JOB PERFORMANCE REPORT

State: Montana Title: Southwest Montana Fisheries Investigation
Project No: F-9-R-31 Title: Madison River Temperature Study
Job No: IIb
Job Duration: July 1, 1982 through June 30, 1983
Report Period: April 1, 1982 through March 31, 1983

OBJECTIVES

1. To determine if higher water temperatures below Ennis Reservoir are having detrimental effects on wild trout populations through changes in age structure, size composition, species composition and growth rates.
2. To obtain wild trout population estimates to include age structure, size composition, species composition and condition factors.
3. To gather water temperature data above and below Ennis Reservoir from April through September.
4. To determine if a correlation exists between water temperatures and growth rates from the April through September period.

DEGREE OF ATTAINMENT

- 1 & 2. Wild trout population, age structure and size structure estimates were made on two sections of the Madison River above (Varney) and below (Norris) Ennis Reservoir. Estimates were made in April and September and data will be included in a future report.
3. Water temperature data were gathered at three locations on the Madison River, one above (Varney) and two below (Ennis Powerhouse and Norris) Ennis Reservoir. Data will be included in a future progress report.
4. Growth rate data were gathered from brown and rainbow trout from the Varney and Norris study sections. Data will be included in a future progress report.

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Date: September 13, 1983