

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS  
FISHERIES DIVISION  
JOB PROGRESS REPORT

State: Montana Title: Southwest Montana Fisheries Study  
Project No.: F-9-R-33 Title: Inventory and Survey of the Waters  
Job No.: 1-b of the Big Hole and Ruby River  
Drainages  
Project Period: July 1, 1984 through June 30, 1985  
Report Period: July 1, 1984 through June 30, 1985

Objectives

1. To determine spring and fall trout population estimates in at least two sections of the Big Hole River and one section of the Ruby River.
2. To assess the effect of special angling regulations on the trout population of one section of the Big Hole River.
3. To monitor daily discharge and water temperature at one location on the Big Hole River.
4. To mitigate or enhance habitat alterations due to agricultural, residential, mining and industrial development.

Degree of Attainment

1. Spring brown trout and fall rainbow trout population estimates were made for the Melrose and Maiden Rock study sections of the Big Hole River. A spring brown trout population estimate was made for the Alder study section of the Ruby River. Data will be presented in a future progress report.
2. Spring brown trout and fall rainbow trout population estimate data from the Maiden Rock study section were compared with data collected from the Melrose study section and data collected prior to the institution of special regulations. Data were compared on an annual basis from March 1981 through the report period. Data will be presented in a future progress report.
3. Discharge and water temperature were monitored on a daily basis at one location on the Big Hole River. Data will be presented in a future progress report.
4. A total of 126 stream alteration projects were inspected during the report period. Under the Montana Natural Streambed and Land Preservation Act of 1975, 58 projects through the Beaverhead Conservation District, 42 projects

through the Ruby Valley Conservation District and two projects through the Mile High Conservation District were inspected. An additional 24 projects were inspected under the Stream Protection Act of 1963.

5. In addition, the following information was collected:

- a. Fall arctic grayling populations were estimated on one study section on the Big Hole River. Data will be presented in a future progress report.
- b. Fish populations and growth rates were monitored in eleven mountain lakes in the Pioneer Mountains. Data will be presented in a future progress report.

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Date: August 21, 1985