

PERFORMANCE REPORT

STATE: Alaska

GRANT NO.: F-10-33

GRANT TITLE: Sport Fish Investigations in Alaska

PERIOD COVERED: July 1, 2017 – June 30, 2018

STUDY NO. AND TITLE: S-2-44 Bristol Bay Salmon

STUDY OBJECTIVES:

1. Estimate the short-term (5 day) mortality rate of Chinook salmon caught and released in the lower Nushagak River sport fishery; and
2. Estimate the effects of selected biological and sport fishery related variables on mortality rates.

RESULTS/DISCUSSIONS:

Objective 1: During June and July of 2017, a total of 107 Chinook salmon were captured with hook and line and implanted with a radio transmitter in the lower Nushagak River. Of the 107 tags deployed, 7 were dropped from the study with 1 lost from the study area and 1 not able to be established as a 5 day survivor or mortality. A total of 98 fish were survivors and 7 were known mortalities within the 5 days. This gives a preliminary hook-and-release mortality rate of 7 fish out of 105 or 6.7% during 2017.

During June and July of 2018, a total of 210 Chinook salmon were captured with hook and line and implanted with a radio transmitter in the lower Nushagak River. Of the 210 tags deployed, 9 were dropped from the study with 5 lost from the study area and 4 not able to be established as a 5 day survivor or mortality. A total of 193 fish were survivors and 12 were known mortalities within the 5 days. This gives a preliminary hook-and-release mortality rate of 12 fish out of 205 or 5.9% during 2018.

Objective 2: Several biological and sport fishery variables were collected during sampling including water temperature, angling method, terminal tackle, hooking location, landing time, handling time, bleeding severity, swimming away characteristics, and external condition of fish at release. The effects of these variables are currently being examined.

FINAL REPORT STATUS:

This performance report constitutes the final report of activities for this study during this reporting period.

Results for objectives 1 and 2 of this project will be published in a Division of Sport Fish Fishery Data Series Report in early 2019.



Landing a Nushagak Chinook salmon for the catch and release mortality study.



Installing a radio telemetry antenna for the Nushagak Chinook salmon catch and release mortality study.

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DATE: August 2, 2018