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PROJECT	r NO.	F	5-R-1	-
DATE	March	28,	1952	_
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## QUARTERLY PROGRESS REPORT FOR

## INVESTIGATIONS PROJECTS

## As Required by

## FEDERAL AID IN FISH AND WILDLIFE RESTORATION ACTS

- 1. Title of Project: Central Montana Fishery Study
- 2. Leader: Nels A. Thoreson, Biologist
- 3. Report of Progress:
  - Job I-A: Cataloging the Lakes and Streams of the Project Area. A list of the streams flowing into the Smith River has been compiled. Most of these streams have not been physically checked as yet because of inaccessibility, however, plans for observing the tributaries of this drainage have been made. Winter observations were made on lower Sheep Creek, a tributary of Smith River, during the past quarter. Considerable amounts of snow covered the stream but little or no ice was found under the snow. This canyon portion of the stream is sheltered from the wind and snow which falls usually accumulates. Apparently the heavy blanket of snow protected the water surface from the low temperatures and prevented formation of ice. Upper Sheep Creek which is more exposed to the wind, in most places, was covered with ice varying from less than an inch to a foot or more in thickness.
  - Job II-A:

    North Fork Smith River Reservoir Study.

    Measurements of the reservoir level and ice thickness have been made several times during the past quarter.

    Only a small amount of water has been allowed to flow out during the last several months. Further work on this reservoir is contemplated.
  - Job III-A: Sheep Creek Fish Population Study.

    Work finished; job completion report attached.
  - Job III-B: The Contribution of Hatchery Trout to the Catch of Fish from Sheep Creek.

    Inactive during report period.
  - Job IV-A: Abundance, Fluctuation in Abundance, Migration of the Fishes of Prickly Pear Creek.

    Proceeding according to schedule.

Job IV-B: Fishing Pressure and the Relation of the Anglers Catch to the Actual Stream Fish Population, Prickly Pear Creek.

Proceeding according to schedule.

Ranch Reservoir Study.

Winter conditions have been observed on several ranch reservoirs during the past quarter. Most reservoirs within the project area entered the winter with ample amounts of water. In this area the weather warmed up during the last two or three days of January and the first half of February. During this period a number of ranch reservoirs were completely filled and water was flowing over spillways. Fishing for bluegills through the ice was attempted without success. Applications for planting of reservoirs in this area were reviewed. Experimental plantings of fish in several reservoirs is planned for the coming quarter. Several meetings were held concerning plans for further ranch pond research and the coordination of all this activity in Montana.

Job VI-A: Fish Losses in the Pishkun Irrigation Canal and Development of Census Techniques.

Work finished; job completion report attached.

Job VII-A: Population Surveys of Streams Within the Project Area.

Work finished; job completion report attached.

Submitted by:	Approved by:		
Name Nels A. Thoreson	Montana State Department of Fish, and Gam		
Title Biologist	By AN Zamhal		
	Title State Game Warden		
	Date April 7. 1952		