

Salmon Fishery Enhancement in Alaska

**A Presentation to the
House Fisheries Special Committee
3/14/2019**

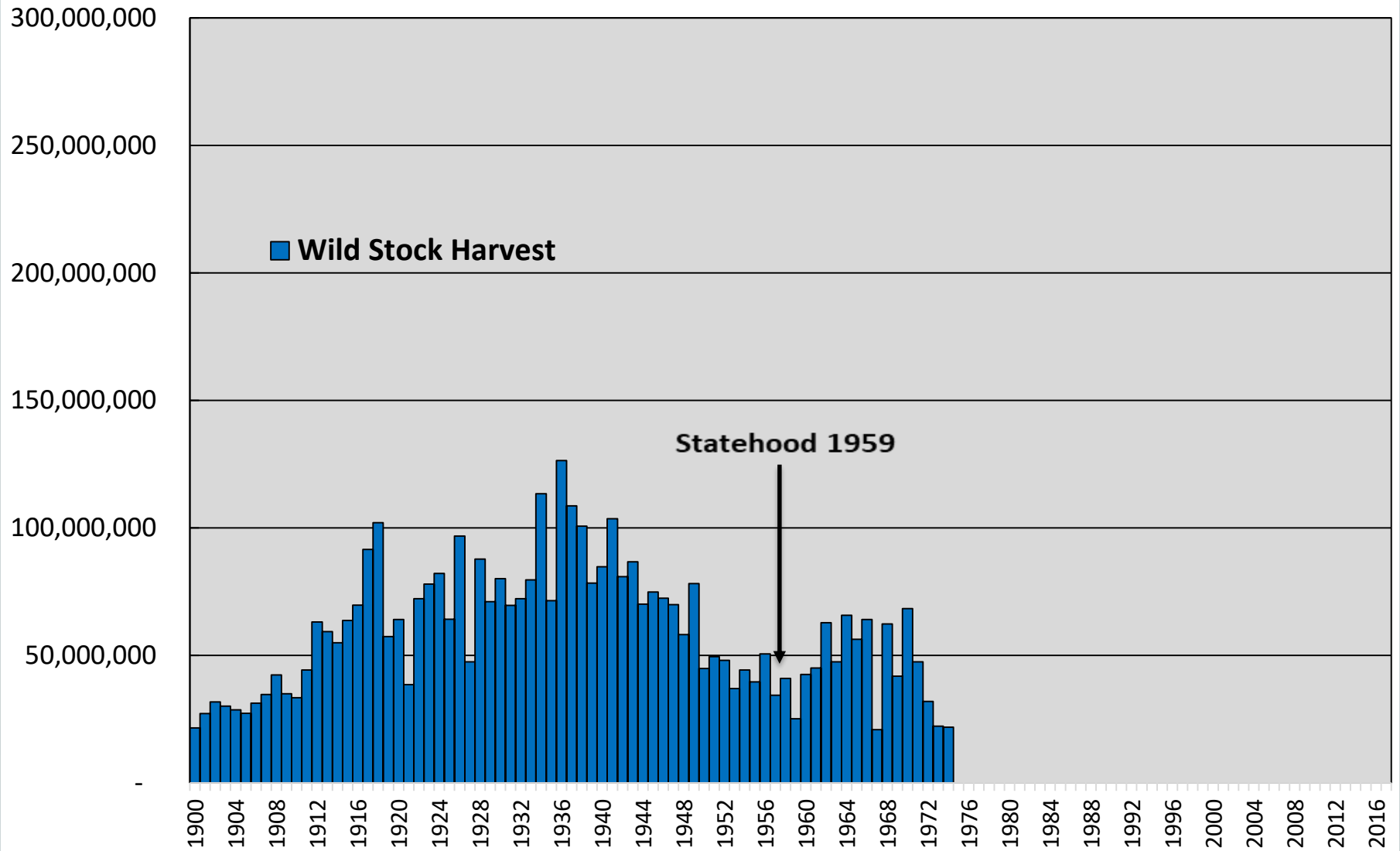
**Alaska Department of Fish and Game
Sam Rabung**



The Need for a Fishery Enhancement Program

- By statehood in 1959, Alaska's salmon fishery had fallen to its lowest level in 60 years and remained low through the next 15 years
- Salmon abundance was well below both historical levels and the production potential of the habitat, many stocks were depleted and some extirpated
- Economic losses to individual fishermen, coastal communities and the State were considered a disaster
- Effective fishery management alone was not increasing abundance quickly enough

Alaska Commercial Salmon Harvest from 1900-1974



An Integrated Approach to Recovering Alaska's Salmon Fisheries

- **In-season escapement based management of salmon fisheries was adopted with state control of fish and game in 1960**
- **Fisheries Rehabilitation, Enhancement and Development (FRED) Division was created by legislature in 1971 (AS 16.05.092)**
- **Following a constitutional amendment in 1972, limited entry commercial salmon fishery program was enacted in 1973. The 1972 constitutional amendment also allowed for “the efficient development of aquaculture” in Alaska (Article 8, section 15)**
- **The 1976 Magnuson-Stevens Act restricted foreign fishing to outside of 200 mile limit**

Private Nonprofit Salmon Hatcheries Join The Effort in 1974

CHAPTER 11

AN ACT Authorizing the Operation of Private Nonprofit Salmon Hatcheries

Be it enacted by the Legislature of the State of Alaska:

Section 1. INTENT. ***It is the intent of this Act to authorize the private ownership of salmon hatcheries by qualified nonprofit corporations for the purpose of contributing by artificial means to the rehabilitation of the state's depleted and depressed salmon fishery...***

Approved May 16, 1974

Effective August 14, 1974

The Purpose of Alaska's PNP Salmon Fishery Enhancement Program

**Recovery and support of Alaska's salmon fisheries
and fishing economy**

**Provide an economic engine to support and grow
coastal communities**

Guidance in the State Constitution

Article 8 Natural Resources

- Section 15 – No Exclusive Right of Fishery. Amended in 1972 to provide an exemption to allow for limited entry into any fishery and “**to promote the efficient development of aquaculture in the State.**”

Guidance in Statutes

Title 16 – Fish and Game

- AS 16.05.050. Powers and Duties of Commissioner
- **AS 16.05.092. Fisheries rehabilitation, enhancement and development**
- AS 16.05.221. Boards of fisheries and game
- AS 16.05.730. Management of wild and enhanced stocks of fish
- AS 16.05.851. Hatchery required
- **AS 16.10.375-480. Salmon Hatcheries**
- AS 16.10.500-560. Fisheries Enhancement Loan Program
- AS 16.40.210. Finfish farming prohibited
- AS 16.43.400-440. Special Harvest Area Entry Permits

Title 16 – Fish and Game

Sec. 16.05.092. Fisheries rehabilitation, enhancement, and development.

“The department shall”

“through rehabilitation, enhancement, and development programs do all things necessary to ensure perpetual and increasing production and use of the food resources of state waters and continental shelf areas;”

Title 16 – Fish and Game

Chapter 10, Article 9 - Salmon Hatcheries.

Section

- 375. Regional salmon plans
- 380. Regional associations
- 400. Permits for salmon hatcheries
- 410. Hearings before permit issuance
- 420. Conditions of a permit
- 430. Alteration, suspension, or revocation of permit
- 440. Regulations relating to released fish
- 443. Department assistance and cooperation
- 445. Egg sources
- 450. Sale of salmon and salmon eggs: use of proceeds; quality and price
- 455. Cost recovery fisheries
- 460. Inspection of hatchery
- 470. Annual report
- 480. Contracts for the operation of state hatcheries

Guidance in Regulations

Title 5 – Fish and Game

- 5 AAC 39.220. Policy for the management of mixed stock salmon fisheries
- 5 AAC 39.222. Policy for the management of sustainable salmon fisheries
- **5 AAC 40.005-990 - Private Nonprofit Salmon Hatcheries**
- 5 AAC 41.001-100 Transportation, Possession and Release of Live Fish

Guidance in Policy

- **Genetic Policy** (1985) and Background to the Genetic Policy (1989)

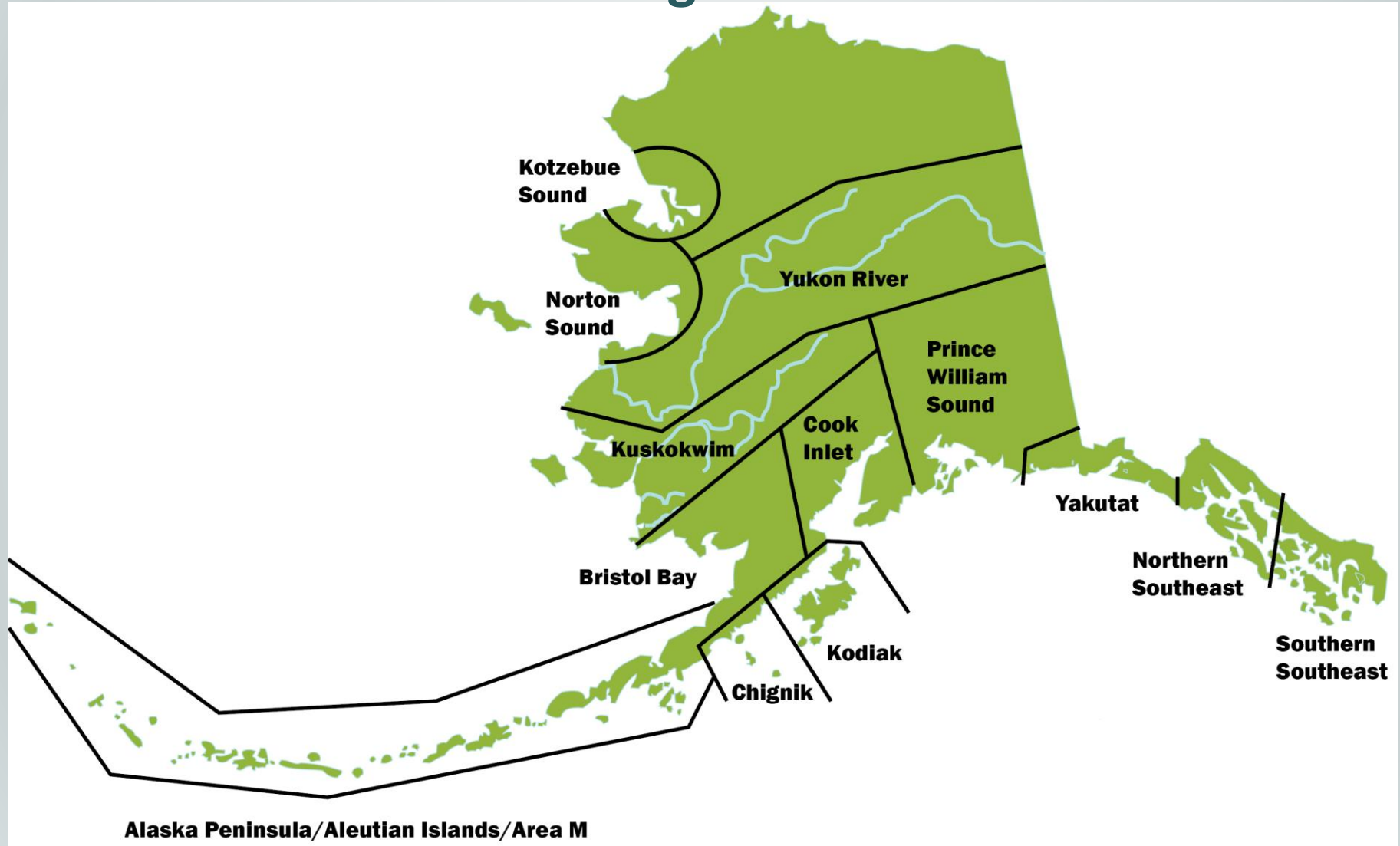
All other policies have been adopted into regulation

Alaska's Program is Stakeholder Driven

The **users of the resource** determine what fishery enhancement is desirable and the ADF&G determines what is appropriate within their mandate to sustain natural production.

The mechanism for this cooperative effort is the Regional Aquaculture Association (RAA) working with ADF&G within the Regional Planning Team (RPT) process to develop the **regional salmon plan**.

Alaska Salmon Fishery Enhancement Planning Regions

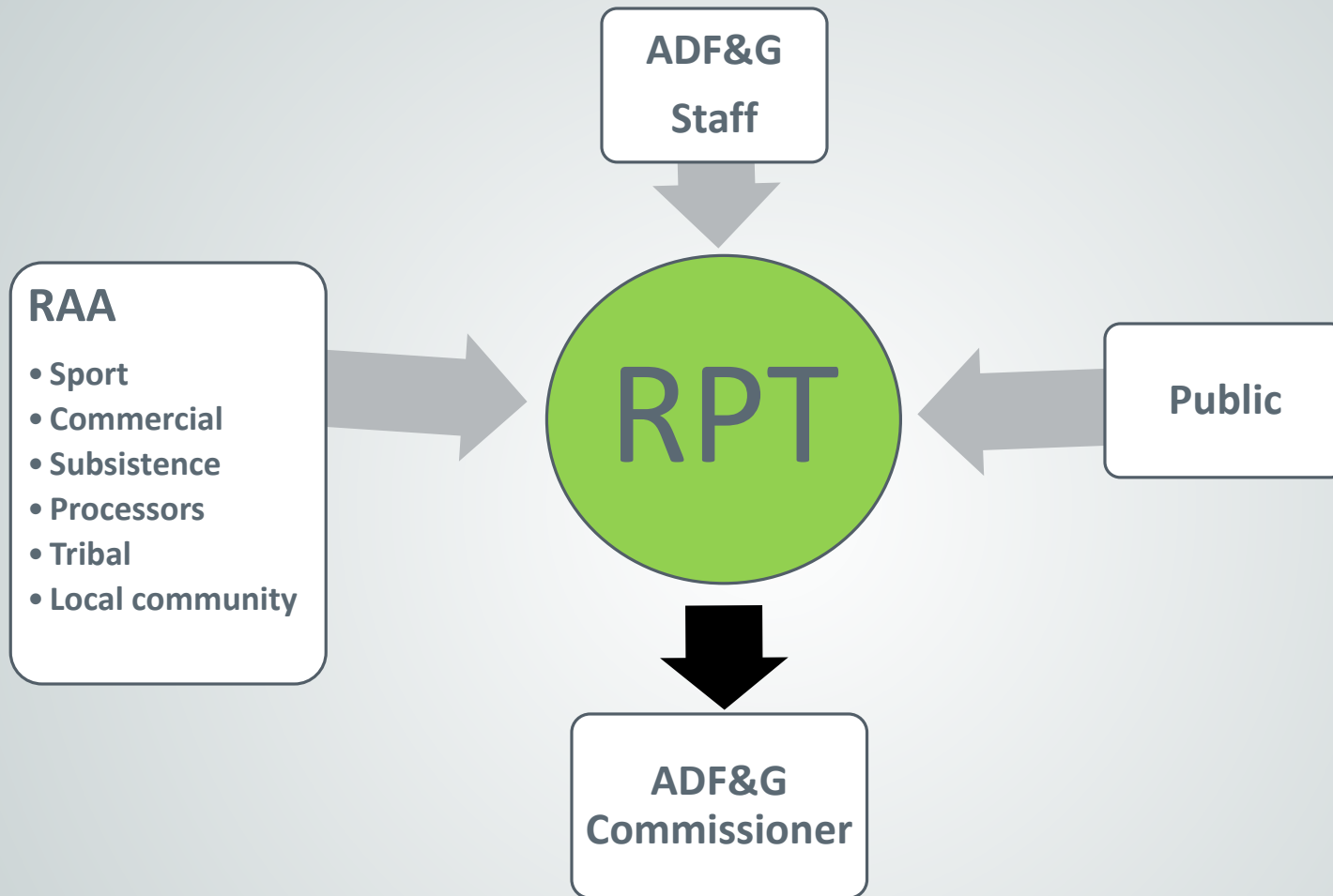


Regional Planning Teams (RPT)

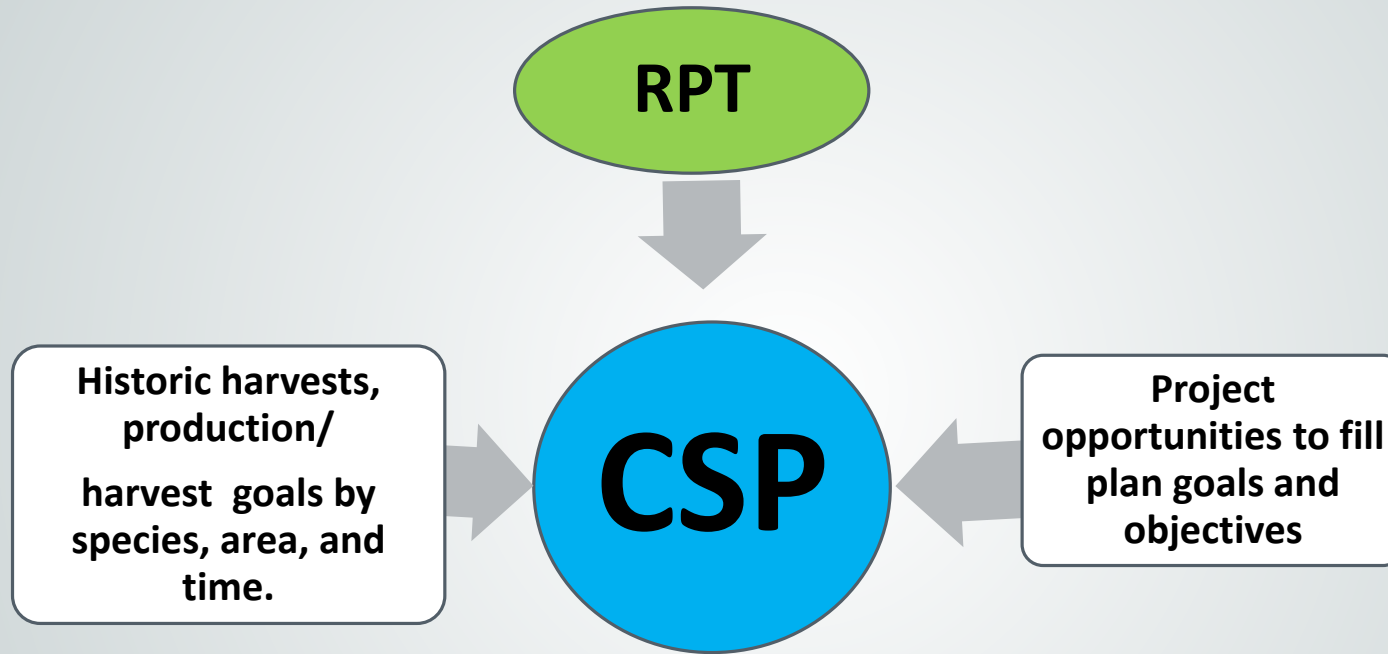
The primary responsibility of the RPT is regional **comprehensive salmon planning.**

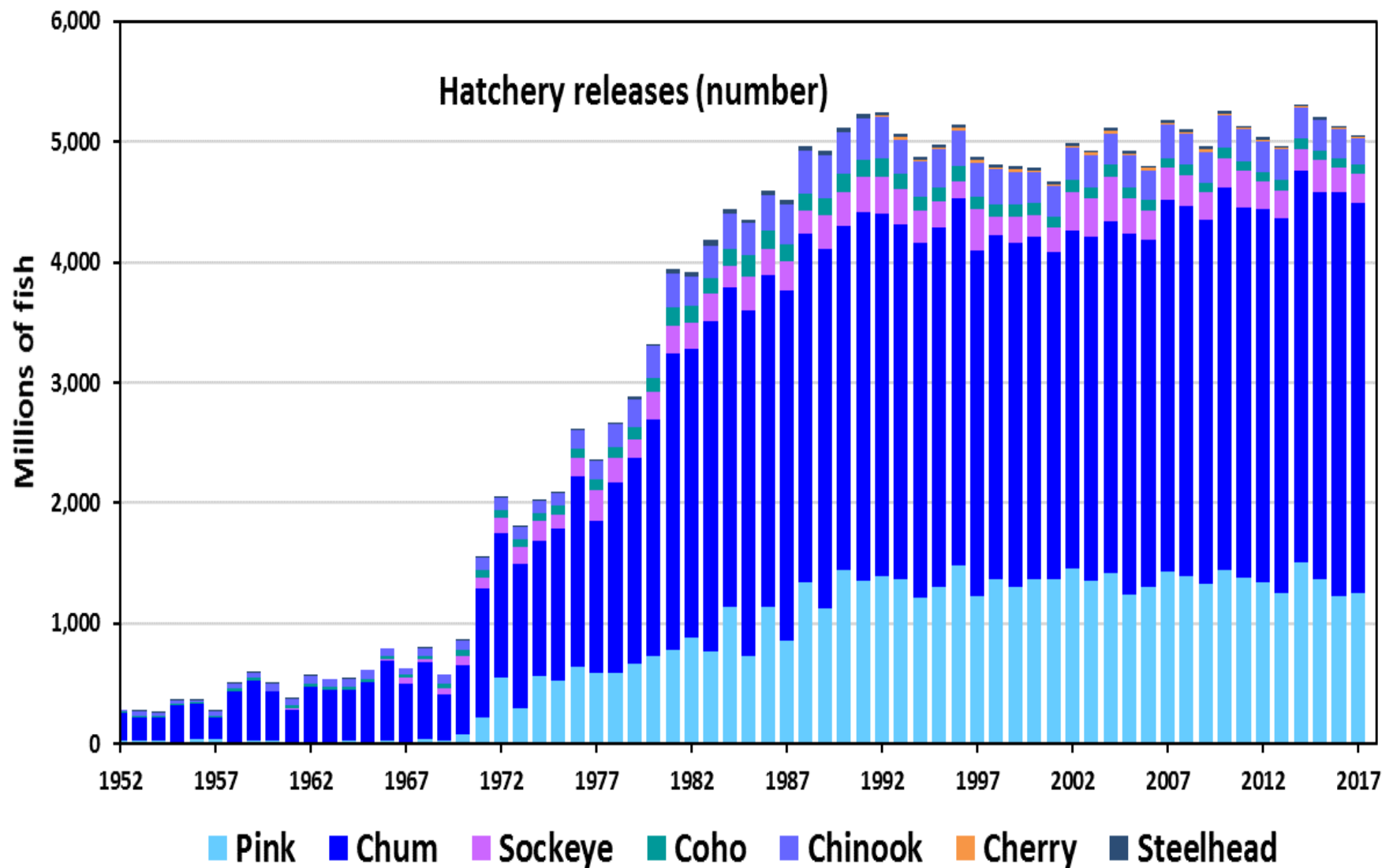
The RPT is **advisory to the ADF&G Commissioner** on salmon fishery enhancement planning and permitting within their region.

Regional Planning Team Process

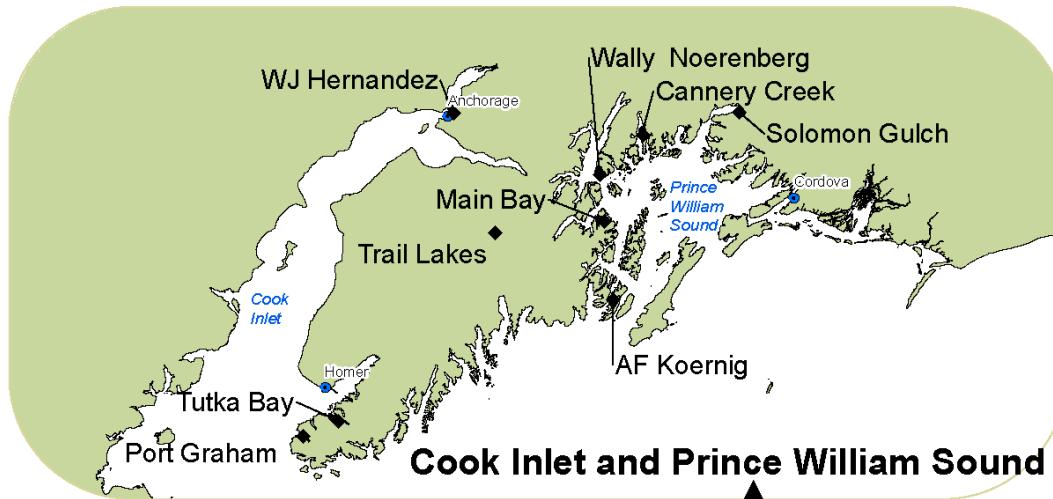


Regional Planning Team Process

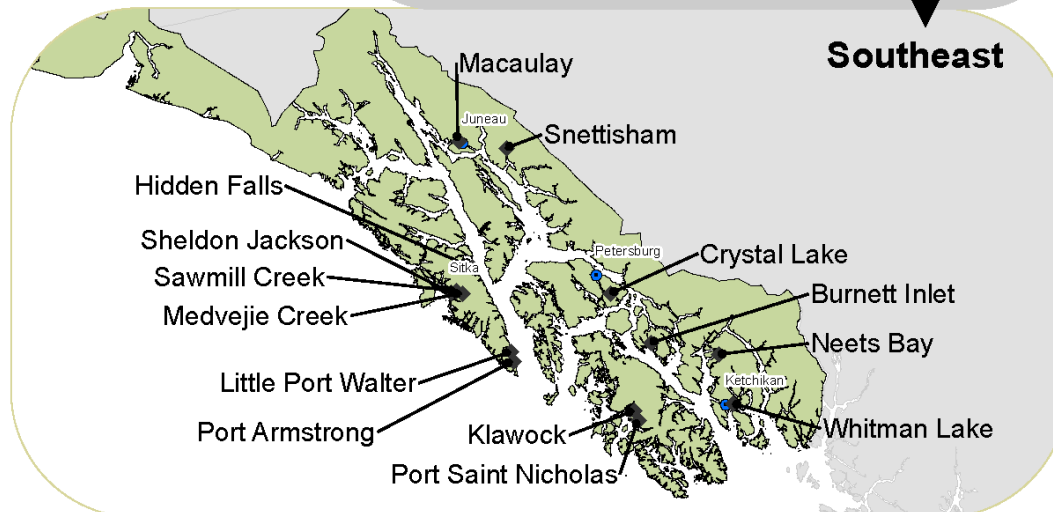
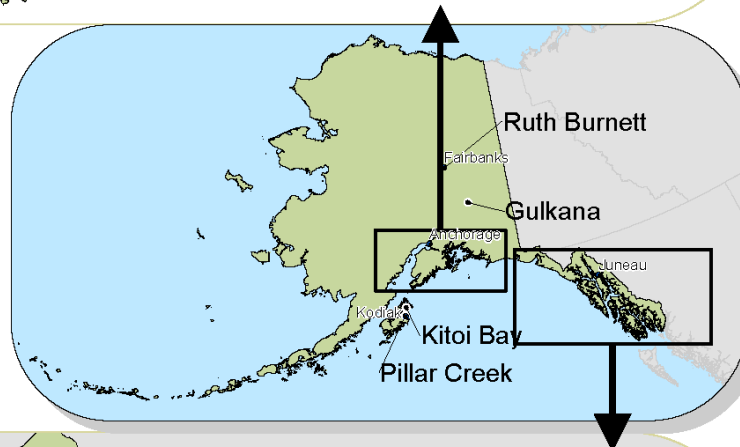




Data Source: North Pacific Anadromous Fish Commission (NPAFC). 2018. NPAFC Pacific salmonid hatchery release statistics (updated 31 July 2018). North Pacific Anadromous Fish Commission, Vancouver. Accessed July, 2018. Available: www.npafc.org

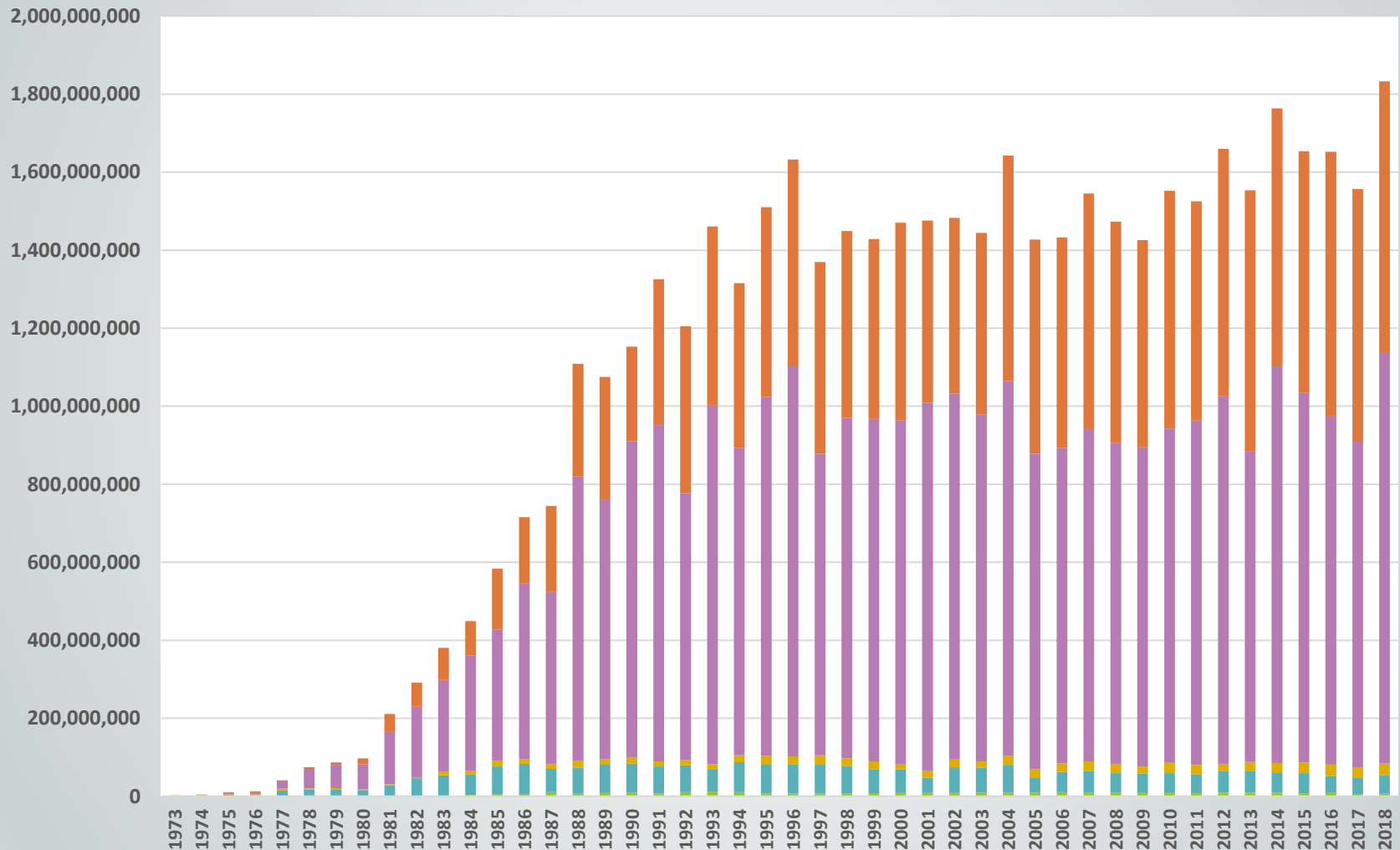


Locations of Alaska Hatcheries

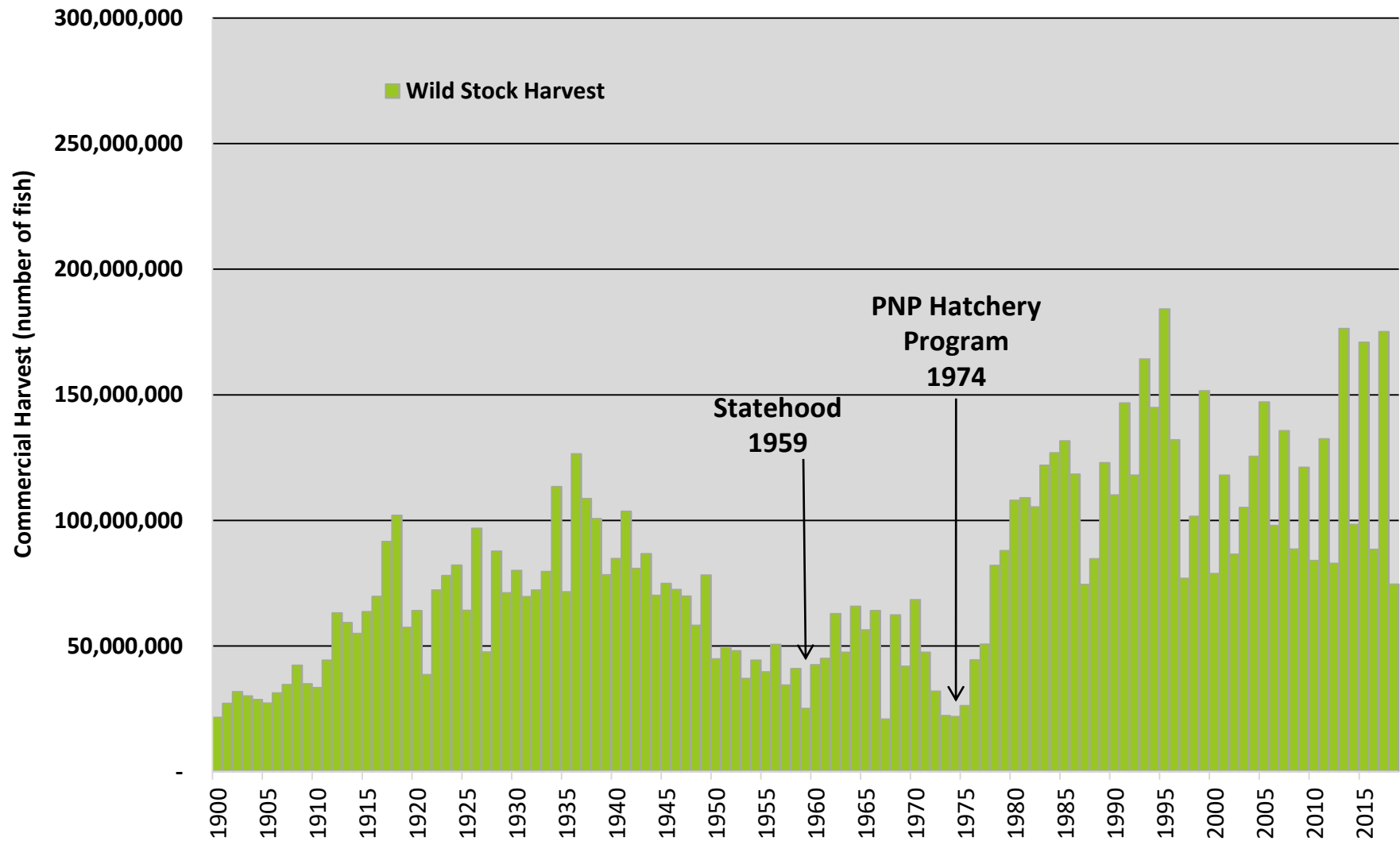


Statewide Hatchery Releases 1973-2018

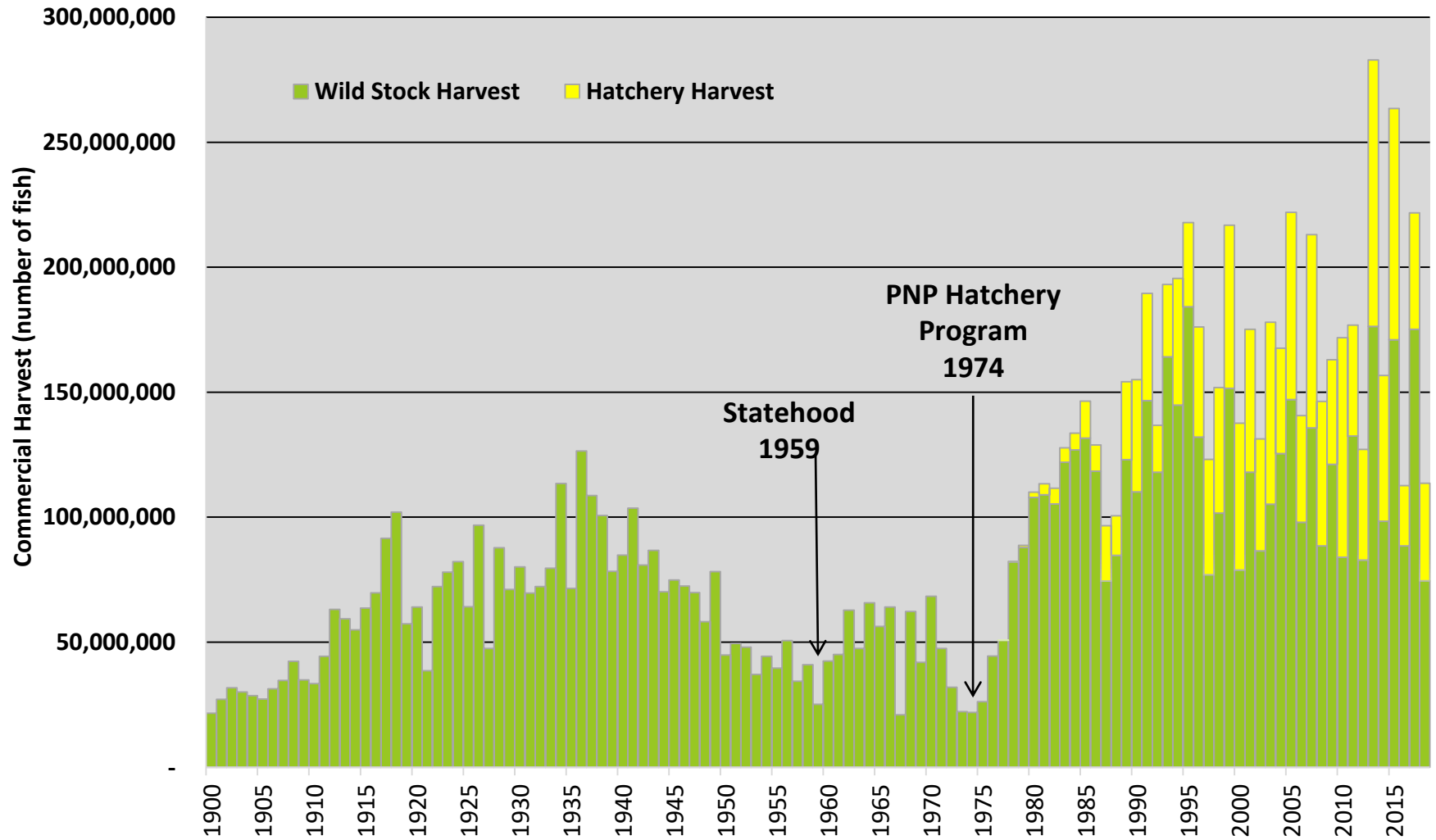
king sockeye coho pink chum



Alaska Commercial Salmon Harvest from 1900-2018



Alaska Commercial Salmon Harvest from 1900-2018



Alaska's contemporary salmon fishery enhancement program has operated since the mid-1970s, and through 2018 has provided over 1.8 billion salmon to the fisheries of the State, resulting in substantial economic value without any obvious negative effects on natural salmon production.