



Sport Fish Enhancement Program



Jeff Milton

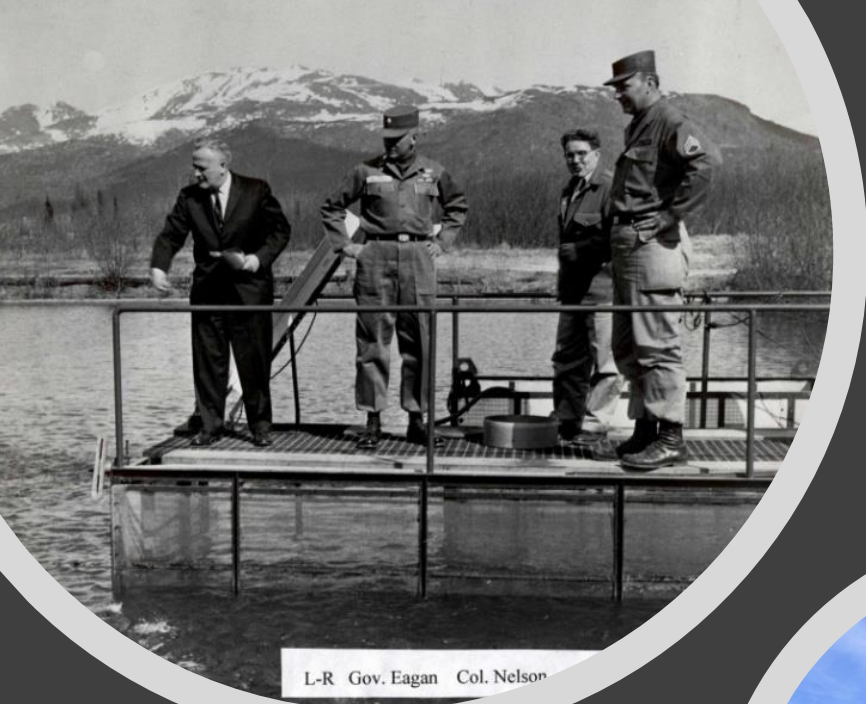
Alaska Department of Fish and Game

Alaska Board of Fisheries, Hatchery Committee Meeting

March 7th, 2020

Tab 2

SF Enhancement in Alaska



- Sport Fish Enhancement in Alaska began in the 1950's with the stocking 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).



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, Arctic grayling and lake trout as fry, fingerling and catchable sized fish.
- Chinook, and coho smolt, fingerling and catchables.



Regulatory Framework



Consistent with PNP regulation (No HP, BHMP)



Annual Management Plan (AMP)



Annual Report (AR)



Fish Transport Permit (FTP)



State Genetics Policies



State Pathology Oversight

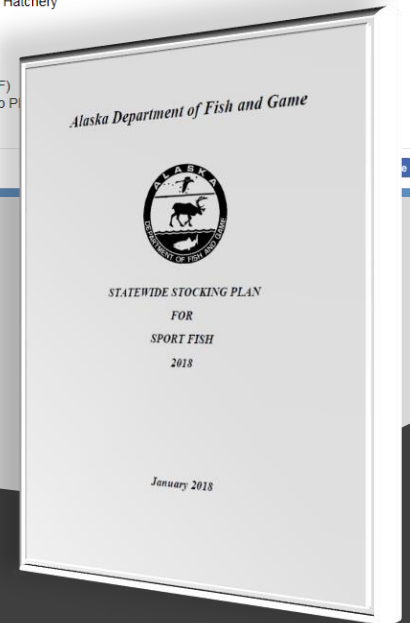


Statewide Stocking Plan For Sport Fish

Statewide Stocking Plan

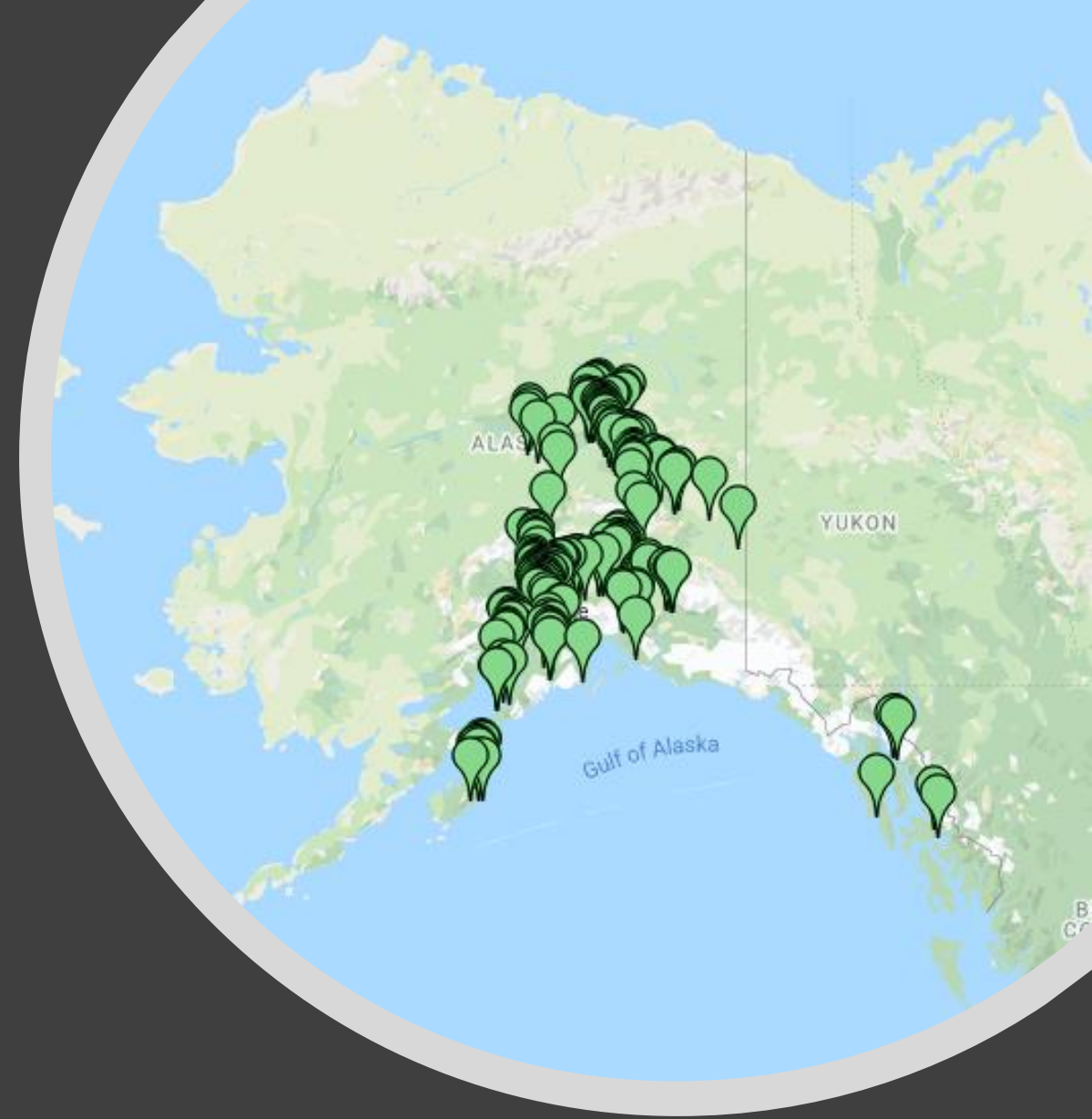
- Outlines Sport Fish Division Stocking plans for the next 5 years
- Contains the Lake Stocking Policy
- Updated and Published Annually by the Division
- Is available for public review and comment each year

The screenshot shows the Alaska Department of Fish and Game website. The main navigation bar includes Home, Fishing, Hunting, Subsistence, Viewing, Education, Species, Habitat, and Regulations. A sub-navigation bar lists various categories like Licenses & Permits, Commercial, Sport, Subsistence, Personal Use, Aquatic Farming, Hatcheries, and Research. The page title is "Hatcheries and Stocking Statewide Stocking Plan". The content area includes a "Sport Fishing" sidebar with links to Sport Fish Home, wefishak, Fishing Information, Alaska Lake Database, Information By Area, Fish Counts, Boating & Angler Access Programs, Hatcheries & Stocking (with sub-links for Hatcheries, Fish Stocking Search, Statewide Stocking Plan, FAQ, and Lake Stocking Policy), Lake Fishing Info, and Proxy Fishing. The main text area features a breadcrumb trail (ADF&G Home > Fishing > Sport > Hatcheries and Stocking), a "Sign in" button, and a "myADF&G" profile icon. The page content includes a heading "Hatcheries and Stocking Statewide Stocking Plan", a paragraph stating "See what fish the department plans to stock over the next 5 years.", a section titled "Statewide Stocking Plan" with a detailed description of the plan's objectives and funding, and a list of PDF links for the Introduction, Region I - Southeast, Region II - Southcentral, and Region III - Interior. Contact information for Andrew Garry is provided, along with a "Share" button.



Unique Aspects

- Statewide Program
- Provides a diversity of accessible harvest opportunities for sport anglers
- Cooperative Agreements with PNPs and SF Hatchery production
- Species produced in addition to Chinook and coho salmon
 - Rainbow trout (Swanson River Origin)
 - Arctic char (Lake Aleknagik Origin)
 - Arctic grayling (Chena River)
 - Lake trout (Seven Mile Lake, Paxson)



Smolt Production

- ~2,500,000 Chinook and coho smolt are stocked at 11 sites in Southcentral.
- 2 of these stockings enhance wild populations of Chinook salmon.
- These 2 sites may only receive smolt that are no more than 1 generation removed from the wild to minimize potential genetic impacts.
- All salmon smolt production at the WJHSFH is conducted in Recirculating Aquaculture systems.



PNP Supported Stocking

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



SSRAA

PNP Co-op Stocking:

Kodiak - KRAA

Juneau - DIPAC

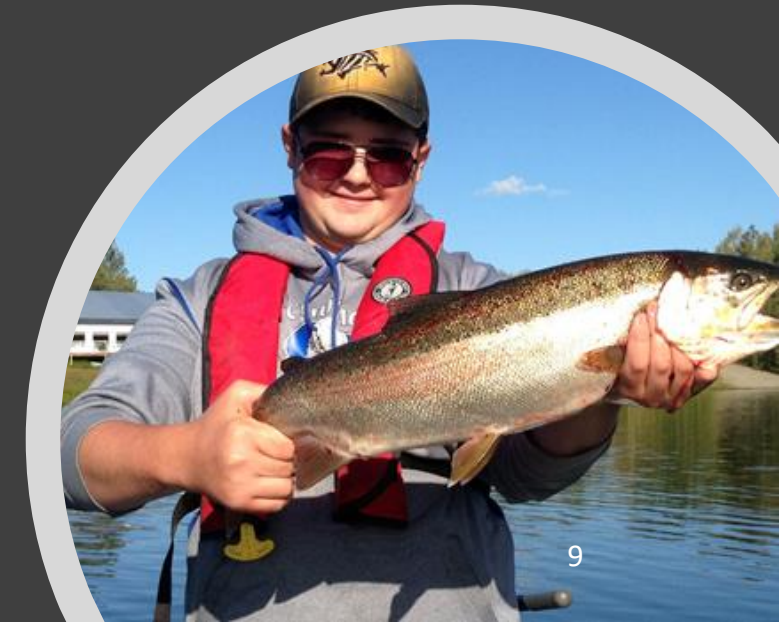
Petersburg - SSRAA

Ketchikan



Lake Stocking

- ~2,000,000 rainbow trout, Arctic char, Arctic grayling, lake trout, coho and Chinook 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.



Production Trends

- SF hatchery facilities are at maximum capacity for most species and life stages
- Changes to the stocking plan usually require reallocation of fish from one site to another
- Lake trout stocking will be added in 2020 with alternate year production
- Enhancement of Deception Creek Chinook salmon has been discontinued due to poor returns



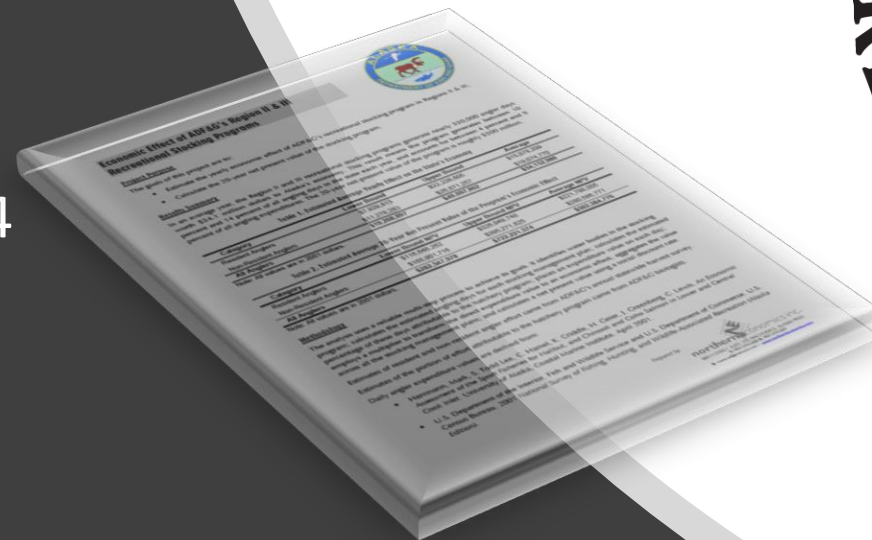
Management

- SF Enhancement projects intended to provide harvest opportunity while limiting impact on wild stocks
- Hatchery reared Chinook salmon returning to Ninilchik River and Crooked Creek can be targeted for harvest while protecting wild origin fish.
- If a stocking project does not provide a net benefit it may be discontinued (Deception Creek)



Funding and Impact

- Funding for SF Enhancement Program is 100% user paid
 - Sport Fish License Sales
 - Federal Aid in Sport Fish Restoration (DJ)
- Annual Operations Cost, \$5.9 million
- Average annual Economic Benefit, \$34 million (2004 Northern Economics)





Research

- Chinook and coho smolt production is otolith marked
- Chinook smolt released at Crooked Creek and Ninilchik River are adipose fin clipped
- All adult fish spawned for future production are tissue sampled
- Size at release evaluation of Ship Creek Chinook smolt
- Observations of straying reported to the Gene Conservation Lab

Review

- Stocking to enhance Sport Fisheries in Alaska predates Statehood
- SF stocking is intended to create and diversify sport fishing opportunities in Alaska.
- SF hatcheries are subject to much of the same oversight applied to PNP hatcheries.
- SF hatchery production includes resident species not normally produced by PNP facilities.
- SF stocking is primarily funded by sport anglers.





Questions?