# 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: Inventory and Survey of the Waters of the

Job No.: 1-b Big Hole and Ruby River Drainages

Period Covered: July 1, 1982 through June 30, 1983

### **OBJECTIVES**

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

# DEGREE OF ATTAINMENT

- 1. Spring and fall wild brown and rainbow trout population estimates were made for the Melrose and Maiden Rock study sections of the Big Hole River, and a spring population estimate was made for wild brown trout in the Sailor section of the Ruby River. Data will be presented in a future progress report.
- 2. Discharge and water temperatures were monitored at one location on the Big Hole River. Data will be presented in a future progress report.
- 3. Spring and fall wild brown and rainbow trout population estimates were made for the Maiden Rock study sections of the Big Hole River.
- 4. A total of sixteen Stream Preservation Act Applications were inspected.

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Date: September 20, 1983