

# ECONOMIC IMPACT OF ALASKA'S SALMON HATCHERIES

Over the past 40 years Alaska's salmon hatcheries have together become a cornerstone of the state's seafood industry and important contributors to regional and statewide economies. Run strength and prices vary year-to-year, however, over the past five years hatcheries have annually accounted for:

4,700	Jobs (Annualized)
16,000+	People Earning Income from Hatchery Salmon
\$218 Million	Labor Income
\$600 Million	Total Economic Output
\$120 Million	Ex-Vessel Value
22%	Share of Total Ex-Vessel Value of Alaska's Salmon Harvest
\$361 Million	First Wholesale Value
24%	Share of Total First Wholesale Value of Alaska's Salmon Production
\$3.6 Million	Estimated Fisheries Business Tax Revenue Generated
272,000	Salmon Harvested in Sport, Personal Use, and Subsistence Fisheries



# COMMERCIAL FISHING VALUE

## Ex-Vessel (Common Property)

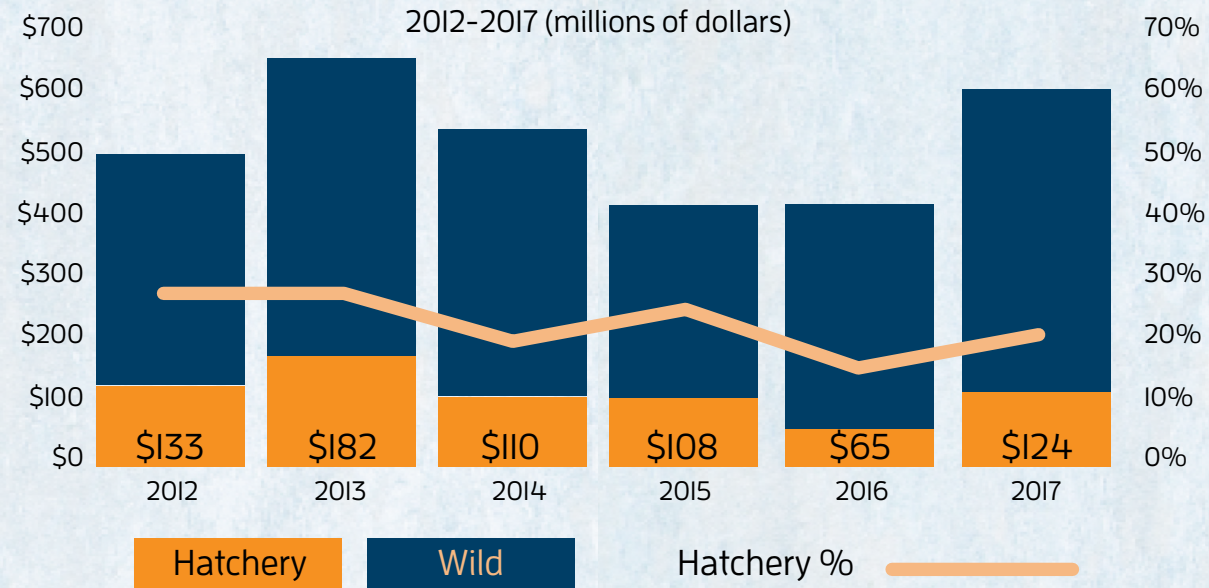
- Between 2012 and 2017, commercial fishermen harvested an annual average of **222 million pounds of hatchery-produced salmon worth \$120 million** in ex-vessel value.
- The regional benefits of hatchery production are broad**, including \$69 million in annual average harvest value in Prince William Sound, \$44 million in Southeast, \$7 million in Kodiak, and about \$0.5 million in Cook Inlet.
- Chum and pink salmon account for most hatchery production** – at 39% and 38% of total value hatchery production value, respectively – followed by sockeye (16%), coho (4%), and Chinook (2%).
- Hatchery salmon accounted for nearly one-quarter (22%) of the total value** of Alaska's salmon harvest over the 2012-2017 period.
- Hatchery contribution to total salmon harvest was highest in PWS** (65%), followed by Southeast (31%), Kodiak (16%), and Cook Inlet (2%).

# SEAFOOD PROCESSING VALUE

## First Wholesale

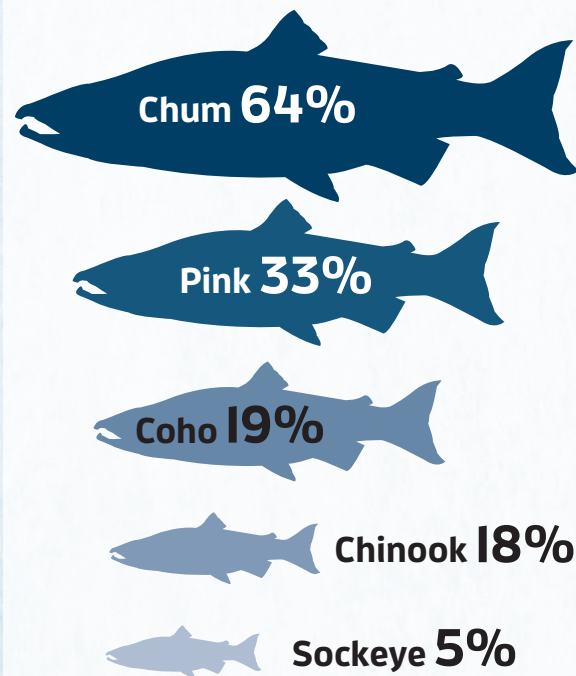
- The first wholesale value of hatchery-produced salmon averaged **\$361 million annually**. First wholesale value is ex-vessel value plus value added by Alaska processors.
- Processing of common-property hatchery salmon accounts for **79% of total first wholesale value**; cost recovery fish account for 21%.
- Hatchery-derived** first wholesale value represents **24 percent of total statewide** salmon first wholesale value.
- Hatcheries account for two-thirds of the total first wholesale value of Alaska's chum salmon and one-third of total pink salmon value.

## Hatchery Contribution to Ex-Vessel Value of Alaska's Salmon Harvests



## Hatchery Production Share of Total First Wholesale Value, by Species

2012-2017



## Labor Income Generated by Hatcheries

2012-2017 Annual Average (millions of dollars)



# ECONOMIC IMPACTS

- Statewide, approximately **8,000 fishermen (permit holders and crew)** earn income from harvest of hatchery-produced salmon.
- The employment impact of hatcheries also includes **hundreds of hatchery operations jobs and thousands of jobs in the support sector**, created as hatchery-generated dollars cycle through the Alaska economy.
- The annual average, full-time equivalent employment impact of hatcheries totals 4,700 jobs, including all multiplier effects. A total of **\$218 million in annual labor income** (wages) are attributable to salmon hatcheries.
- While not quantified in this analysis, resident **sport, personal use, and subsistence harvests of hatchery salmon have additional economic impacts** as well as very significant social and cultural impacts in Alaska.
- Southeast Alaska hatcheries account for **2,000 jobs (annualized), \$90 million in labor income, and \$237 million in total annual output**, including all multiplier effects.
- Prince William Sound hatcheries account for **2,200 jobs, \$100 million in labor income, and \$315 million in total annual output**, including all direct, indirect, and induced effects.

## Total Annual Statewide Economic Impact of Alaska Salmon Hatcheries

	Direct Impacts	Indirect & Induced Impacts	Total Economic Impacts
<b>Commercial Fishing</b>			
Employment	1,040	500	1,540
Labor Income	\$70.9 million	\$23.6 million	\$94.5 million
<b>Seafood Processing</b>			
Employment	1,360	820	2,180
Labor Income	\$52.2 million	\$29.6 million	\$81.8 million
<b>Hatchery Operations</b>			
Employment	345	270	615
Labor Income	\$15.5 million	\$9.4 million	\$24.9 million
<b>Non-resident Sport Fishing</b>			
Employment	285	90	375
Labor Income	\$10.5 million	\$5.7 million	\$16.2 million
<b>Total Economic Impact</b>			
Employment	3,030	1,680	4,710
Labor Income	\$149.1 million	\$68.3 million	\$217.5 million
Output	\$386.1 million	\$216.0 million	\$602.1 million

# SPORT, PERSONAL USE, AND SUBSISTENCE

## Average Annual Hatchery-Origin Salmon Harvest by Sport and Related Fisheries



Numbers are considered conservative due to limited sampling of sport and related harvests for origin

- ◆ **Coho, Chinook, and sockeye salmon are the most important hatchery-produced species** for sport, personal use, and subsistence harvests.
- ◆ Hatchery-origin salmon accounted for **17% of the total statewide sport coho catch**, 5% of sport sockeye catch, and 8% of the sport Chinook catch.
- ◆ **Large hatchery contributions to sport harvests** occur in Southern Southeast (31,000 SSRAA coho harvested annually),

the Kenai Peninsula Borough area 26,000 CIAA sockeye), and Valdez (25,000 VFDA coho).

- ◆ **Residents of Anchorage, Fairbanks and many other Alaska communities benefit from personal use and subsistence harvest of hatchery salmon.** One-third of the roughly 100,000 hatchery-produced sockeye harvested annually in Copper River are caught by Fairbanks residents, a quarter by Anchorage residents, and a fifth by Mat-Su households.

## ALASKA'S EIGHT NON-PROFIT HATCHERY ASSOCIATIONS

### Southern Southeast Regional Aquaculture Association (SSRAA)

ssraa.org

### Armstrong-Keta (AKI)

armstrongketa.org

### Douglas Island Pink and Chum, Inc. (DIPAC)

dipac.net

### Northern Southeast Regional Aquaculture Association (NSRAA)

nsraa.org

### Prince William Sound Aquaculture Corporation (PWSAC)

pwsac.com

### Valdez Fisheries Development Association, Inc. (VFDA)

valdezfisheries.org

### Cook Inlet Aquaculture Association (CIAA)

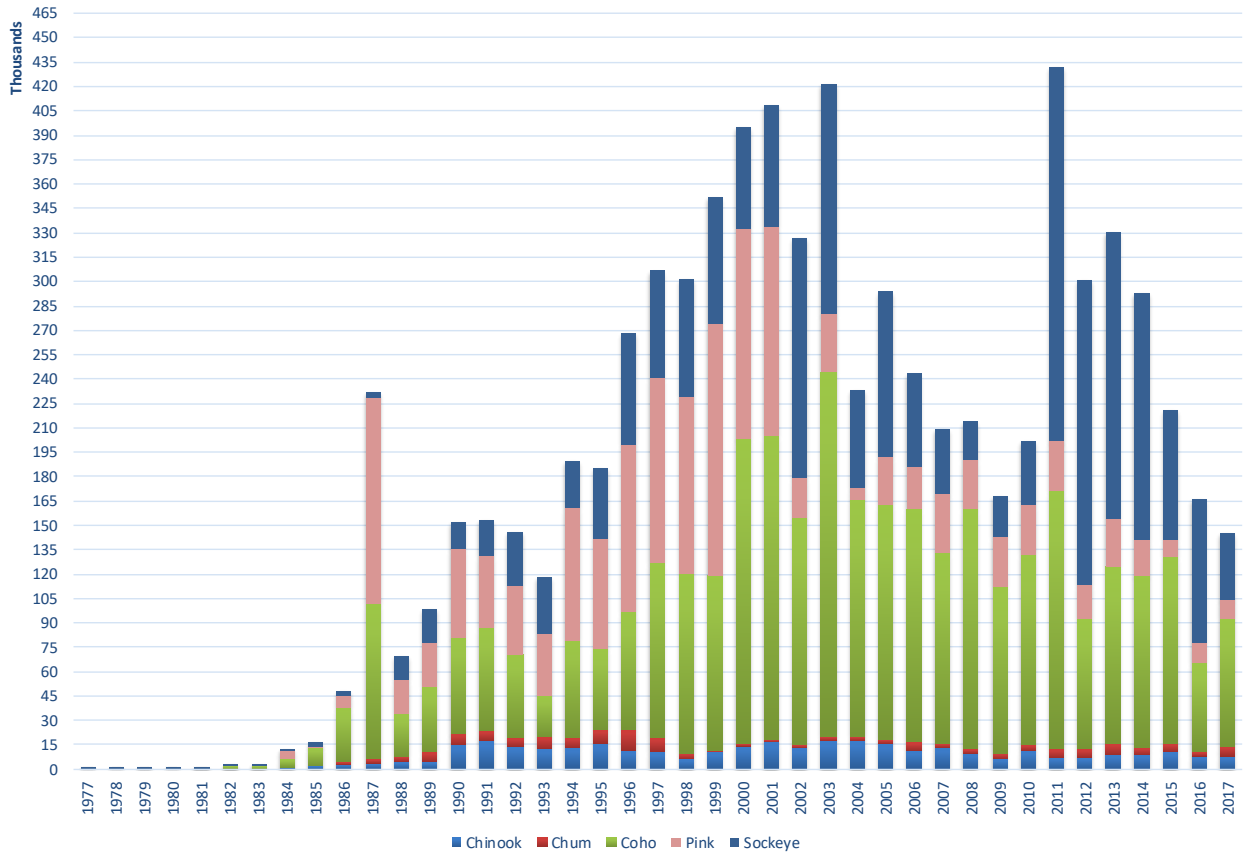
ciaanet.org

### Kodiak Regional Aquaculture Association (KRAA)

kraa.org



### Alaska Hatchery Contributions to Sport, PU, & Subsistence Fisheries



### North Pacific hatchery releases

