ADF&G Sport Fish Hatchery Program



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SF Hatchery Program

- Sport Fish stocking in Alaska began in the 1950's with the release of rainbow trout.
 - Create and diversify Sport Fishing opportunities for anglers.
- The Division operates 2 hatcheries, William Jack Hernandez SFH (Anchorage) and Ruth Burnett SFH (Fairbanks).



SF Production

- SF stocking program consists of smolt stocking and lake stocking.
- Annually releasing 7.2 million fish. (2.3 million PNP)
- Species produced:
 - Rainbow trout, Arctic char and Arctic grayling fry, fingerling and catchable sized fish.
 - King, and coho smolt, fingerling and catchables.



Regulatory Framework

- Consistent with PNP regulation (No HP, BHMP)
- Annual Management Plan
- Annual Report
- Fish Transport Permits
- State Genetics Policies
- State Pathology Oversite

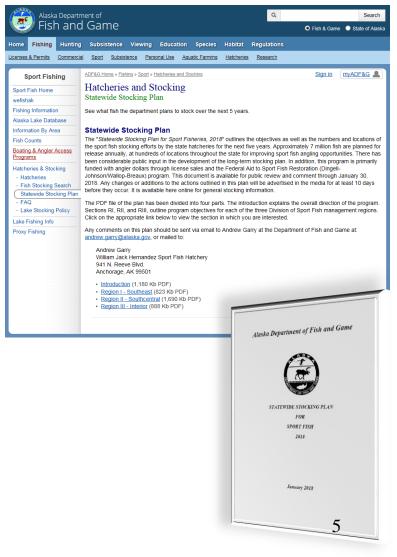


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 Statewide Stocking Plan For Recreational Fisheries

Sport Fish

- Outlines Sport Fish Division Stocking plans for the next 5 years
- Updated and Published Annually by the Division
- Is available for public review and comment each year



Smolt Production

- ~2,500,000 king and coho smolt are stocked at 12 sites in Southcentral.
- 3 of these stockings enhance wild populations of king salmon to provide additional broodstock and fishery enhancement. (Ninilchik River, Crooked Creek, Deception Creek).
- These sites may only receive smolt that are no more than 1 generation removed from wild parents to minimize potential genetic impacts.

PNP Supported Stocking

- In areas not accessible from SF Hatcheries the Division has established Cooperative Agreements with local PNP hatchery programs.
 -KRAA -DIPAC -SSRAA
- These include king, coho and rainbow trout stockings in Kodiak, Juneau, Ketchikan, Petersburg.



Macaulay Salmon Hatche

OSF Hatchery Stocking:

Fairbanks **Delta Junction** Glennallen Seward Homer (Seldovia, Homer Spit) Ninilchik Kasilof (Crooked Cr.) Anchorage **Eklutna** Tailrace Willow Creek (Deception Cr.)



<u>PNP Co-op Stocking:</u>
Kodiak - KRAA
Juneau - DIPAC
Petersburg - SSRAA
Ketchikan

8

> 200

Sites

Lake Stocking



- ~2,000,000 rainbow trout, Arctic char, Arctic grayling, coho and king salmon fry, fingerling and catchable sized fish are released into more than 200 freshwater locations across Alaska.
- Diploid fish can only be stocked into land locked locations.
- Sterile Triploid fish maybe stocked into open or semi open systems. Most SF production is sterile, regardless of release location.



Impact

• 2004, Northern Economics

- Nearly 330,000 angler days
- \$34 million in spending



Economic Effect of ADF&G's Region II & III Recreational Stocking Programs

Project Purpose

The goals of this project are to:

- · Estimate the yearly economic effect of ADF&C's recreational stocking program in Regions II & III;
- Calculate the 20-year net present value of the stocking program.

Results Summary

In an average year, the Region II and III recreational stocking programs generate nearly 330,000 angler days worth 33.4.1 million dollars to Alaska's economy. This result means the program generates between 10 percent and 14 percent of all angling days in the state each year, and accounts for between 4 percent and 9 percent of all angling expenditures. The 20-year net-present value of the program is roughly \$500 million.

Table 1. Estimated Average Yearly Effect on the State's Economy

Category	Lower Bound	Upper Bound	Average
Resident Anglers	\$7,929,813	\$22,226,605	\$15,078,209
Non-Resident Anglers	\$11,278,283	\$26,871,257	\$19,074,770
All Anglers	\$19,208,097	\$49,097,862	\$34,152,980

Note: All values are in 2001 dollars

Table 2. Estimated Average 20-Year Net Present Value of the Program's Economic Effect

\$116,646,262	\$326,949,748	\$221,798,005
\$165,901,716	\$395,271,825	\$280,586,771
\$282,547,978	\$722,221,574	\$502,384,776
	\$165,901,716	\$165,901,716 \$395,271,825

Methodology

The analysis uses a reliable multi-step process to achieve its goals. It identifies water bodies in the stocking program; calculates the estimated angling days for each stocking management plan; calculates the estimated percentage of these days attributable to the hatchery program; places an expenditure value on each day; employs a multiplier to transform the direct expenditure value to an economic effect; aggregates the value across all the stocking management plans; and calculates a net present value using a social discount rate.

Estimates of resident and non-resident angler effort came from ADF&G's annual statewide harvest survey.

Estimates of the portion of effort attributable to the hatchery program came from ADF&C biologists.

Daily angler expenditure values are derived from:

- Hermann, Mark, S. Todd Lee, C. Hamel, K. Criddle, H. Ceier, J. Creenberg, C. Lewis, An Economic Assessment of the Sport Fisheries for Halibut, and Chinook and Coho Salmon in Lower and Central Cook Inlet. University of Alaska, Coastal Marine Institute. April 2001.
- U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce. U.S. Census Bureau. 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Alaska Edition).

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Other Benefits

- Creates accessible fisheries in locations such as Fairbanks, Anchorage, Homer, Seward, Kodiak, Juneau, Ketchikan
- Provides increased harvest opportunity
- Diverts effort from wild stock fisheries

<u>Summary</u>

- Stocking to enhance Sport Fisheries in Alaska predates Statehood and the development of the PNP program.
- SF stocking is intended to create and diversify sport fishing opportunities in Alaska.
- SF hatcheries are subject to much of the same oversite applied to PNP hatcheries.
- SF hatchery production includes resident species not normally produced by PNP facilities.
- SF stocking is primarily funded by sport anglers through license sales and federal taxes on fishing equipment and boat fuel.

Questions



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