

FISH/SHELLFISH STUDY NUMBER 1

Study Title: Salmon Spawning Area Injury

Lead Agency: ADF&G

PROJECT JUSTIFICATION

This project will complete the analysis of data from NRDA and restoration studies designed to improve the accuracy of wild pink salmon escapement estimates. Data analyses from ten weirs and more than 40 selected streams in the vicinity of each weired stream will be completed and summarized. Estimates of aerial survey bias and stream life from 1990 and 1991 studies represent a major advance in escapement estimation procedures. Results will dramatically improve past and future escapement estimates in Prince William Sound and will lead to more accurate and precise stock specific fisheries management. The commercial fishery in Prince William Sound is of major economic importance and also plays a major role in regulating populations of salmon in Prince William Sound. Wild stocks which were injured by the Exxon Valdez oil spill play a major role in the Prince William Sound ecosystem and are frequently intercepted in mixed stock fisheries dominated by hatchery fish. Accurate and timely estimates of spawning escapements are critical for biologists who seek to ensure reproductive success for wild populations by manipulating fisheries. Data analyses completed by this project will enable fisheries managers to improve inseason escapement estimates and identify escapement shortfalls. Injured wild populations may be protected and restored if escapement shortfalls can be quickly identified and corrected by selectively reducing harvests in areas where exploitation of injured stocks might occur.

BUDGET (\$K)

Salaries	\$ 51.3
Travel	1.7
Contractual	1.2
Supplies	2.1
Equipment	<u>0.2</u>
Subtotal	\$ 56.5
General Administration	<u>7.8</u>
Total	\$ 64.3