

ECONOMIC IMPACT OF

ALASKA SALMON HATCHERIES

Private nonprofit (PNP) salmon hatcheries play an important role in Alaska's seafood industry, the sport and subsistence harvests, and the regional economies of Southeast Alaska, Prince William Sound, Cook Inlet, and Kodiak.

Alaska's PNP hatchery associations contracted with McKinley Research Group to update previous research on the economic impact of hatcheries. This update covers 2018-2023. The research found that annually on average, Alaska's hatcheries accounted for:

4,200 Jobs
(ANNUALIZED)



PEOPLE EARNING INCOME FROM HATCHERY SALMON

\$3M
ESTIMATED FISHERIES BUSINESS TAX REVENUE GENERATED



\$219M
LABOR INCOME



\$576M
TOTAL ECONOMIC OUTPUT

192,000
SALMON HARVESTED IN SPORT, PERSONAL USE, AND SUBSISTENCE FISHERIES

\$103M EX-VESSEL VALUE

=16%
SHARE OF TOTAL STATEWIDE EX-VESSEL VALUE



\$346M FIRST WHOLE-SALE VALUE

=21%
SHARE OF TOTAL STATEWIDE SALMON WHOLESALE VALUE



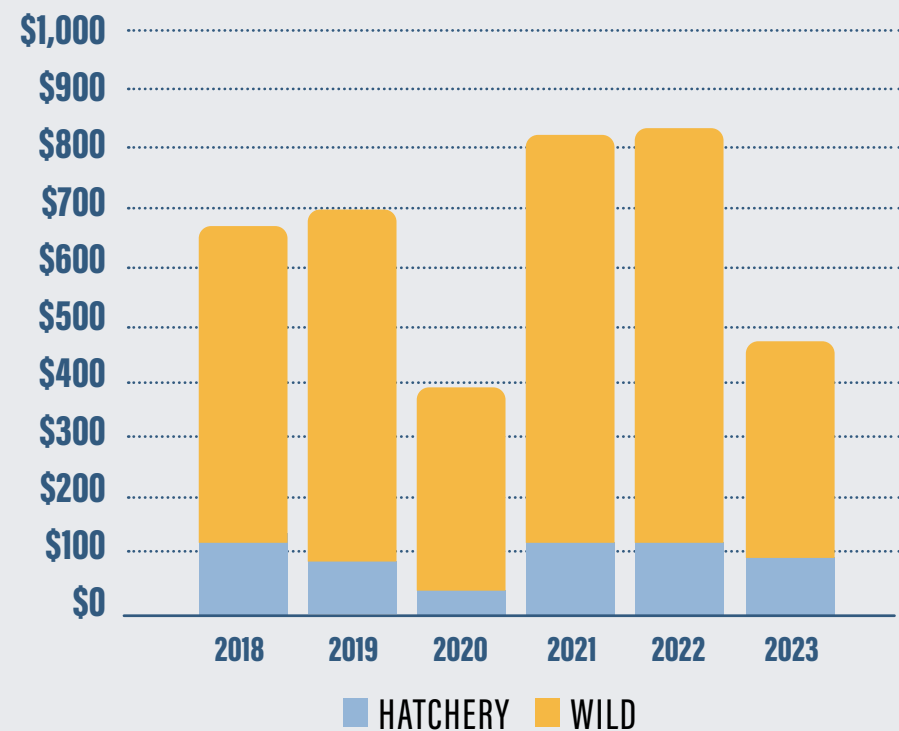
COMMERCIAL FISHING VALUE

EX-VESSEL (COMMON PROPERTY)

Commercial fishing economic activity generated by hatcheries includes both common property fisheries and cost recovery fisheries. Common property fisheries are regular commercial fishing opportunities available to commercial fishing permit owners. Cost recovery fisheries are exclusive fishing opportunities to harvest hatchery salmon to generate revenue for hatcheries. The figures below include only common property fisheries.

- Between 2018 and 2023, commercial fishermen harvested an annual average of **170 million pounds of hatchery-produced salmon worth \$102 million** in ex-vessel value, the gross revenue earned by fishermen.
- **The regional benefits of hatchery production are broad**, including \$51 million in annual average harvest value in Prince William Sound, \$42 million in Southeast, \$8 million in Kodiak, and about \$0.6 million in Cook Inlet.
- **Chum and pink salmon account for most hatchery production.** These two species made up 47% and 36% of hatchery-generated common property ex-vessel value, respectively – followed by sockeye (10%), coho (5%), and Chinook (2%).
- **Most hatchery-generated ex-vessel revenue went to the seine fleet (63%)**, followed by gillnetters (30%), and trollers (7%).
- **Hatchery salmon accounted for 16% of the total value** of Alaska's salmon harvest over the 2018-2023 period.
- **Hatchery contribution to total salmon harvest was highest in PWS (53%)**, followed by Southeast (33%), Kodiak (17%), and Cook Inlet (3%).
- **Cost recovery income to harvesters is about \$1 to \$3 million annually**, although cost recovery is not included in overall economic impact totals due to data limitations.

HATCHERY CONTRIBUTION TO EX-VESSEL VALUE OF ALASKA'S SALMON HARVESTS, 2018-2023 (MILLIONS OF DOLLARS)



HATCHERY SALMON EX-VESSEL VALUE AS % OF STATEWIDE SALMON TOTAL



ECONOMIC IMPACTS

- Statewide, approximately **7,500 fishermen (permit holders and crew) earn some of their income from harvest of hatchery-produced salmon.** About 950 annualized commercial fishing jobs can be attributed to salmon produced by PNP hatcheries.
- The employment impact of hatcheries also includes **hundreds of jobs in seafood processing, hatchery operations, and charter fishing. Hatcheries additionally generate thousands of jobs in the support sector**, created as hatchery-generated dollars cycle through the Alaska economy.
- The employment impact of hatcheries totals **about 4,200 annualized jobs, including all multiplier effects. A total of \$219 million in annual labor income** (wages) can be attributed to salmon hatcheries.

ECONOMIC IMPACT OF ALASKA (STATEWIDE) HATCHERY PRODUCTION

	DIRECT IMPACTS	INDIRECT & INDUCED IMPACTS	TOTAL ECONOMIC IMPACTS
COMMERCIAL FISHING			
EMPLOYMENT	950	430	1,390
LABOR INCOME (\$MILLIONS)	\$61	\$20	\$81
SEAFOOD PROCESSING			
EMPLOYMENT	1,010	810	1,810
LABOR INCOME (\$MILLIONS)	\$58	\$29	\$87
HATCHERY OPERATIONS			
EMPLOYMENT	290	340	630
LABOR INCOME (\$MILLIONS)	\$22	\$10	\$32
NON-RESIDENT SPORT FISHING			
EMPLOYMENT	330	100	440
LABOR INCOME (\$MILLIONS)	\$12	\$7	\$19
TOTAL ECONOMIC IMPACT			
EMPLOYMENT	2,580	1,680	4,270
LABOR INCOME (\$MILLIONS)	\$153	\$66	\$219
OUTPUT	\$375	\$208	\$583

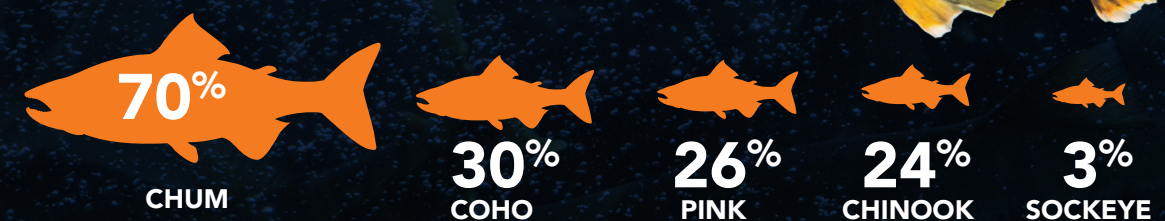
SEAFOOD PROCESSING VALUE

FIRST WHOLESALE

First wholesale value provides one measure of the sales made by Alaska's seafood processors. It represents the ex-vessel value paid to fishermen plus value added by processing raw products. First wholesale production includes both common property and cost recovery hatchery salmon. Common property salmon made up 77% of the value on average in the 2018-2023 study period. The remaining 23% of wholesale value was cost recovery salmon.

- The first wholesale value of hatchery-produced salmon averaged **\$346 million annually** over the last five years.
- Hatchery-derived first wholesale value represented **21% of total statewide salmon first wholesale value.**
- Hatcheries account for **two-thirds of the total first wholesale value of Alaska's chum salmon**, about a third of coho first wholesale value and a quarter of pink and Chinook value.
- Processors paid approximately **\$3 million annually in fisheries business taxes** from hatchery salmon. Fisheries business taxes are based on the ex-vessel value of the product purchased by processors.

HATCHERY PRODUCTION SHARE OF TOTAL FIRST WHOLESALE VALUE, BY SPECIES, 2019-2022



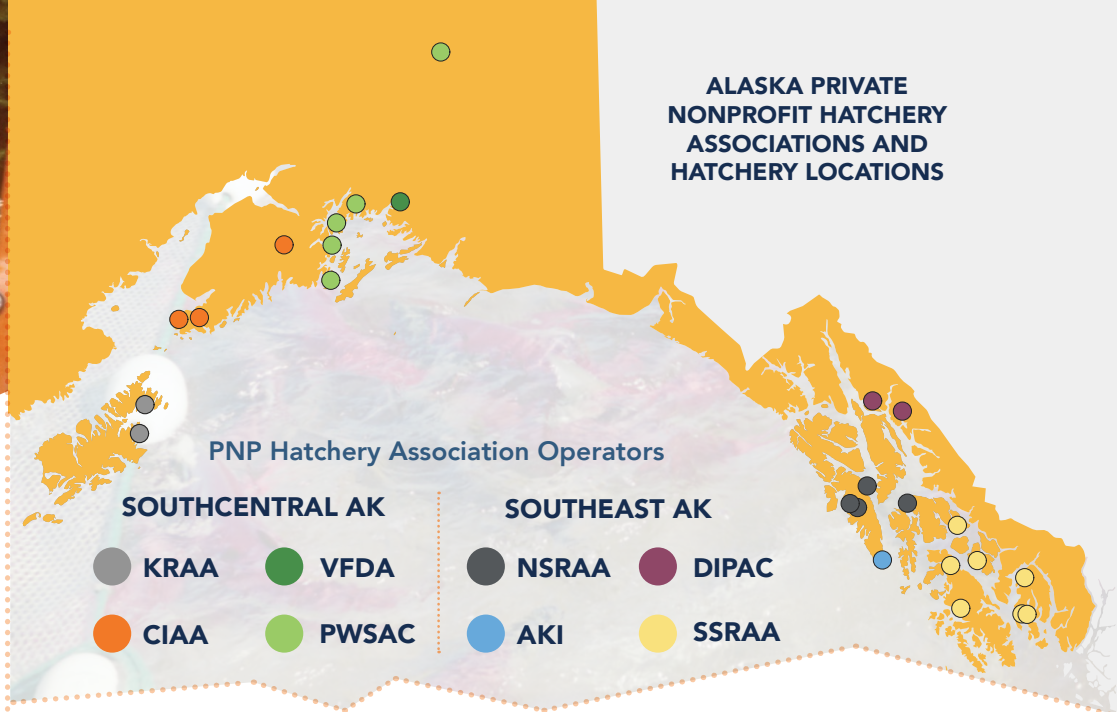


50 YEARS OF PRIVATE NONPROFIT HATCHERIES IN ALASKA

The origin of Alaska's private non-profit salmon hatcheries dates back fifty years. In the early 1970's the Alaska legislature took several steps to address low salmon returns in the state including the creation of limited entry fishing permits, allowing the development of salmon hatcheries, and – in 1974 – authorizing Private Nonprofit Corporations (PNPs) to operate these hatcheries.

As of 2024, eight PNPs operate 26 hatcheries in Alaska. These include a mix of PNP and state-owned hatcheries, which PNPs operate at no cost to the state. There are four additional non-PNP hatcheries: two sport fish hatcheries operated by the state (in Anchorage and Fairbanks), a research hatchery owned by the federal National Marine Fisheries Service, and a tribally owned hatchery operated by the Metlakatla Indian Community.

ALASKA PRIVATE NONPROFIT HATCHERY ASSOCIATIONS AND HATCHERY LOCATIONS



SPORT, PERSONAL USE, AND SUBSISTENCE

- **At least 162,000 hatchery salmon were caught in sport, personal use, and subsistence fisheries** annually. This number is likely a significant underestimate because of limited sampling and limited tagging of coho salmon.
- These fisheries **provide food for Alaskans and generate revenue from visitors attracted to Alaska because of sport fishing opportunities.** There are numerous salmon derbies across the state that are supported by hatchery-raised fish, mostly coho.
- The **four Southeast PNP hatchery organizations support noncommercial harvest with the release of millions of coho, Chinook, chum, and sockeye salmon each year.** Personal use of sockeye; sport charter, marine sport, and shoreside sport catch of chum, Chinook and coho are all significantly supported by these hatchery programs.
- The **two Prince William Sound PNP hatchery associations produce coho, sockeye, and pink salmon caught by noncommercial users.** Hatchery produced coho significantly supports the charter operators in the sound. Coho subsistence fishing in the village of Tatitlek is supported as well. Hatchery raised sockeye salmon are caught in Copper River subsistence and personal use fisheries.
- **The Cook Inlet Region PNP hatcheries produces sockeye salmon** in Cook Inlet's Resurrection Bay, an area that historically had few sockeye runs but now attracts sport fishermen. Hatchery-produced coho salmon also enhance sport fishing opportunities in this region.
- **The Kodiak PNP hatcheries enhance fishing opportunities for noncommercial users along the Kodiak road system** by stocking sockeye, coho, and Chinook salmon, as well as rainbow trout.