

END OF YEAR PROJECT REPORT/JOB PROGRESS REPORT
FY 94: JULY 1, 1993 - JUNE 30, 1994

Division Fisheries Region 3 SBAS Project Number 3324, I-k

Project Title Southwest Montana Big Hole River Grayling Study

Federal Aid Project Number F-46-R-7

Study I Job K

Report Period 7/1/93 Ending Date 6/30/94

Principal Investigators

E. Richard Vincent, Regional Fisheries Manager
Pat Byorth, Fisheries Program Specialist
Richard Oswald, Fisheries & Wildlife Biologist

OBJECTIVES

1. Make population estimates of fluvial arctic grayling on the McDowell - Wisdom study sections during the spring (June) with the objective of maintaining arctic grayling populations of at least 40 II year and older grayling per mile (Headwaters of Big Hole to Pintlar Creek).
COMPLETED

2. Make a September population estimate of arctic grayling for the McDowell - Divide reach of the Big Hole River.
NOT COMPLETED - Due to low water conditions, this population estimate for fluvial arctic grayling was not possible.

3. Determine spring spawning migration of adult grayling using a tagging and electrofishing survey.
COMPLETED

4. Determine the Fall - Winter migration of grayling to winter habitat using fish tags, electrofishing and radio telemetry gear.
COMPLETED

5. Capture and spawn 10-15 ripe female grayling to continue to stock in Axolotl lake to establish a wild brood stock of fluvial grayling.
COMPLETED.

6. Trap and spawn the fluvial arctic grayling established in Axolotl lake taking eggs and sperm to hatchery for rearing and restocking in the Big Hole River study area.
COMPLETED

9. Determine thermal suitability using USGS gage at Wisdom and four thermographs placed downstream from Wisdom. **COMPLETED.**

10. Monitor losses of young-of-year grayling to larger irrigation diversions upstream from Wisdom using electrofishing gear. **COMPLETED.**

11. Conduct a hooking mortality study which would monitor losses of angler released grayling held in live cars for a 24 hour period. **PARTIALLY COMPLETED.**

- B. Describe any variance between work scheduled and work completed and explain (i.e., problems incurred and resulting impacts to attainment of project objectives):

Objectives 2 was not completed due to time constraints and lack of adequate water flows in Big Hole River.

Objectives 7 and 11 were partial completed because part of the evaluation period spans into FY93.

- C. Discuss impact(s) of project variance to DFWP programs (as related to objectives stated in the strategic plan, species plans, river plans or other long range documents). Also discuss any significant accomplishments of this project (state in terms of outputs produced if possible, i.e., recreation days, etc.)

NONE

- D. FINAL BUDGET STATUS (TOTAL cost of project...personal services, operations and other). Note any differences between SBAS end-of-fiscal year figures and individual records kept by the region.

<u>Project Number</u>	<u>Amount Budgeted</u>	<u>Amount Spent</u>	<u>Balance of Funds</u>	<u>Variance:</u> (If project spending was as scheduled, put "on schedule". If spending was at variance with planned costs, describe.)
TOTALS	<u>\$41,099</u>	<u>\$41,075</u>	<u>+\$24</u>	On schedule

- E. RECOMMENDED ACTION(S) to improve the effectiveness of this type of work effort in the future.

NONE

Prepared by

Date 7/7/94

Regional Supervisor

Date 9/8/94

Comments: _____

