STATE OF ALASKA

Jay S. Hammond, Governor

Annual Performance Report for

ESTABLISHMENT OF GUIDELINES FOR PROTECTION OF THE SPORT FISH RESOURCES DURING LAND USE ACTIVITIES

by

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Volume 22 Study No. D-I

RESEARCH PROJECT SEGMENT

State: ALASKA Name: Sport Fish Investigations of Alaska

Project No.: F-9-13

Study No.: D-I Study Title: A STUDY OF LAND USE ACTIVITIES AND THEIR RELATIONSHIP TO THE SPORT FISH RESOURCES IN ALASKA

Job No.: D-I-A Job Title: Establishment of Guidelines for Protection of the Sport Fish Resources During Land Use Activities

Cooperator: Steven T. Elliott

Period Covered: July 1, 1980 to June 30, 1981

ABSTRACT

This job was inactive during the reporting period.

BACKGROUND

The Land Use Project originated from the job "Effects of Logging on Dolly Varden" in 1970. The emphasis of that study included pre-logging assessment of Dolly Varden populations at Hood Bay, an endeavor that set the stage for the future program (Reed and Armstrong, 1971).

Initial studies began with an intensive survey of logged watersheds in southeastern Alaska and a comprehensive review of literature and guidelines on the effects of logging on salmonid populations (Reed and Elliott, 1972). Results of the first year's work were published as a pamphlet written in cooperation with the U.S. Forest Service (Sheridan et al., 1973) and recognized the following needs: (1) that cooperative working relationships were needed to solve problems where land development had or would potentially impact fisheries, and (2) a reliable method of estimating the size of fish populations was needed.

In response to these needs, the project launched a series of meetings to inform the industry and the public of the importance of habitat and the timber harvest methods needed to preserve it. Additionally, the project joined with the Forest Service in pre-logging surveys of watersheds, assisted in the writing of land planning documents, and commented and reviewed Environmental Impact Statements (Reed and Elliott, 1973; Reed, 1974; Dinneford, 1975; Dinneford, 1976; Hubartt, 1977).

In the fall of 1976, the U.S. Forest Service initiated development of the Tongass Land Management Plan (TLMP), a planning program with goals of identifying, prioritizing, and allocating use classifications to watersheds in the Tongass Forest. The Land Use Project was a major participant in this planning process and designed a fishery rating system for commercial and sport fisheries and provided resource information for the evaluation process. The resultant plan included many of the recommendations and guidelines that had been previously formulated by the Land Use Project (Hubartt, 1978).

As a result of participation in the TLMP, the Land Use Project identified two areas where additional work was necessary: (1) a method for indexing populations of juvenile salmonids was needed, and (2) there were still many unanswered questions concerning the impacts of timber harvest on the biology of salmonids. Consequently, research programs conducted by the project were guided in a direction consistent with the above needs (Hubartt, 1979; Hubartt, 1980).

RECOMMENDATIONS

Research

1. Continue to identify waters important to the sport fishing resources and seek protection for those that are impacted by land use activities.

Management

1. Continue to monitor the impact of land use designation on resource use patterns and provide managers with support information for management strategies.

OBJECTIVES

1. Identify waters important to the sport fish resource and provide recommendations to protect these resources during land use activities.

2. Continue to develop and refine field techniques for the quantitative evaluation of rearing salmonid populations for use in the land planning process.

3. Design and test methods for evaluating rearing fish habitat quality.

FINDINGS

The "guidelines" job was inactive during this reporting period.

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