

Regional Information Report No. 5J24-05

**Alaska Salmon Fisheries Enhancement Annual
Report, 2023**

by

Lorna Wilson

March 2024

Alaska Department of Fish and Game

Division of Commercial Fisheries



Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figures or figure captions.

Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H_A
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	e
hectare	ha	at	@	catch per unit effort	CPUE
kilogram	kg	compass directions:		coefficient of variation	CV
kilometer	km	east	E	common test statistics	(F, t, χ^2 , etc.)
liter	L	north	N	confidence interval	CI
meter	m	south	S	correlation coefficient	
milliliter	mL	west	W	(multiple)	R
millimeter	mm	copyright	©	correlation coefficient (simple)	r
		corporate suffixes:		covariance	cov
Weights and measures (English)		Company	Co.	degree (angular)	$^\circ$
cubic feet per second	ft ³ /s	Corporation	Corp.	degrees of freedom	df
foot	ft	Incorporated	Inc.	expected value	E
gallon	gal	Limited	Ltd.	greater than	>
inch	in	District of Columbia	D.C.	greater than or equal to	\geq
mile	mi	et alii (and others)	et al.	harvest per unit effort	HPUE
nautical mile	nmi	et cetera (and so forth)	etc.	less than	<
ounce	oz	exempli gratia (for example)	e.g.	less than or equal to	\leq
pound	lb	Federal Information Code	FIC	logarithm (natural)	ln
quart	qt	id est (that is)	i.e.	logarithm (base 10)	log
yard	yd	latitude or longitude	lat or long	logarithm (specify base)	log ₂ , etc.
		monetary symbols (U.S.)	\$, ¢	minute (angular)	'
Time and temperature		months (tables and figures): first three letters	Jan, ..., Dec	not significant	NS
day	d	registered trademark	®	null hypothesis	H_0
degrees Celsius	°C	trademark	™	percent	%
degrees Fahrenheit	°F	United States (adjective)	U.S.	probability	P
degrees kelvin	K	United States of America (noun)	USA	probability of a type I error (rejection of the null hypothesis when true)	α
hour	h	U.S.C.	United States Code	probability of a type II error (acceptance of the null hypothesis when false)	β
minute	min	U.S. state	use two-letter abbreviations (e.g., AK, WA)	second (angular)	"
second	s			standard deviation	SD
Physics and chemistry				standard error	SE
all atomic symbols				variance	
alternating current	AC			population sample	Var
ampere	A			sample	var
calorie	cal				
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

REGIONAL INFORMATION REPORT NO. 5J24-05

**ALASKA SALMON FISHERIES ENHANCEMENT ANNUAL REPORT,
2023**

by

Lorna Wilson

Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau

Alaska Department of Fish and Game
Division of Commercial Fisheries
1255 W. 8th St., P.O. Box 11526
Juneau, Alaska 99811-5526

March 2023

The Regional Information Report Series was established in 1987 and was redefined in 2007 to meet the Division of Commercial Fisheries regional need for publishing and archiving information such as area management plans, budgetary information, staff comments and opinions to Alaska Board of Fisheries proposals, interim or preliminary data and grant agency reports, special meeting or minor workshop results and other regional information not generally reported elsewhere. Reports in this series may contain raw data and preliminary results. Reports in this series receive varying degrees of regional, biometric, and editorial review; information in this series may be subsequently finalized and published in a different department reporting series or in the formal literature. Please contact the author or the Division of Commercial Fisheries if in doubt of the level of review or preliminary nature of the data reported. Regional Information Reports are available through the Alaska State Library and on the Internet at: <http://www.adfg.alaska.gov/sf/publications/>.

Product names used in this publication are included for completeness and do not constitute product endorsement. The Alaska Department of Fish and Game does not endorse or recommend any specific company or their products.

Lorna Wilson

*Alaska Department of Fish and Game, Division of Commercial Fisheries,
1255 W. 8th St., P.O. Box 115526, Juneau, AK 99811-5526, USA*

This document should be cited as follows:

Wilson, L. 2024. Alaska salmon fisheries enhancement annual report, 2023. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 5J24-05, Juneau.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526

U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648,

(Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G, Division of Sport Fish, Research and Technical Services, 333 Raspberry Rd, Anchorage AK 99518 (907) 267-2517

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
LIST OF APPENDICES.....	iii
ABSTRACT.....	1
PREFACE.....	1
INTRODUCTION.....	2
Alaska Hatchery History.....	2
Alaska Fishery Enhancement Planning.....	4
Fisheries Enhancement is Regional.....	4
Private Nonprofit Hatchery Permit Process.....	4
Private Nonprofit Hatchery Permits and Plans.....	5
Alaska Hatchery Policies.....	5
Genetic Policy.....	6
Fish Health and Disease Policy.....	6
Fishery Management Policies.....	6
About Hatcheries.....	6
Economic Efficiency.....	7
Hatcheries and Fishery Managers Work Together.....	7
Salmon Return Evaluation.....	8
Hatchery and Wild Salmon Interaction.....	10
Non-Private Nonprofit Salmon Propagation.....	10
2023 SUMMARY.....	11
Current Hatcheries.....	11
Fishery Enhancement Regions.....	11
Statewide Hatchery Production.....	13
Hatchery Return.....	13
Hatchery Egg Takes.....	15
Hatchery Releases.....	17
Projected Hatchery Return in 2023.....	18
Propagative Research.....	18
Hatchery Activity by Region.....	19
Southeast.....	19
Prince William Sound.....	22
Cook Inlet.....	24
Kodiak.....	26
Interior.....	29
ACKNOWLEDGEMENTS.....	29
REFERENCES CITED.....	30
APPENDIX A: ALASKA SALMON FISHERIES ENHANCEMENT PROGRAM TIMELINE.....	33
APPENDIX B: PERMITTED CAPACITY OF ALASKA PRIVATE NONPROFIT HATCHERIES, 2023.....	39
APPENDIX C: ACTIVE ALASKA HATCHERIES AND CONTACT INFORMATION.....	43
APPENDIX D: COMMERCIAL SALMON HARVEST AND VALUE, 2023.....	49

TABLE OF CONTENTS (Continued)

	Page
APPENDIX E: PROJECTED HATCHERY RETURN BY SPECIES, 2023	55
APPENDIX F: EGG PRODUCTION FROM AQUATIC RESOURCE PERMITS, 2023.....	61
APPENDIX G: HATCHERY EGG COLLECTION, 2023.....	65
APPENDIX H: HATCHERY RELEASES, 2023	69
APPENDIX I: COMMERCIAL HARVEST SUMMARY, 2023	75
APPENDIX J: HATCHERY RETURNS, 2023	79
APPENDIX K: PNP HATCHERY PERMITEE, PERMITTED EGG CAPACITY, AND NUMBER OF EYED EGGS, 1975–2023.....	89
APPENDIX L: SUMMARY OF ANADROMOUS SALMON EGG TAKES, RELEASE, AND RETURNS FROM ALASKA HATCHERIES, 1972-2023.....	127
APPENDIX M: STATEWIDE COMMERCIAL HARVEST SUMMARIES, 1977–2023	141

LIST OF TABLES

Table	Page
1. Estimated total salmon returns attributed to Alaska hatcheries (including common property harvest, cost-recovery harvest, broodstock, and other) as reported by operators, by area and species, 2023.....	13
2. Estimated sport, personal use, and subsistence harvest of hatchery-produced fish, 2023	15
3. Estimated salmon egg takes for Alaska hatcheries as reported by operators, by area, 2023.....	17
4. Estimated juvenile salmon releases from Alaska hatcheries by region, 2023.....	18

LIST OF FIGURES

Figure	Page
1. Commercial salmon harvest in Alaska, 1900–2023.....	2
2. Juvenile salmon released by Alaska hatcheries by mark type, 1970–2023.....	8
3. Salmon otolith (ear stone) with a thermal mark.....	9
4. Salmon hatcheries currently operating in Alaska.....	12
5. Alaska hatchery total salmon return as reported by operators by species, 2023.....	13
6. Species composition of the 2023 Alaska hatchery contribution to the exvessel value of commercial harvest by species.....	14
7. Alaska salmon hatchery returns as reported by operators by return category, 2023. <i>Other</i> includes escapement, sea lion mortality, lagoon die-off, etc. <i>PU</i> is Personal Use and <i>Sub</i> is Subsistence. Some broodstock carcasses sold as commercial cost-recovery harvest at low value and is shown here as broodstock.....	14
8. Salmon eggs collected at by PNP hatcheries and by state and federal hatcheries, and PNP hatchery permitted capacity by species and total, 1975–2023.....	16
9. Salmon eggs collected for Alaska hatchery programs by species, 2023. Rainbow trout and Arctic char eggs are not shown.....	17
10. Total salmon released for Alaska hatchery programs, 1975–2023.....	17
11. Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of CCP hatchery harvest in Southeast Alaska, 2023.....	20
12. Eggs collected, by species, for salmon hatchery programs in Southeast Alaska, 2023.....	21
13. Total salmon released for Southeast Alaska hatchery programs, 1975–2023.....	21
14. Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of commercial common property hatchery harvest in Prince William Sound, Alaska, 2023.....	23

LIST OF FIGURES (Continued)

Figure	Page
15. Eggs collected by species for salmon hatchery programs in Prince William Sound, Alaska, 2023.	24
16. Total salmon released for Prince William Sound Alaska hatchery programs, 1975–2023.	24
17. Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of CCP hatchery harvest in Kodiak, Alaska, 2023.	25
18. Eggs collected, by species, for salmon hatchery programs in Cook Inlet, Alaska, 2023.	26
19. Total salmon released for Cook Inlet Alaska hatchery programs, 1975–2023.	26
20. Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of CCP hatchery harvest in Kodiak, Alaska, 2023.	27
21. Eggs collected, by species, for salmon hatchery programs in Kodiak, Alaska, 2023.	28
22. Total salmon released for Kodiak Alaska hatchery programs, 1975–2023.	28

LIST OF APPENDICES

Appendix	Page
A1. Alaska salmon fisheries enhancement program timeline.	34
B1. Permitted capacity of Alaska private nonprofit hatcheries, in millions of eggs, 2023.	40
C1. Active Alaska hatcheries, 2023.	44
C2. Actively operated Alaska hatcheries contact information, 2023.	46
D1. Alaska (preliminary) commercial harvest and Alaska hatchery-produced harvest by region, 2023.	50
D2. Estimated exvessel value of the total Alaska CCP harvest (preliminary), by region, 2023.	52
E1. Projected adult return, by species, to Alaska fisheries enhancement projects in 2024.	56
F1. Summary of salmon production of eggs collected in 2021 from Aquatic Resource Permits issued by the ADF&G.	62
G1. Eggs collected at Alaska hatcheries as reported by operators, 2023.	66
H1. Alaska hatchery releases as reported by operators, 2023.	70
I1. Commercial harvest of salmon from Alaska fisheries enhancement projects, 1977–2023.	76
J1. Details of the estimated Chinook salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.	80
J2. Details of the estimated sockeye salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.	82
J3. Details of the estimated coho salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.	83
J4. Details of the estimated pink salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.	85
J5. Details of the estimated chum salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.	86
K1. Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Southern Southeast-area hatcheries, 1975–2023.	90
K2. Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Northern Southeast-area hatcheries, 1975–2023.	92
K3. Hatchery operator (Op.), PNP Hatchery permitted sockeye salmon green egg capacity (Cap.), and number of sockeye salmon eyed eggs at Southeast-area hatcheries, 1975–2023.	94
K4. Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Southern Southeast-area hatcheries, 1975–2023.	96
K5. Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Northern Southeast-area hatcheries, 1975–2023.	98
K6. Hatchery operator (Op.), PNP Hatchery permitted pink salmon green egg capacity (Cap.), and number of pink salmon eyed eggs at Southeast-area hatcheries, 1975–2023.	100
K7. Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap.), and number of chum salmon eyed eggs at Southern Southeast-area hatcheries, 1975–2023.	102
K8. Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap., millions), and number of chum salmon eyed eggs at Northern Southeast-area hatcheries, 1975–2023.	104

LIST OF APPENDICES (Continued)

Appendix	Page
K9. Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap., millions), and number of chum salmon eyed eggs at Cook Inlet-area hatcheries, 1975–2023.	106
K10. Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs Cook Inlet-area hatcheries, 1975–2023.	107
K11. Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Cook Inlet-area hatcheries, 1975–2023.	109
K12. Hatchery operator (Op.), PNP Hatchery permitted pink salmon green egg capacity (Cap.), and number of pink salmon eyed eggs at Cook Inlet-area hatcheries, 1975–2023.	111
K13. Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.	112
K14. Hatchery operator (Op.), PNP Hatchery permitted sockeye salmon green egg capacity (Cap.), and number of sockeye salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.	113
K15. Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.	114
K16. Hatchery operator (Op.), PNP Hatchery pink salmon permitted green egg capacity (Cap.), and number of pink salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.	116
K17. Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap.), and number of chum salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.	118
K18. Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.	120
K19. Hatchery operator (Op.), PNP Hatchery permitted sockeye salmon green egg capacity (Cap.), and number of sockeye salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.	121
K20. Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.	123
K21. Hatchery operator (Op.), PNP Hatchery permitted pink salmon green egg capacity (Cap.), and number of pink salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.	124
K22. Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap.), and number of chum salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.	125
L1. Summary of anadromous salmon production (all species) from Alaska hatcheries and fisheries enhancement projects, 1972–2023.	128
L2. Summary of anadromous Chinook salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.	130
L3. Summary of sockeye salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.	132
L4. Summary of coho salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.	134
L5. Summary of pink salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.	136
L6. Summary of chum salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.	138
M1. Summary of statewide commercial harvest (including cost recovery) of hatchery-produced salmon from Alaska's fisheries enhancement projects as reported by operators, 1977–2023.	142
M2. Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Southeast Alaska fisheries enhancement projects as reported by operators, 1977–2023.	143
M3. Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Prince William Sound fisheries enhancement projects as reported by operators, 1977–2023.	144
M4. Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Cook Inlet fisheries enhancement projects as reported by operators, 1978–2023.	145
M5. Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Kodiak fisheries enhancement projects as reported by operators, 1981–2023.	146

ABSTRACT

This annual report reviews Alaska’s salmon fisheries enhancement program. This program’s success is attributable to the development of statutes, regulations, and policies that require hatcheries to be located away from important natural salmon stocks and to use local broodstock sources. To maintain genetic diversity, Alaska hatcheries do not selectively breed for size or other traits and use large numbers of broodstock. Most hatchery releases are marked so that fishery managers can estimate the strength of wild stocks in the harvest inseason and manage wild stocks conservatively. Hatchery production is intended to supplement—not replace—wild stock production. Harvests in 2013, 2015, and 2017 were 3 of the 4 highest wild stock salmon harvests dating back to the late 1800s. Abundance-based wild stock management priority, habitat protection, and record wild stock harvests reflect the state’s commitment to conservation of wild stocks and provide the foundation of its salmon fisheries enhancement program.

Currently, 30 salmon hatcheries are operating in the state. Twenty-six facilities are operated by private nonprofit (PNP) corporations, which are funded primarily from the sale of a portion of hatchery returns. Of these, 11 are state owned and operated by PNPs on the state’s behalf at no cost to the state. Non-PNP operated hatcheries include two sport fish hatcheries operated by the state, one research hatchery operated by the National Marine Fisheries Service, and one hatchery operated by the Metlakatla Indian Community under federal regulation.

In 2023, the commercial fleet caught 80 million Alaska hatchery-produced salmon worth an estimated \$131 million in exvessel value. Hatchery fish contributed 35% of the statewide commercial salmon harvest and 33% of the statewide commercial harvest exvessel value. Additionally, 215 thousand hatchery fish were caught in sport, personal use, and subsistence fisheries. In preparation for future production, Alaska hatcheries took 2.1 billion salmon eggs and released 1.9 billion juvenile salmon.

Keywords: Alaska salmon hatchery, hatchery, pink salmon, chum salmon, Chinook salmon, coho salmon, sockeye salmon

PREFACE

This report is a review of Alaska’s hatchery production based on information provided by hatchery operators, preliminary fish ticket data, and reports from area managers. The report is intended to update the Alaska State Legislature on the status of Alaska’s hatchery program in fulfillment of Alaska Statute 16.05.092.

In this document, *wild* fish refer to fish that are offspring of parents that naturally spawned in watersheds and intertidal areas. *Hatchery* fish are fish reared in a hatchery to a juvenile stage and released. *Farmed* fish are fish reared in captivity to market size for sale. Farming of finfish, including salmon, is not legal in Alaska. Also, note that a small number (less than 200,000) in the overall statewide catch—primarily in the Southeast Alaska Chinook salmon harvest—are hatchery fish from hatcheries outside Alaska; these fish are included with the wild catch. *Broodstock* are fish used for egg and milt collection at the hatchery.

The *commercial harvest* is composed of the *common property* and *cost-recovery* harvests. The *commercial common property* harvest is fish available for harvest by commercial fishing permit holders. Sport, personal use, and subsistence users also harvest *common property* fish. The *cost-recovery* harvest is fish harvested in designated special harvest areas to pay for hatchery operations.¹ A *tender* vessel is a boat that transports the catch from a fishing boat to a processing facility. Tenders are usually larger vessels that can transport the catch from numerous fishing boats to a shore-based processor so that the vessels can stay on the fishing grounds and continue fishing.

Exvessel value is the value paid to fishermen by a processor for their harvest and are presented in this report. *First wholesale value* is the value of processed product sold by a processor. Exvessel

¹ Fish harvested in regulatory-designated special harvest areas in a commercial common property fishery may be subject to a special cost-recovery fishery assessment tax to pay for operations.

values by region were estimated as the percentage of the hatchery harvest in the region for each species multiplied by the total exvessel value for that species in the region, by year.

Values and numbers of hatchery fish are for Alaska hatcheries only, and they do not include harvest in Alaska from non-Alaska hatcheries, such as hatcheries in Canada or the Pacific Northwest states. Numbers in tables may be rounded for clarity. Monetary values are not adjusted for inflation unless otherwise noted. Contributions of hatchery fish are in numbers of fish, and not weight of fish.

References in this document to the ADF&G commissioner refer to the commissioner or delegates.

The data in this report is the best known at the time. For data requests such as a hatchery time series, it is best to contact the author of this or the latest fisheries enhancement annual report. Corrections, such from fish ticket edits, are sometimes made to the database that are not always made to past published reports.

INTRODUCTION

ALASKA HATCHERY HISTORY

Alaska’s modern hatchery program was developed in response to historically low salmon abundance in the early 1970s (Figure 1). Alaska’s modern hatchery program began in 1971, when the Alaska Legislature established the Division of Fisheries Rehabilitation, Enhancement and Development (FRED) within the Alaska Department of Fish and Game (ADF&G). See Appendix A1 for a fisheries enhancement timeline of events.

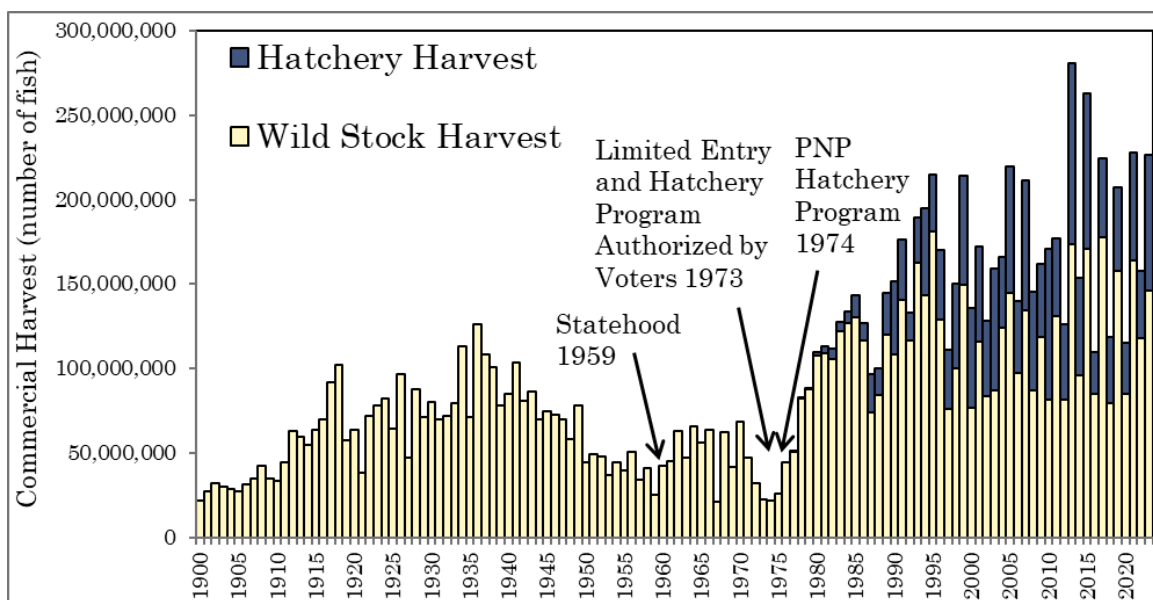


Figure 1.—Commercial salmon harvest in Alaska, 1900–2023.

In 1972, Alaska voters amended Article 8, Section 15 of Alaska’s Constitution to provide tools for restoring and maintaining the state’s fishing economy. The amendment provided an exemption to the “no exclusive right of fishery” clause in the state constitution, enabling limited entry to Alaska’s state fisheries and allowing the development of aquaculture in the state. Alaska’s salmon hatchery program developed under this authority and was designed to supplement—not replace—

sustainable natural production. Alaska’s salmon fishery harvests were just 22 million fish in 1973 and 1974 (Figure 1).

In 1974, the Alaska Legislature expanded the hatchery program, authorizing private nonprofit (PNP) corporations to operate salmon hatcheries:

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. The program shall be operated without adversely affecting natural stocks of fish in the state and under a policy of management which allows reasonable segregation of returning hatchery-reared salmon from naturally occurring stocks.²

This means that PNP hatcheries have a fishery enhancement objective and hatchery permits are issued for production-scale hatcheries.

The State of Alaska funded the construction of 18 hatcheries between 1969 and 1983 with general obligation bonds. These state-built hatcheries were initially operated by ADF&G FRED Division. PNP corporations began building hatcheries in the mid-1970s. In 1988, the legislature passed an act that allowed the state hatcheries to be operated by PNP hatchery corporations (AS 16.10.480). Since then, all state-owned commercial production hatcheries still in operation have been contracted to PNP hatchery operators. PNP corporations hold their own hatchery permits³ to operate the facilities and are responsible for funding hatchery operations. In 1993, FRED Division was merged with the Division of Commercial Fisheries. Two Division of Sport Fish hatcheries continue under state operation.

ADF&G, PNP hatcheries, and other agencies such as the U.S. Forest Service, engaged in a variety of activities to increase salmon production. New hatcheries were built to raise salmon. Fish ladders were constructed around barriers to provide adult salmon access to new spawning and rearing areas. Lakes with waterfall outlets too high for adult salmon to ascend were stocked with salmon fry. Log jams were removed in streams to enable returning adults to reach spawning areas. Nursery lakes were fertilized to increase the available feed for juvenile salmon.

A combination of favorable environmental conditions, limited fishing effort, abundance-based harvest management, habitat improvement and protection, and hatchery production gradually boosted salmon catches. Recent wild commercial salmon harvests (2013–2023) annually averaged 179 million fish—an increase of 462% from the 10 years of harvests before hatchery contribution (1967–1976). Alaska’s hatchery program has produced significant contributions to the fisheries alongside sustainable, healthy, well-managed wild production. Four of the 5 largest wild-stock harvests in Alaska history occurred in the last 11 years. The 5 largest wild-stock harvests, in order of descending rank, were in 1995, 2017, 2013, 2015, and 2021.

² Alaska Legislature 1974. An act authorizing the operation of private nonprofit salmon hatcheries. Section 1, Chapter 111, SLA 1974, in the Temporary and Special Acts.

³ An exception to this is the Crystal Lake Hatchery in Petersburg, which is owned by the state, operated by the Southern Southeast Regional Aquaculture Association, and has no hatchery permit.

ALASKA FISHERY ENHANCEMENT PLANNING

Fisheries Enhancement is Regional

Regional Aquaculture Associations (RAAs) exist for many of Alaska's salmon planning regions (5 AAC 40.300–40.370). The ADF&G commissioner determines whether an RAA is qualified and can assist in the formation of one for each region. Where RAAs operate hatcheries, they also form PNP corporations, and have a board of directors whose membership is composed of commercial salmon fishing permit holders and representatives of other stakeholder groups such as sport and subsistence harvesters, processors, and city officials. PNP boards establish hatchery production goals and oversee business operations.

Salmon fishery enhancement efforts are guided by comprehensive salmon plans for each region. These plans are developed by Regional Planning Teams (RPTs). RPTs are composed of 6 voting members: 3 from ADF&G and 3 appointed by the RAA's board of directors. Plans are developed in a public process based on the needs of fishery user groups and communities of the region. The plans can be periodically reviewed and updated to meet changing needs. RPT meetings are public.

Private Nonprofit Hatchery Permit Process

Each hatchery is permitted separately. Acquisition of a hatchery permit is an extensive process (5 AAC 40.110–40.230). A hatchery application consists of production goals, hatchery site information, water flow, water chemistry data, land ownership, water rights, hatchery design, initial proposed broodstock for the hatchery, and a financial plan. ADF&G staff draft a fishery management feasibility analysis for the proposed hatchery. The PNP Hatchery Program Coordinator reviews the application with the applicant, who addresses any deficiencies. ADF&G management and regional staff review the application. The application is then provided for public review.

The RPT reviews hatchery permit applications within their region. The RPT determines whether the hatchery operation is compatible with the regional comprehensive salmon plan. Following review by the RPT, a public hearing is held regarding the hatchery permit. At the public hearing, the hatchery applicant describes the proposed hatchery plan, and ADF&G staff present the basic management plan (BMP, described in the next section) for the hatchery. Public testimony and questions follow the presentations. ADF&G must respond in writing to any specific objections to the proposed permit.

The application is then sent to the ADF&G commissioner for final review. By regulation (5 AAC 40.220), the commissioner's decision is based on consideration of (1) the suitability of the site for making a reasonable contribution to the common property fishery, not adversely affecting management of wild stocks, and not requiring significant alterations of traditional fisheries; (2) the operation of the hatchery makes the best use of the site's potential to benefit the common property fishery; (3) the harvest area size at the hatchery is sufficient in size to provide a segregated harvest of hatchery fish of acceptable quality for sale; (4) proposed donor sources can meet broodstock needs for the hatchery for the first cycle; (5) water sources for the hatchery are secured by permit and are of appropriate quality and quantity; and (6) the hatchery has a reasonable level of operational feasibility and an acceptable degree of potential success.

Hatchery permits cannot be transferred. When hatcheries change operators, a new permit must be issued by the process described above.

Private Nonprofit Hatchery Permits and Plans

Alaska PNP hatcheries operate under 4 documents: *PNP hatchery permit*, *basic management plan* (BMP), *fish transport permits* (FTP), and *annual management plans* (AMP). All of these documents are approved by the commissioner.

The *PNP hatchery permit* (AS 16.10.400–16.10.470) authorizes operation of the hatchery and specifies the species, egg source (stock), egg numbers, release location(s), release numbers, and other conditions. Hatchery permits remain in effect unless relinquished by the permit holder or revoked by the ADF&G commissioner.

The *basic management plan* (BMP; 5 AAC 40.820) is an addendum to the PNP hatchery permit to include a facility development schedule and specifies the stocks for broodstock development, maximum number of eggs of each species that a facility can incubate, and the authorized release locations among other conditions. PNP hatchery permits and BMPs are available for public input through a public hearing that includes an oral and written comment period prior to a determination by the commissioner. The permit and BMP may be amended by the permit holder through a *permit alteration request* (PAR; 5 AAC 40.850). Requested changes are reviewed by the RPT that allows for public participation. Recommendations to approve PARs are sent to the ADF&G commissioner for consideration.

A *fish transport permit* (FTP; 5 AAC 41.001–41.060) is required for egg collection, transport, and release of live fish. An FTP authorizes specific activities described in the hatchery permit and management plans including broodstock source, gamete collection, and release site, and are consistent with the previously approved guiding documents for the program, such as the PNP hatchery permit. FTP applications are reviewed by the ADF&G fish pathologist, fish geneticist, regional resource development biologist, and other ADF&G staff as delegated by the ADF&G commissioner. Reviewers ensure activities described in the FTP are consistent with ADF&G policies and may suggest conditions for the FTP. Reviewers recommend approval or provide concerns, and final consideration of the application is made by the ADF&G commissioner. FTPs are issued for a fixed period. When an FTP is renewed or amended, the FTP application goes through the same review process as the original FTP. Continual review of hatchery activities provides an ongoing assessment of all hatchery projects over time.

An *annual management plan* (AMP; 5 AAC 40.840) outlines operation for the current year and is written cooperatively between ADF&G regional and PNP hatchery staff in a process that is coordinated by the PNP Hatchery Program Coordinator. Typically, AMPs include the current year's egg-take goals, juvenile releases, remaining fish inventory, expected adult returns, harvest management plans, FTPs required or in place, production strategies, and evaluation plans. AMPs must be consistent with the PNP Hatchery Permit and BMP. Final consideration of the plan is made by the ADF&G commissioner.

ALASKA HATCHERY POLICIES

The success of Alaska's hatchery program can be attributed to the various policies, statutes, and regulations that were instituted by ADF&G, the legislature, and the Alaska Board of Fisheries to control hatchery development and concurrently to protect wild stocks (Evenson et al. 2018). Numerous Alaska mandates and policies for hatchery operations were specifically developed to minimize potential adverse effects to wild stocks. Through a comprehensive permitting and planning process, PNP hatchery operations are subject to continual review by ADF&G staff.

Genetic Policy

The ADF&G *Genetic Policy* sets out restrictions and guidelines for stock transport, protection of wild stocks, and maintenance of genetic variance (Davis et al. 1985). Policy guidelines include banning importation of salmonids from outside the state (except U.S./Canada transboundary rivers); restricting transportation of stocks between the major geographic areas in the state (Southeast, Kodiak Island, Prince William Sound, Cook Inlet, Bristol Bay, Arctic-Yukon-Kuskokwim, and Interior); requiring the use of local broodstock; maintaining genetic diversity by use of large populations of broodstock collected across the entire run and without regard to any physical trait such as size; and limiting the number of hatchery stocks derived from a single donor stock. This policy and other relevant information are used by ADF&G geneticists when they review hatchery permits.

Fish Health and Disease Policy

The Alaska Fish Health and Disease Control Policy (5 AAC 41.080) is designed to protect fish health and prevent spread of infectious disease in fish and shellfish. The policy is used by ADF&G fish pathologists to review hatchery plans and permits. The policy and associated guidelines are discussed in *Policies and Guidelines for Alaska Fish and Shellfish Health and Disease Control* (Meyers 2010), which includes policy guidelines for FTPs, broodstock screening, disease histories, and transfers between hatcheries. Previously suggested regulation changes published in an earlier description of the Alaska hatchery program were codified into state regulations in Title 5 of the Alaska Administrative Code in February 2011. These regulations and guidelines are used by ADF&G fish pathologists when they review hatchery permits.

Fishery Management Policies

The Alaska state constitution, statutes, and regulations mandate that ADF&G manage salmon returns for wild stock conservation. This means that escapement goals are established for important salmon systems, and the fisheries are managed to meet these goals. The Alaska Policy for the Management of Sustainable Salmon Fisheries (5 AAC 39.222), the Policy for the Management of Mixed-Stock Salmon Fisheries (5 AAC 39.220), the Salmon Escapement Goal Policy (5 AAC 39.223), and local fishery management plans (5 AAC 39.200) guide fisheries management for the protection of wild salmon stocks. These regulations require fishery managers to consider the interactions of wild and hatchery salmon stocks when reviewing hatchery management plans and permits.

ABOUT HATCHERIES

PNP hatcheries are funded from a variety of sources. Commercial salmon fishing permit holders may vote to impose a salmon enhancement tax on sale of salmon in their region. These funds are collected by the state and distributed to the RAA to finance hatchery operations or other enhancement and rehabilitation activities. Independent PNP corporations,⁴ not affiliated with an RAA, also operate hatcheries in several areas of the state. The RAAs and independent PNP hatchery organizations may contract processors to harvest hatchery-produced salmon in designated areas⁵ to pay for operations. Such harvests are called *cost-recovery* fisheries, in contrast to *common property* fisheries, which are fisheries open to all qualified commercial, subsistence, personal use,

⁴ Independent PNP operators do not receive salmon enhancement tax funds; only RAAs receive the tax funds.

⁵ Designated areas are called special harvest areas.

and sport harvesters. Additionally, a fisheries enhancement loan program is available to PNP hatcheries for hatchery planning, construction, and operation and for planning and implementation of enhancement and rehabilitation activities (AS 16.10.500–560).

Economic Efficiency

There are tradeoffs between the costs of production and the value of fish at harvest that make some salmon more economical to produce than others. Hatchery production is limited by the available freshwater capacity, freshwater rearing space, rearing time, and costs of production. Costs of production include feed, the rearing facility, and facility operations. The potential value of fish at harvest is limited by the value of fish at return and the number of fish that return. Hatcheries balance fish production costs with potential value of harvest when making production decisions.

Some salmon species are more economical to rear. Pink salmon are the most economical to rear because they have a short rearing time—1 winter in the hatchery—and have the shortest life cycle of Pacific salmon, 2 years. This means pink salmon provide a quick return on investment and provide the highest economic return for the production costs. Chum salmon have the same rearing time in the hatchery but have a longer life cycle (3–4 years); therefore, they have a longer return on investment. Pink and chum salmon are the bulk of Alaska hatchery production because they have the highest return on investment for the cost of production. Chinook, sockeye, and coho salmon are less economical to produce than pink and chum because they have long rearing times at the hatchery, typically a year or more, and have longer life cycles, so they have a long return on investment. Although Chinook, sockeye, and coho salmon garner higher prices per pound at harvest, the longer rearing time required at the hatchery mean that they are expensive to rear and less economical to produce.

Hatcheries and Fishery Managers Work Together

Hatchery egg takes, rearing strategies, and releases are planned with the goal of eventual harvest; accordingly, hatchery activities are integrated with harvest management. Harvests of hatchery-produced salmon occur at specific locations because juvenile salmon imprint on the water at release and then, when salmon return as adults, they home to that location (Dittman and Quinn 1996). Release site selection allows hatcheries to plan the number of salmon that will return to an area and allows hatcheries and fishery managers to anticipate for hatchery salmon contribution to various fisheries.

Segregation of hatchery-origin and naturally spawned returns allows fishery managers to work toward fishery objectives for wild stocks, such as salmon escapement goals, and increases diversity in fishing opportunity. When wild stock production provides surplus fish for harvest, fishers may target those fish during open fishing periods in traditional fishing areas. Hatchery returns may be intercepted in traditional fisheries. When traditional wild stock fishing periods close, fishers can move to the hatchery return areas that remain open and continue fishing until the wild stock areas reopen. In some seasons, fishers may exclusively target hatchery fish in the hatchery return areas, even when wild stock areas are open, which may reduce harvest rates on wild stocks. Hatchery salmon return areas provide the fishing fleet more time and area to fish.

Although most of the harvest of a species in a region may be made up of hatchery production—pink salmon in Prince William Sound or chum salmon in Southeast Alaska, for example—this does not mean that hatchery production is intended to replace wild stock production. Hatchery production grew at a pace that allowed managers to assess all salmon returns and understand how

to manage for wild stock returns in the presence of hatchery returns and provide for adequate escapement of wild stocks.

Salmon Return Evaluation

Alaska’s PNP hatchery salmon return evaluation program has a track record of active assessment and innovation. Hatcheries use coded wire tags, otolith marks, or both, to differentially mark releases. Differentially marking salmon allows for apportioning the commercial fishery catch between hatchery and wild salmon where both hatchery and wild stocks return simultaneously (Hagen et al. 1995). Tags and marks from salmon caught on the high seas can be used to determine origins and migration patterns, and salmon carcasses can be collected during stream surveys to assess straying.

Over time, Alaska hatcheries have increased the proportion of juvenile salmon releases that are marked (Figure 2). Starting in the 1970s, few hatchery releases had any type of mark, although some had 1 or 2 fins clipped. In the 1980s, hatcheries started tagging juvenile salmon by inserting a coded wire tag (CWT) into the nose of a portion of released salmon (Jefferts 1963). CWTs are etched with a numeric code that can be read when the fish is recovered as an adult; the numeric code can determine the salmon’s release group and estimate that release group’s contribution to fisheries. In Alaska, fish that are CWT-tagged also receive an external mark: their adipose fin (a small fatty fin on the fish’s back) is clipped to allow visual separation of fish that have a CWT from those that do not.

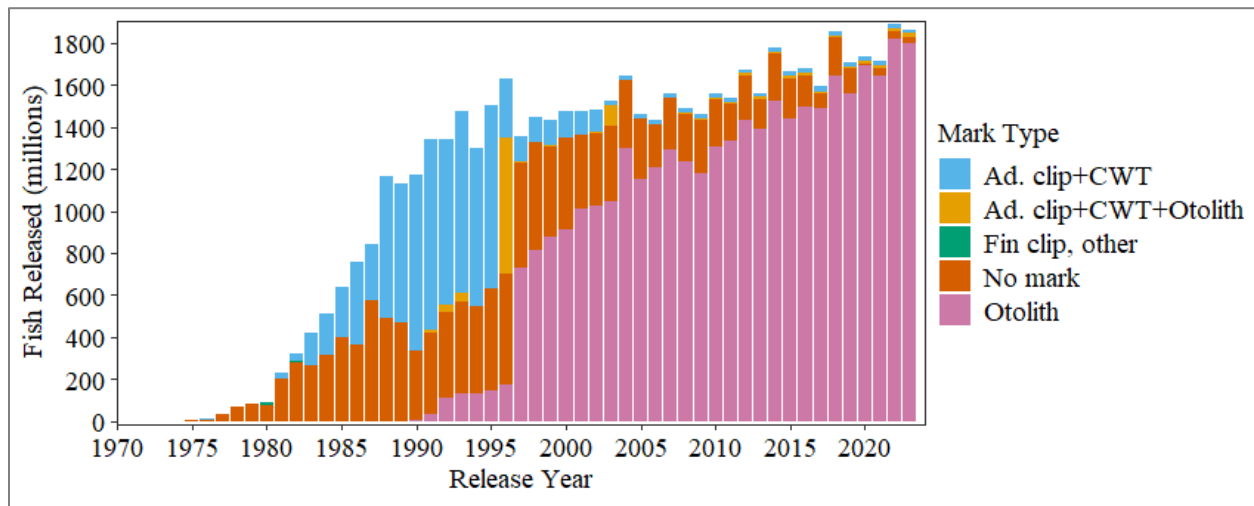


Figure 2.—Juvenile salmon released by Alaska hatcheries by mark type, 1970–2023.

Otolith marking was first used on a production scale in 1988 at Snettisham Hatchery near Juneau. Cook Inlet hatcheries began releasing otolith-marked salmon in 1991 and Northern Southeast hatcheries began releasing otolith-marked fish in 1992. Prince William Sound hatcheries released juvenile salmon that were otolith marked, CWT-tagged, and adipose clipped in 1996 before transitioning to only otolith marks in 1997. Southern Southeast hatcheries started consistently releasing otolith-marked salmon in 2002. Kodiak hatcheries released their first otolith-marked fish in 2014, and by 2020 nearly all (97.8%) salmon releases from Alaska were otolith marked.

Otolith marking is commonly performed by alternating warmer and colder incubation water over a 12-hour to 6-day period, usually during the egg stage. This action will lay down alternating dense and less dense patterns of growth on the fish's ear bone (called the otolith), similar to rings on a tree (Figure 3; Volk et al. 1999). Growth patterns on otoliths of naturally spawned salmon are less distinct and irregular, so hatchery and natural-produced salmon can be separated by visual inspection of their otoliths. Regulation of temperature or stress means fish can be marked with distinct patterns, allowing for separation of stocks among hatcheries, release sites, and brood years. As manipulation of rearing area is used to mark the fish, 100% of the fish are marked. Full marking of release groups allows for high accuracy in the assessment of the number of hatchery fish in return sampling, which is an improvement over marking fish with coded wire tags that are typically applied to a fraction of the release.

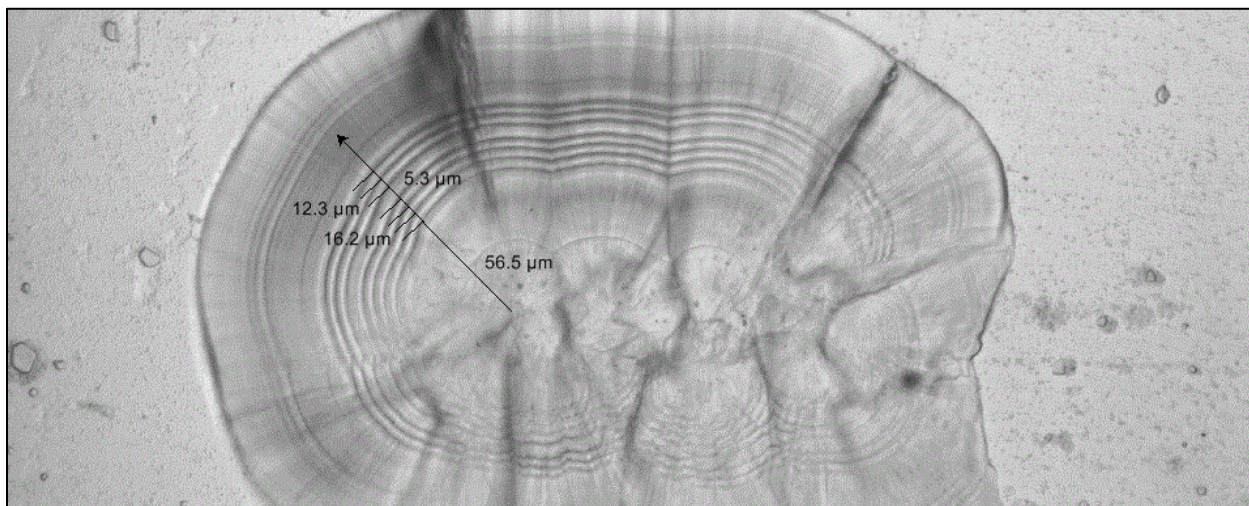


Figure 3.—Salmon otolith (ear stone) with a thermal mark. This otolith was taken from a juvenile sockeye salmon at Snettisham Hatchery in Juneau, AK.

Source: Mark Characteristic Report. <https://mtalab.adfg.alaska.gov/OTO/reports/VoucherSummary.aspx?mi=TAHLTAN16> (accessed 3/3/2021).

All PNPs and nearly all Alaska hatcheries' release data are publicly available in online reports maintained by the ADF&G Mark, Tag, and Age Laboratory. The release report shows species, number of fish released, release location, the type of mark applied to the fish, and other release information.⁶ The thermal mark voucher report characterizes each thermal mark applied at a hatchery so that upon recovery, a thermal mark can be matched to its release group.⁷

Hatchery operators and ADF&G staff sample tags and otoliths from fisheries to estimate hatchery contribution. Otoliths are read for mark presence and identification by hatchery operators and by ADF&G. The ADF&G Mark, Tag, and Age Laboratory maintains several online reports that summarize fishery data. For example, the ADF&G Mark Summary Report provides the number of otolith-marked salmon recovered in Alaska and Canada in commercial and test fisheries.⁸ Fisheries are sampled for CWTs by ADF&G and hatchery operators, and nearly all CWTs are

⁶ Hatchery Release Report Form. <https://mtalab.adfg.alaska.gov/CWT/reports/hatcheryrelease.aspx> (accessed March 3, 2021).

⁷ Find Voucher Information. <https://mtalab.adfg.alaska.gov/OTO/reports/VoucherSummary.aspx> (accessed March 3, 2021).

⁸ Mark Summary Report Form. <https://mtalab.adfg.alaska.gov/OTO/reports/MarkSummary.aspx> (accessed March 3, 2021).

dissected and decoded by the ADF&G CWT Lab. The ADF&G Agency Report lists CWT recoveries by release group and provides fishery contribution.⁹

Hatchery and Wild Salmon Interaction

Straying of hatchery-produced fish to wild stock systems has been monitored for many years. Hatchery chum salmon straying has been assessed in Southeast Alaska (Piston and Heintz 2012a, 2012b) and Prince William Sound systems (Brenner et al. 2012). Hatchery Chinook salmon straying has been monitored on several Southeast Alaska systems for decades (Ed Jones, ADF&G Fishery Biologist, Juneau, personal communication). Hatchery sockeye salmon straying has been studied in Kodiak (Baer and Honnold 2002), in the Copper River basin (Bidlack and Valentine 2009), and the Kenai River (Habicht et al. 2013; Stopha 2012). Pink salmon straying has been monitored in Prince William Sound (Brenner et al. 2012) and Cook Inlet (Hollowell et al. 2017).

A long-term study is underway to investigate interactions between hatchery and wild salmon in Alaska.¹⁰ A panel of scientists with broad experience in salmon fishery enhancement, research, and management—from ADF&G, University of Alaska, aquaculture associations, and National Marine Fisheries Service—was assembled in 2011. The panel designed and guides a research program entitled *Interactions of Wild and Hatchery Pink and Chum Salmon in Prince William Sound and Southeast Alaska*. Study fundings are shared among the PNP operators, salmon processors, and the State of Alaska, and is administered by ADF&G. Field work is conducted by the Prince William Sound Science Center and the Sitka Sound Science Center. The study will improve understanding of hatchery and wild stock interactions and provide Alaska-specific scientific guidance for assessing Alaska’s hatchery program.

NON-PRIVATE NONPROFIT SALMON PROPAGATION

ADF&G Division of Sport Fish hatcheries in Anchorage and Fairbanks produce fish for sport fisheries in Cook Inlet, Resurrection Bay, Prince William Sound, Southeast, and the Interior. The hatcheries are primarily funded from the federal excise tax on fishing-related equipment under the Dingell-Johnson Sport Fish Restoration Act. The funding, policy, and planning for these hatcheries is described in the current Statewide Stocking Plan.¹¹

A non-ADF&G agency may propagate salmon in Alaska’s waters under one of 2 types of permits: a PNP salmon hatchery permit, or an aquatic resource permit (ARP). ARPs have a scientific or educational objective, see regulation 5 AAC 41.600. ARPs are issued for feasibility studies for potential hatchery production, vocational programs, small-scale production for the purpose of salmon research, and the extensive *Salmon in the Classroom* program conducted in schools across the state.

Tamgas Creek Hatchery (TCH) operated by Metlakatla Indian Community (MIC) is on Annette Islands Reserve, the only Indian Reserve in Alaska. TCH is managed solely by MIC under federal regulation.

⁹ Agency Report Form. <https://mtalab.adfg.alaska.gov/CWT/reports/agency.aspx> (accessed March 3, 2021).

¹⁰ Study findings can be found at http://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesResearch.findings_updates (accessed November 14, 2023).

¹¹ <https://www.adfg.alaska.gov/index.cfm?adfg=fishingSportStockingHatcheries.stockingPlan> (accessed November 14, 2023).

2023 SUMMARY

CURRENT HATCHERIES

30 hatcheries operated in Alaska during 2023 (Figure 4; Appendices C1, C2). Most (26) hatcheries were operated by PNPs. Of these, 11 are owned by the state and 15 are owned by PNPs. The 11 hatcheries owned by the state were operated by PNPs on the state's behalf at no cost to the state. There were several non-PNP hatcheries operating in Alaska. Little Port Walter operations by NMFS were authorized for research and not PNP operations. ADF&G operated 2 sport fish hatcheries, William Jack Hernandez Hatchery in Anchorage and Ruth Burnett Hatchery in Fairbanks. Metlakatla Indian Community governed and operated Tamgas Creek Hatchery (TCH). Activities at non-PNP hatcheries are included in this report, as available. There are 4 PNP hatchery facilities that are permitted but did not take eggs or contribute to salmon returns in 2023: Haines Projects (Southeast), Perry Island Hatchery (Prince William Sound), Eklutna Hatchery (Cook Inlet), and Little Port Walter operated by Armstrong Keta Incorporated (Southeast).

FISHERY ENHANCEMENT REGIONS

There are 12 planning regions established by the commissioner: Northern Southeast, Southern Southeast, Yakutat, Prince William Sound, Cook Inlet, Kodiak, Chignik, Bristol Bay, Alaska Peninsula/Aleutian Islands/Area M, Kuskokwim, Yukon, and Norton Sound/Bering Strait.

Regional planning teams developed comprehensive salmon plans in Southeast (Duckett et al. 2010), Yakutat (YRPT 2014), Prince William Sound (ADF&G 1994), Cook Inlet (CIRPT 2007), Kodiak (KRPT 2011), Chignik (ADF&G 1993b), Alaska Peninsula/Aleutian Islands/Area M (ADF&G 1993a), Bristol Bay (ADF&G 1989), Yukon (Holder and Senecal-Albrecht 1998), and Norton Sound (NSBSRPT 2015).

Commercial fishing participants elected for a salmon enhancement tax (SET) in 8 regions: Southern Southeast (3%), Northern Southeast (3%), Cook Inlet (2%), Prince William Sound (2%), Kodiak (2%), Chignik (2%), and Yakutat (2%). Of regions with SET, there are fishery enhancement activities in Southern Southeast, Northern Southeast, Cook Inlet, Prince William Sound, and Kodiak.

There are two allocation plans for enhanced fisheries, one in Prince William Sound and one in the joint Northern Southeast and Southern Southeast planning region. Allocation plan details are described by region below.

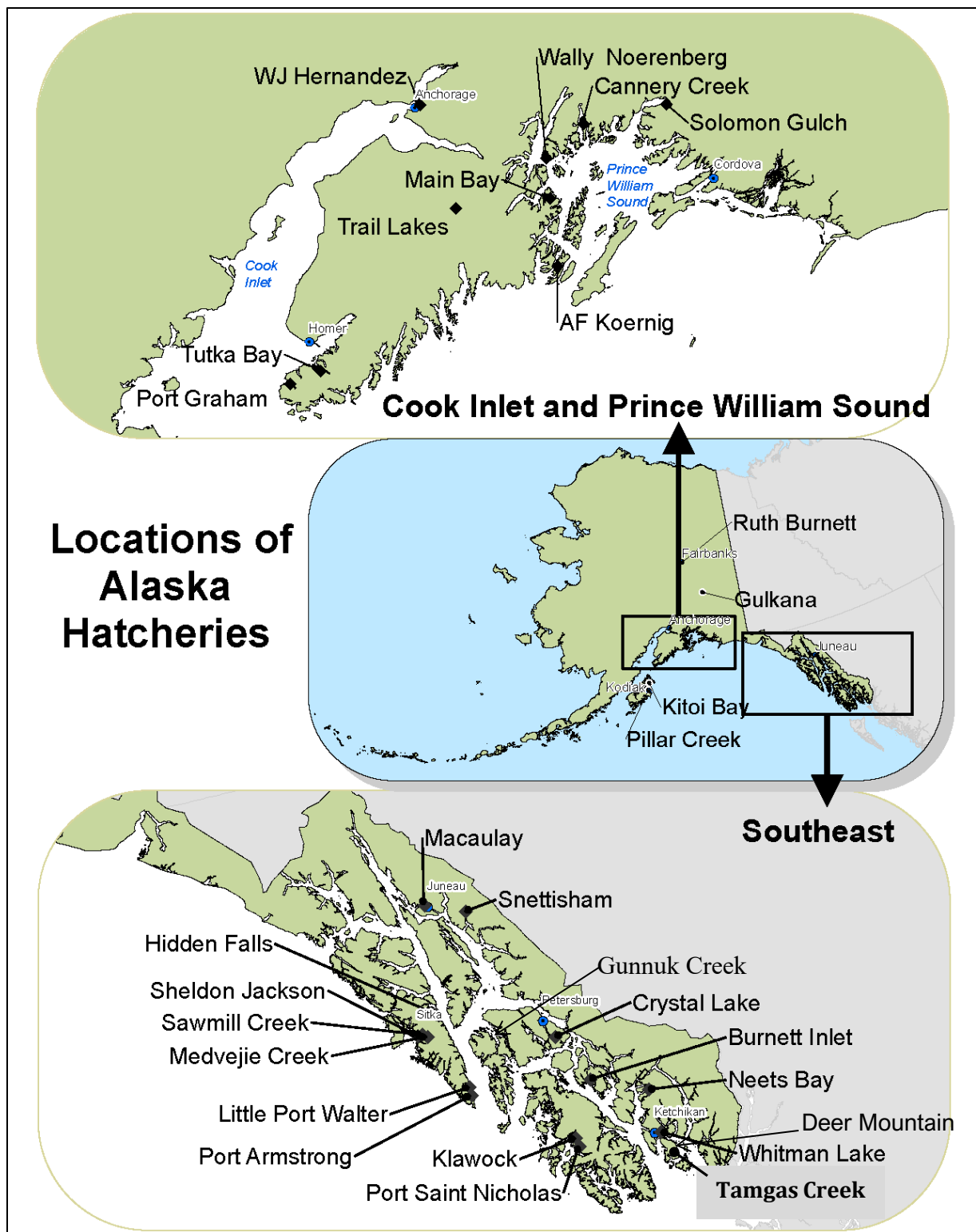


Figure 4.—Salmon hatcheries currently operating in Alaska.

STATEWIDE HATCHERY PRODUCTION

Statewide, 86.9 million adult hatchery salmon returned to Alaska in 2023. Hatcheries collected 2.3 billion eggs and released 1.9 billion juvenile salmon in preparation for future fisheries enhancement. Details of the statewide 2023 returns, egg takes, and releases are below. Hatchery operators forecast 56.6 million salmon will return in 2024, details below.

Historic anadromous egg takes, releases, and returns for Alaska hatcheries and fisheries enhancement projects, total and by species, are in Appendices L1–L6.

Hatchery Return

About 86.9 million adult hatchery salmon returned to Alaska waters in 2023 (Table 1; Figure 5). Pink and chum salmon were the dominant species to return from Alaska hatchery production, followed by sockeye, coho, and Chinook salmon.

Table 1.—Estimated total salmon returns attributed to Alaska hatcheries (including common property harvest, cost-recovery harvest, broodstock, and other) as reported by operators, by area and species, 2023.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Southeast	69,335	161,911	798,138	1,450,332	15,121,183	17,600,899
Prince William Sound	144	908,243	49,654	49,259,669	4,593,341	54,811,051
Cook Inlet	7,828	231,250	18,166	2,141,181	0	2,398,425
Kodiak	100	338,077	105,815	11,391,078	295,907	12,130,977
Total	77,407	1,639,481	971,773	64,242,260	20,010,431	86,941,352

Note: Landlocked salmon harvest is not shown because it includes multiple species.

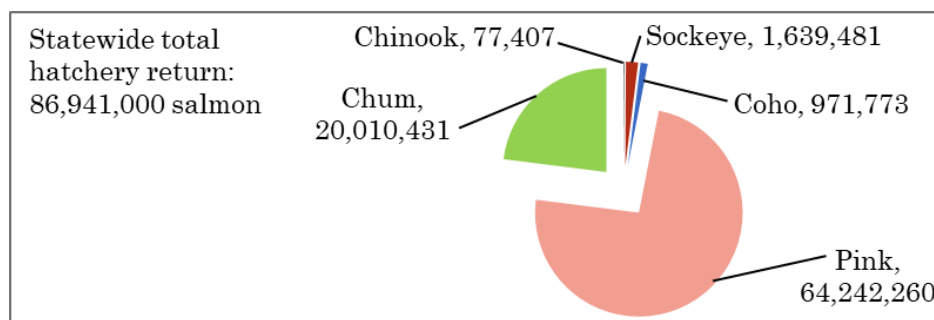


Figure 5.—Alaska hatchery total salmon return as reported by operators by species, 2023.

Note: Landlocked salmon harvest is not shown because it includes multiple species.

Alaska hatcheries contributed approximately 80.4 million hatchery-produced salmon to commercial fisheries¹². Hatchery fishery contributions had an estimated exvessel value of \$131 million and made up 33% of the statewide commercial harvest exvessel value (Appendix D1). The exvessel value of the commercial hatchery harvest was 48% chum salmon, followed by pink

¹² The commercial fishery is composed of 2 components: (1) the common property fisheries, which are open to fishermen holding salmon permits, and (2) cost-recovery fisheries, which are fish harvested to pay for PNP hatchery operations. Some broodstock sold as commercial cost recovery harvest and is shown here as broodstock.

(38%), sockeye (9%), coho (3%), and Chinook salmon (2%) (Figure 6).¹³ The total commercial harvest of hatchery-produced salmon, including cost recovery, was the 4th largest since 1977 (Appendix K1).

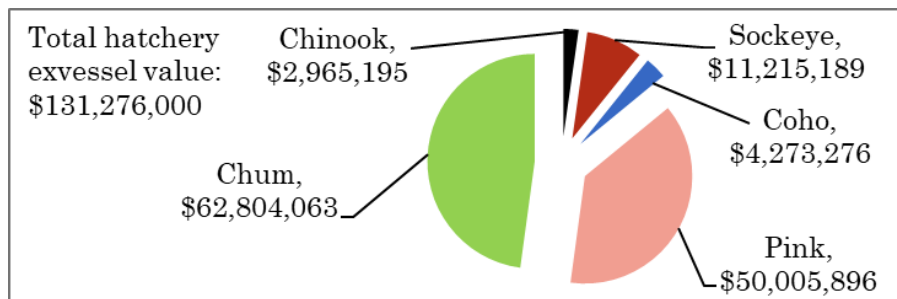


Figure 6.—Species composition of the 2023 Alaska hatchery contribution to the exvessel value of commercial harvest by species.

Note: Exvessel value for hatchery harvest total commercial harvest multiplied by the hatchery percent of the commercial harvest. Exvessel value source: https://www.adfg.alaska.gov/static/fishing/pdfs/commercial/2023_preliminary_salmon_summary_table.pdf (accessed 11/14/2023).

Alaska hatchery salmon contributed approximately 60.7 million fish to commercial common property fisheries and approximately 19.5 million fish to cost-recovery fisheries (Figure 7). Approximately 3.8 million salmon were taken for broodstock in preparation for future production.

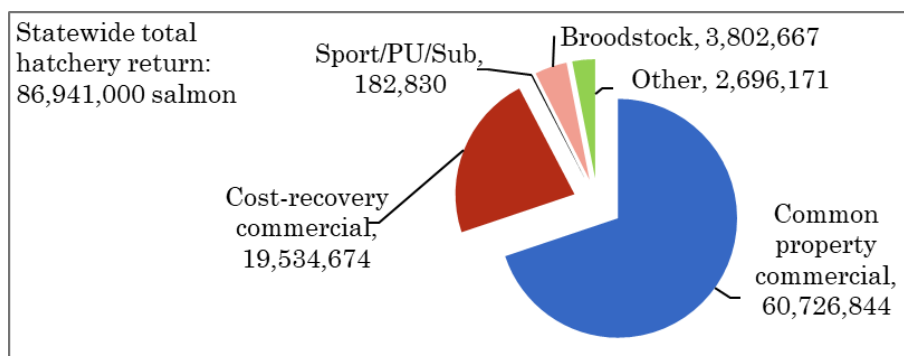


Figure 7.—Alaska salmon hatchery returns as reported by operators by return category, 2023. *Other* includes escapement, sea lion mortality, lagoon die-off, Metlakatla and test fishery harvest, etc. *PU* is Personal Use and *Sub* is Subsistence. Some broodstock carcasses sold as commercial cost-recovery harvest at low value and is shown here as broodstock.

Hatchery-produced salmon harvested in the commercial common property fisheries, 60.7 million salmon, had an estimated exvessel value of \$96.7 million and made up 24% of the statewide commercial harvest exvessel value (Appendix D2). Cost-recovery harvest, which pays for hatchery operations, had an estimated exvessel value of \$34.5 million, was 9% of the total commercial harvest

¹³ Note that hatchery contribution to the statewide harvest can differ from the contribution to the statewide exvessel value because of differences in exvessel values paid for salmon in different regions of the state. For example, Chinook salmon and chum salmon hatchery production is largely in Southeast Alaska, where exvessel price per pound is usually among the highest in the state for these 2 species.

exvessel value, and 21% of the exvessel value of hatchery harvest in commercial fisheries (Figure 6; Appendix I1).

An estimated 215,000 hatchery-produced salmon, rainbow trout, Arctic char, and Arctic grayling were harvested in the sport, personal use, and subsistence fisheries in 2023 (Table 2). Hatchery-produced coho salmon were the greatest part of this harvest (115,300), followed by sockeye salmon (30,800), rainbow trout (30,600), Chinook salmon (15,400), pink salmon (14,300), chum salmon (5,200), landlocked salmon (1,800), Arctic char (1,300), and Arctic grayling (400). Hatchery contribution to sport harvest is an underestimate because the hatchery contribution is not estimated at all locations, is known to be underestimated at some locations (*e.g.*, shore-based harvest may be counted as contribution but not harvest from boats), and some sport harvest is put and take and not counted as harvest.

Table 2.—Estimated sport, personal use, and subsistence harvest of hatchery-produced fish, 2023.

Region	Chinook	Sockeye	Coho	Pink	Chum	Arctic char	Rainbow trout	Arctic grayling	Landlocked salmon	Total
Southeast	7,407	5,074	68,243	1,418	5,185	0	0	0	0	87,327
Prince William Sound	144	5,210	20,629	10,420	0	0	0	0	0	36,403
Cook Inlet	7,828	20,500	17,585	2,500	0	0	0	0	0	48,413
Kodiak	53	0	8,800	0	0	0	0	0	0	8,853
Southcentral lakes	0	0	0	0	0	678	16,478	0	0	17,156
Interior lakes	0	0	0	0	0	658	14,143	395	1,834	17,030
Total	15,432	30,784	115,257	14,338	5,185	1,336	30,621	395	1,834	215,182

Hatchery Egg Takes

Private nonprofit hatcheries in Alaska are currently permitted to take a total of 2.6 billion eggs (Appendix B1). Prince William Sound hatcheries are permitted to take the highest number of eggs (1.02 billion), followed by Southeast (979 million), Cook Inlet (309 million), and Kodiak (275 million). Although hatcheries are permitted to take a certain number of eggs of a species and stock each year, hatcheries do not always take their permitted capacity. Failure to take their permitted capacity can be due to low numbers of returning salmon, shifting program priorities, the hatchery building their rearing capacity, building their broodstock returns, or other reasons.

Eggs also are taken for production at non-PNP hatcheries, including William Jack Hernandez Sport Fish Hatchery in Anchorage, Ruth Burnett Sport Fish Hatchery in Fairbanks, Crystal Lake Hatchery near Petersburg, and Tamgas Creek Hatchery operated by Metlakatla Indian Community on Anette Island.

Egg collection trends over time vary by species (Figure 8). Chinook salmon egg collections grew steadily from the late 1970s and 1980s and remained steady in subsequent years. Sockeye salmon egg collections grew steadily until the 1990s and steadily decreased in subsequent years. Coho salmon egg collections grew steadily until the mid-2010s and have been fairly stable in subsequent years. Pink salmon egg collections grew in the 1970s through early 1990s and have been stable since then. Chum salmon egg collections grew during the 1970s and 1980s, with lesser increases in subsequent years.

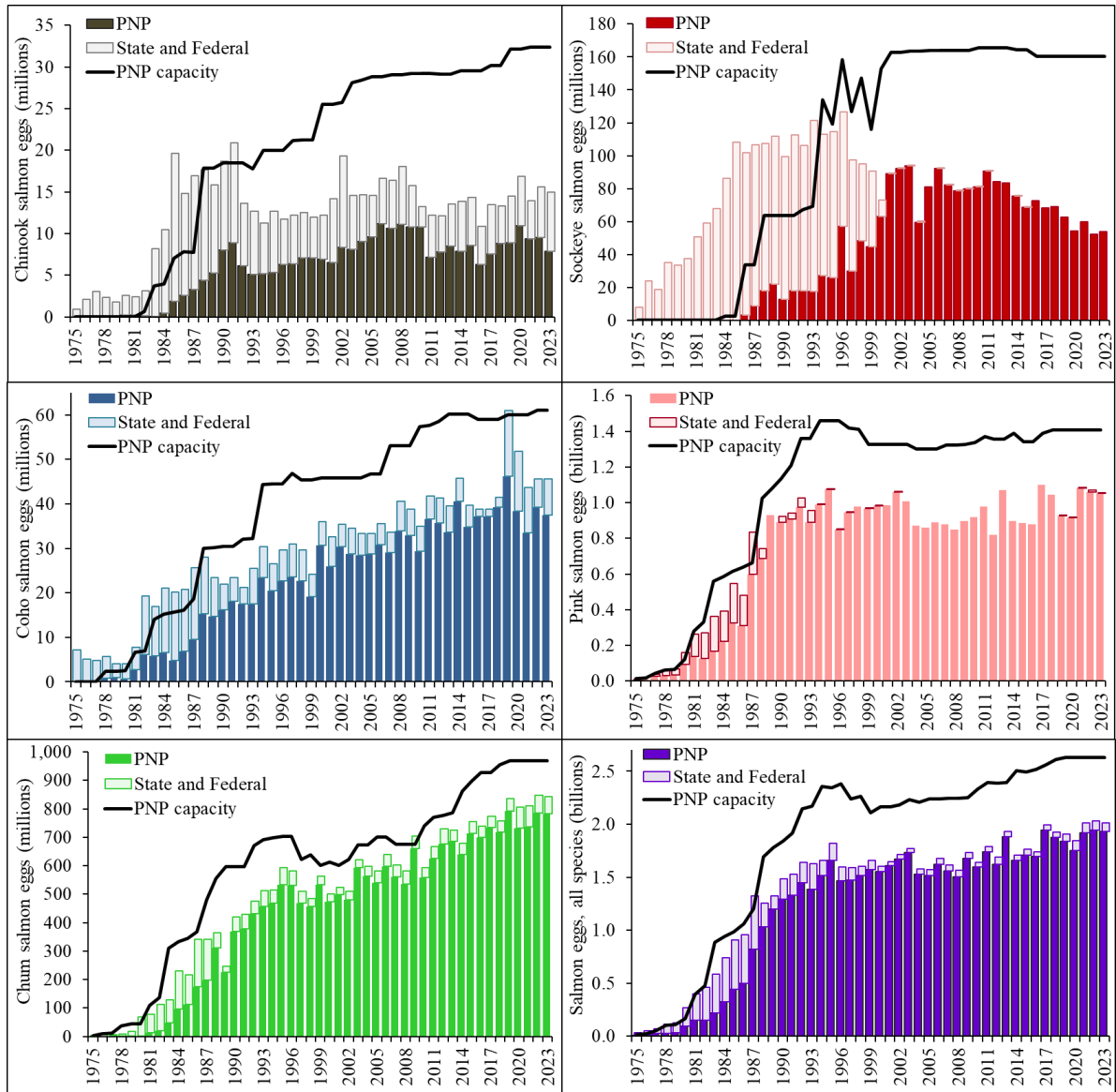


Figure 8.—Salmon eggs collected at by PNP hatcheries and by state and federal hatcheries, and PNP hatchery permitted capacity by species and total, 1975–2023.

In 2023, 2.1 billion eggs were collected for Alaska hatcheries (Figures 8 and 9, Table 3). Most of these eggs were from pink salmon (1.1 billion), followed by chum (898 million), sockeye (54 million), coho (46 million), and Chinook salmon (15 million). The number of eggs by area, operator, species, and location are in Appendix G1.

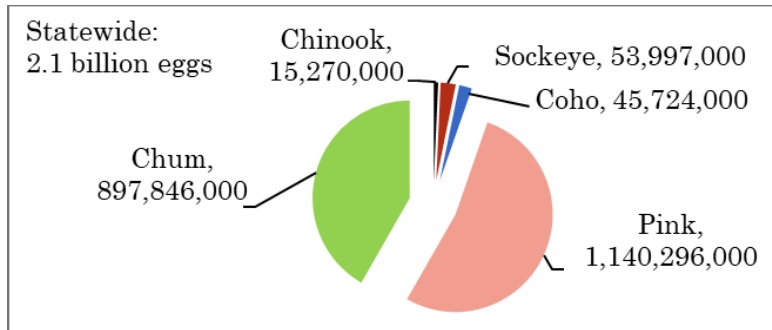


Figure 9.—Salmon eggs collected for Alaska hatchery programs by species, 2023. Rainbow trout and Arctic char eggs are not shown.

Table 3.—Estimated salmon egg takes for Alaska hatcheries as reported by operators, by area, 2023.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Southeast Prince William Sound	12,402,426	17,969,603	34,928,962	55,642,385	719,133,925	840,077,301
Cook Inlet	2,665,173	2,870,264	2,056,919	52,572,499	0	63,391,535 ^a
Interior	60,004	0	137,665	0	0	237,669 ^a
Kodiak	92,208	5,583,865	2,599,700	218,091,555	27,813,026	254,180,354
Total	15,269,811	53,997,480	45,723,842	1,140,295,981	897,846,438	2,157,247,802^a

^a Includes Arctic char (161,968), rainbow trout (3,912,282), and lake trout (40,000) eggs taken in Cook Inlet and Interior areas.

Hatchery Releases

Since 1995, annual hatchery releases have ranged from about 1.4 to 1.9 billion juvenile salmon (Figure 10). About 1.9 billion juvenile salmon were released in 2023 (Figure 10; Table 4). Most of the 2023 releases were from eggs collected in 2022 and were pink (1 billion) and chum (769 million) salmon. The remainder of the releases were from eggs taken mainly in 2021 and were sockeye (35 million), coho (32 million), and Chinook (10 million) salmon.

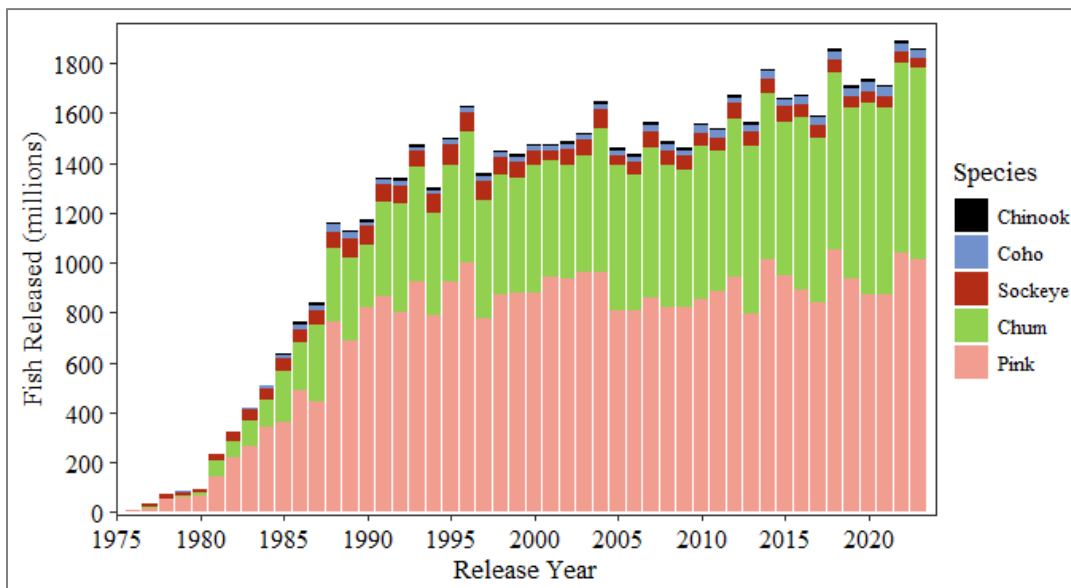


Figure 10.—Total salmon released for Alaska hatchery programs, 1975–2023.

Table 4.—Estimated juvenile salmon releases from Alaska hatcheries by region, 2023.

Area	Chinook	Sockeye	Coho	Pink	Chum	Rainbow trout	Total ^a
Southeast	7,261,652	13,136,100	25,741,166	61,230,372	607,078,640	46,800	714,494,730
Prince William Sound	223,336	13,314,031	3,742,165	739,441,201	132,194,513	958	888,916,204
Cook Inlet	2,032,605	4,986,865	1,561,076	21,017,854	0	979,076	30,625,140
Interior	39,649	0	119,288	0	0	246,807	434,814
Kodiak	46,503	3,844,287	1,082,732	191,750,551	29,718,848	46,670	226,489,591
Total	9,603,745	35,281,283	32,246,427	1,013,439,978	768,992,001	1,320,311	1,860,960,479

^a Includes Arctic char (76,734) releases in Cook Inlet and Interior regions.

Projected Hatchery Return in 2023

Hatchery operators forecast a total return of about 53.6 million salmon in 2023. This includes returns of 31.0 million pink, 19.9 million chum, 1.5 million sockeye, 0.9 million coho, and 89 thousand Chinook salmon to hatchery projects. Details of forecasted returns by area and project are in Appendix E1.

The 2023 hatchery return was 86.9 million fish, 127% the forecast of 68.2 million fish (Wilson 2023). Returns of all species but Chinook salmon were more than forecasted; returns were 155% of forecasted chum salmon, 122% of pink salmon, 109% of sockeye, 102% of coho, and 85% of forecasted Chinook salmon.

All species combined, the forecasted hatchery returns in 2024 by area about the same in Southeast (99%) and are approximately half or less in other areas (35–56%) than the 2023 returns (Appendix E1). The forecasted hatchery returns in 2024 by species are about the same ($\pm 15\%$) than the 2023 returns for all species but pink salmon, which are forecasted to be approximately half of the 2023 return. By area and species, the forecasted hatchery returns in 2024 are about the same as 2023 returns, except pink salmon in all areas, coho salmon in Prince William Sound that are forecasted to be more than double the 2023 return, and all species in Kodiak, which are forecasted to be around half of the 2024 returns (34–57%).

For comparison, the National Oceanic and Atmospheric Administration (NOAA)-ADF&G 2023 Southeast Alaska pink salmon commercial harvest forecast, which included hatchery and naturally spawned fish, was 19 million pink salmon.¹⁴ The 2023 Southeast-area pink salmon commercial harvest (an estimated 6% hatchery production), was nearly 48 million pink salmon, which was 250% of the forecast. The NOAA-ADF&G 2024 Southeast Alaska pink salmon commercial harvest forecast is 19 million pink salmon.¹⁵

PROPAGATIVE RESEARCH

In 2023, ARPs were issued for small-scale production, including for salmon research, feasibility studies for potential hatchery production, vocational programs, and the extensive salmon in the classroom program conducted in schools across the state (Appendix F1).

¹⁴ Source: <https://www.adfg.alaska.gov/static/applications/dcfnewsrelease/1444357143.pdf> (accessed November 17, 2023).

¹⁵ Source: <http://www.adfg.alaska.gov/static/applications/dcfnewsrelease/1549019284.pdf> (accessed November 17, 2023).

HATCHERY ACTIVITY BY REGION

Southeast

Southeast Alaska has 2 planning regions: Northern Southeast and Southern Southeast. Hatchery production from both planning regions is presented together.

Hatcheries

The Southern Southeast Alaska PNP hatcheries operated by Southern Southeast Regional Aquaculture Association (SSRAA) are Burnett Inlet, Neets Bay, Whitman Lake, Deer Mountain, Klawock River, and Port Saint Nicholas (Figure 4). Since 2000, ADF&G has contracted SSRAA to operate the Crystal Lake Hatchery. Metlakatla Indian Community (MIC) operates Tamgas Creek Hatchery, located on Annette Island (the only Indian Reserve in Alaska), which is not a PNP hatchery and is managed solely by MIC under federal regulation.

The Northern Southeast Alaska PNP hatcheries operated by Northern Southeast Regional Aquaculture Association (NSRAA) are Gunnuk Creek, Hidden Falls, Medvejie Creek, and Sawmill Creek. Other PNP hatcheries in Northern Southeast are Port Armstrong operated by Armstrong-Keta Incorporated, Macaulay and Snettisham operated by Douglas Island Pink and Chum, Incorporated (DIPAC), and Sheldon Jackson operated by the Sitka Sound Science Center. There is a joint use agreement between NMFS and AKI for Little Port Walter Hatchery in lower Chatham Strait. Little Port Walter Hatchery operated by AKI is a PNP hatchery. Little Port Walter hatchery operations under NMFS are authorized for research and not PNP operations.

Management considerations

The dominant species produced by Southeast Alaska hatcheries is chum salmon. Hatchery-produced chum salmon are caught in fisheries that are managed for sockeye or pink salmon harvest. Chum salmon that are not harvested in the sockeye and pink salmon fisheries return to release sites in bays where they can be harvested with minimal impact to wild stocks.

In 1994, the Board of Fisheries established value allocations for harvest of salmon from enhancement projects among fisheries in the southeast Alaska area: seine 44–49%; hand and power troll 27–32%; and drift gillnet 24–29% (5 AAC 33.364). By regulation, to comply with allocation plans, the Southeast joint Northern and Southern RPT makes annual recommendations to the commissioner on production changes to salmon enhancement (5 AAC 40.345). See the Hatchery Planning webpage for information about the next joint Northern and Southern RPT meeting.¹⁶

In 2023, there were 9 stocks of concern located in Southeast Alaska: 7 Chinook salmon stocks (Chilkat, King Salmon, Unuk, Stikine, Andrew, Chickamin, and Taku Rivers), and 2 sockeye salmon stocks (McDonald Lake and Klukshu River).¹⁷ Management actions to reduce harvest of these stocks were taken throughout Southeast Alaska fisheries.

Hatchery returns in Southeast

In 2023, the joint Northern and Southern Southeast Alaska had the 2nd-ranked hatchery return out of the 4 planning areas, with a total return of 17.6 million salmon (Table 1).

¹⁶ See <https://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesPlanning.regional> (accessed January 9, 2024).

¹⁷ Source: <http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akfishstocks> (accessed November 14, 2023).

About 10.6 million hatchery fish were caught in the Southeast Alaska commercial common property fisheries in 2023, worth an estimated exvessel value of \$41 million, or 41% of the exvessel value for commercial common property salmon fisheries in the region (Figure 11; Appendices D1, D2). Chum salmon contributed most to the value of the commercial common property harvest (\$35.7 million), followed by Chinook (\$2.4 million), coho (\$2.4 million), sockeye (\$269 thousand), and pink salmon (\$256 thousand). The 10.6 million hatchery-produced salmon harvested in the Southeast commercial common property fishery accounted for 18% of the total commercial common property catch in the region (Appendix D1). Hatcheries contributed an estimated 89% of the chum, 24% of the coho, 20% of the Chinook, 5% of the sockeye, and 1% of the pink salmon, in numbers of fish, to CCP fisheries by species.

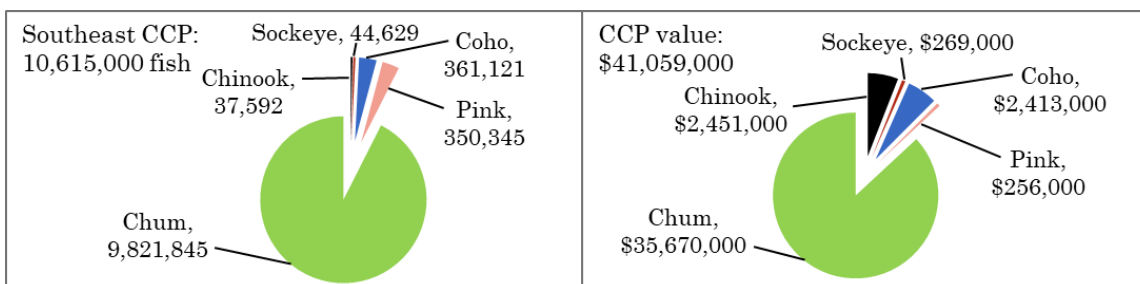


Figure 11.—Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of CCP hatchery harvest in Southeast Alaska, 2023.

An additional 4.8 million salmon hatchery returns were harvested for cost recovery. Hatchery harvest including cost recovery accounted for 24% of the commercial harvest and 49% of the total commercial harvest value in Southeast Alaska. The total commercial harvest of hatchery-produced salmon reported by operators, including cost recovery, was 80.4 million fish, the 3rd largest for Southeast Alaska since 1977 (Appendix K2).

For the sport, personal use, and subsistence fisheries, coho salmon contributed the most hatchery-produced fish (68,200), followed by Chinook (7,400), chum (5,200), sockeye (5,100), and pink salmon (1,400) (Table 2).

Details of the salmon returns in 2023 to the Southeast region, by return type, project, and species as reported by operators are in Appendices J1–J5.

Egg takes and releases in Southeast

In 2023, there were 840 million eggs taken in Southeast Alaska: 719 million chum, 56 million pink, 35 million coho, 18 million sockeye, and 12 million Chinook salmon eggs (Figure 12; Table 3). The number of eggs by area, operator, location, and species for 2023 are in Appendix G1. Historic PNP hatchery permitted egg capacity and number of green eggs are in Appendices K1–K8.

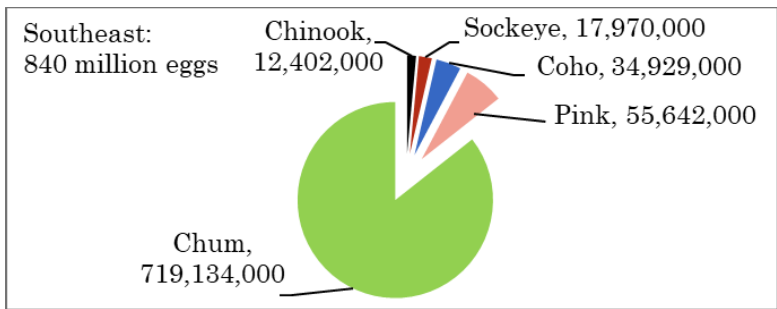


Figure 12.—Eggs collected, by species, for salmon hatchery programs in Southeast Alaska, 2023.

There were 714 million salmon released in Southeast Alaska in 2023: 607 million chum, 61 million pink, 26 million coho, 13 million sockeye, and 7 million Chinook salmon (Figure 13; Table 4). There were 47 thousand rainbow trout stocked in Southeast lakes. The number of releases by area, operator, hatchery, release site, and species are in Appendix H1.

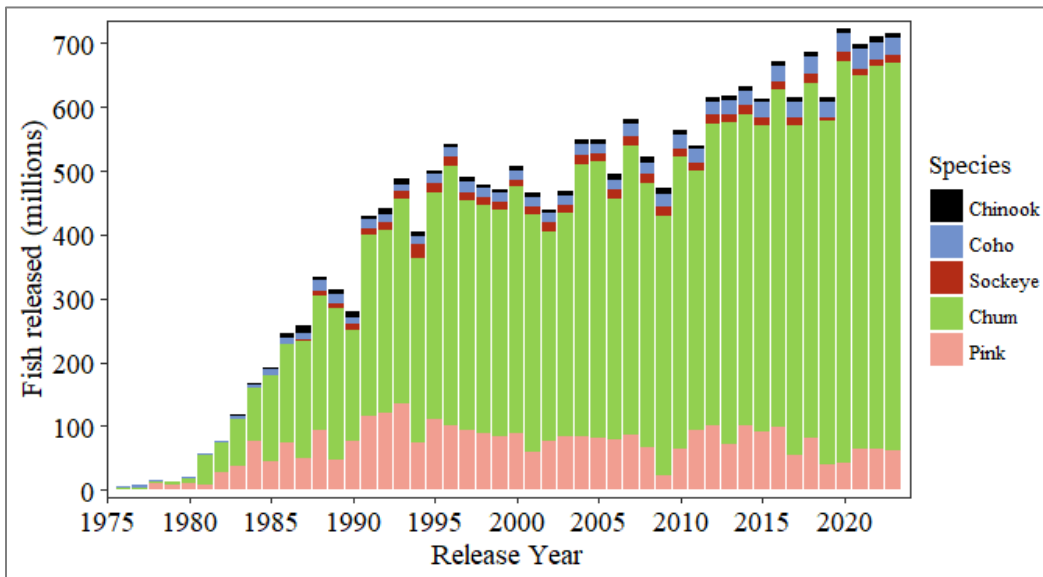


Figure 13.—Total salmon released for Southeast Alaska hatchery programs, 1975–2023.

Permit alterations for Southeast hatcheries

Southern Southeast

In Southern Southeast, 1 PNP Hatchery PAR was submitted in extraordinary circumstances that was approved. Southern Southeast Regional Aquaculture Association submitted a PAR for Neets Bay Hatchery (PNP Permit No. 19) to collect, incubate, and rear to the fry stage up to 8 million Carroll River (summer) chum salmon green eggs for release at Port Asumcion on behalf of the Port Saint Nicholas Hatchery (PNP Permit No. 48). This alteration does not increase permitted egg capacity or total release numbers but allows Neets Bay Hatchery to rear summer chum salmon destined for Port Asumcion in place of Port Saint Nicholas Hatchery.

Northern Southeast

In Northern southeast, 1 PNP Hatchery PAR was submitted for review that was approved. The Hidden Falls Hatchery (HFH) PNP permit No. 28 was amended to include taking up to 40 million chum salmon eggs on behalf of Port Armstrong Hatchery (PAH, Permit No. 13) for release at HFH permitted sites. This allows Northern Southeast Regional Aquaculture Association (NSRAA) to use PAH's under-utilized chum salmon egg capacity at HFH for fisheries enhancement. Armstrong Keta, Inc. plans to continue to use the remainder of the PAH permitted chum salmon capacity, 20 million green eggs. In combination, the chum salmon egg take at HFH on behalf of PAH and the chum salmon egg take at PAH will not exceed the PAH chum salmon permitted capacity (60 million).

Prince William Sound

Hatcheries

Hatcheries operated by Prince William Sound Aquaculture Corporation, an RAA, are Armin F. Koernig, Cannery Creek, Gulkana, Main Bay, and Wally Noerenberg. Solomon Gulch Hatchery is operated by the PNP corporation Valdez Fisheries Development Association (Figure 4).

Management Considerations

Most of Alaska's hatchery production is in Prince William Sound, where pink, chum, and sockeye salmon are the primary species produced at hatcheries.

Prince William Sound Aquaculture Association (PWSAC) produced salmon harvested in the commercial common property fishery allocation are reviewed for consistency with the Prince William Sound Management and Salmon Enhancement Allocation Plan (5 AAC 24.370). In this plan, corrective measures are applied to fisheries the year following calculation of value by gear group. The set gillnet gear group allocation is 4% of the five-year average value of PWSAC-produced salmon harvested in the commercial common property fishery. If the set gillnet gear group exceeds 5% of the five-year average value of PWSAC-produced salmon, they are limited to no more than 36 hours of fishing time per week beginning July 10 in the following year. Drift gillnet and purse seine gear groups are each allocated 50% of the value of PWSAC-produced salmon harvested in the commercial common property fishery excluding set gillnet harvest values. If the drift gillnet gear group harvest value is 45% or less, then in the following year, the drift gillnet gear group has exclusive access to enhanced returns in the Port Chalmers Subdistrict harvest from June 1 through July 30. If the purse seine gear group harvest value is 45% or less, then in the following year, the purse seine gear group has exclusive access to the enhanced returns at Esther Subdistrict from June 1 through July 20. No corrective measure specified in the allocation plan will be implemented during the 2024 Prince William Sound commercial salmon season.¹⁸

Coghill Lake sockeye salmon stock in Prince William Sound has been a concern for Prince William Sound fishery managers in recent years. Although the total run to Coghill Lake (catch plus escapement) was estimated to be well above escapement needs each year between 2013 and 2016, escapements to the lake were below the lower bound of the escapement goal in 2013, 2015, and 2016. Although no fishery openings occurred to target Coghill Lake sockeye salmon in any of these years, Coghill Lake sockeye salmon were harvested along their migration routes in fisheries targeting primarily hatchery returns. Managers were more restrictive in the amount of fishing area

¹⁸ Source: Prince William Sound Salmon Fishery–2024 Allocation Plan (5 AAC 24.370) Advisory Announcement <https://newsrelease.adfg.alaska.gov/static/applications/dfnewsrelease/1549275022.pdf> (accessed January 9, 2024).

opened along the Coghill Lake sockeye salmon migration corridors in 2017 and 2018 and were successful in achieving the escapement goal. In 2023, the Coghill River weir count was 64,212 sockeye salmon, within the Sustainable Escapement Goal range of 20,000–75,000 fish.¹⁹ There are no longer any stocks of concern in Prince William Sound.²⁰

Hatchery returns in Prince William Sound

In 2023, Prince William Sound had the highest-ranked hatchery return of 4 planning areas with active hatcheries with a total return of 54.8 million salmon (Table 1).

About 40.3 million hatchery fish were caught in the commercial common property (CCP) fisheries, worth an estimated exvessel value of \$46 million, or 64% of the exvessel value for CCP salmon fisheries in the region (Figure 14; Appendices D1, D2). Pink salmon contributed most to the value of the CCP harvest (\$30.7 million), followed by chum (\$9.6 million), sockeye (\$5.5 million), and coho salmon (\$156 thousand). The 40.3 million hatchery-produced salmon harvested in the CCP fishery accounted for 76% of the total CCP catch in the region (Appendix D1). Hatcheries contributed an estimated 78% of the pink, 79% of the chum, 33% of the sockeye, and 10% of the coho salmon, in numbers of fish, to CCP fisheries by species.

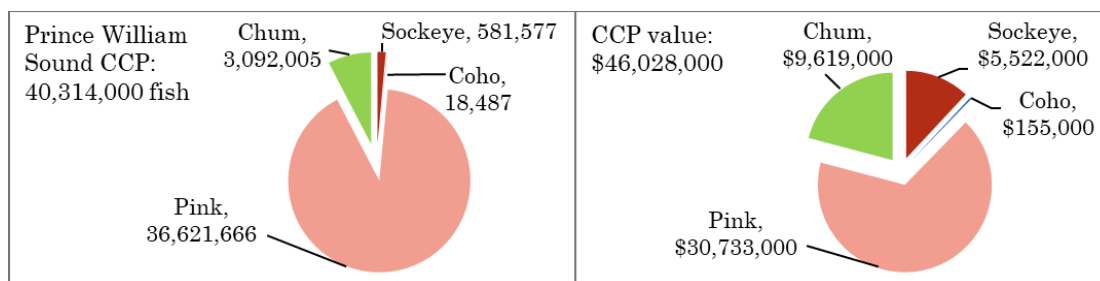


Figure 14.—Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of commercial common property hatchery harvest in Prince William Sound, Alaska, 2023.

An additional 11.7 million salmon were harvested for cost recovery. Hatchery harvest including cost recovery accounted for 81% of the commercial harvest and 70% of the total commercial harvest value in Prince William Sound. The total hatchery commercial harvest, including cost recovery, of 80.4 million salmon was the 5th largest for Prince William Sound since 1977 (Appendix K3).

For the sport, personal use, and subsistence fisheries, coho salmon contributed the most hatchery-produced fish (20,600), followed by pink (10,400), sockeye (5,200), and Chinook salmon (100; Table 2).

Details of the salmon returns in 2023 to the Prince William Sound region, by return type, project, and species as reported by operators are in Appendices J1–J5.

Egg takes and releases in Prince William Sound

In 2023, there were 998 million eggs taken in Prince William Sound: 814 million pink, 151 million chum, 27 million sockeye, and 6 million coho salmon (Figure 15; Table 3). The

¹⁹ Source: 2022 Prince William Sound salmon season summary advisory announcement. <https://www.adfg.alaska.gov/static/applications/dcfnewsrelease/1545571888.pdf> (accessed January 25, 2024).
²⁰ Source: <http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akfishstocks> (accessed November 14, 2023).

number of eggs by area, operator, location, and species are in Appendix G1. Historic PNP hatchery permitted egg capacity and number of green eggs are in Appendices K13–K17.

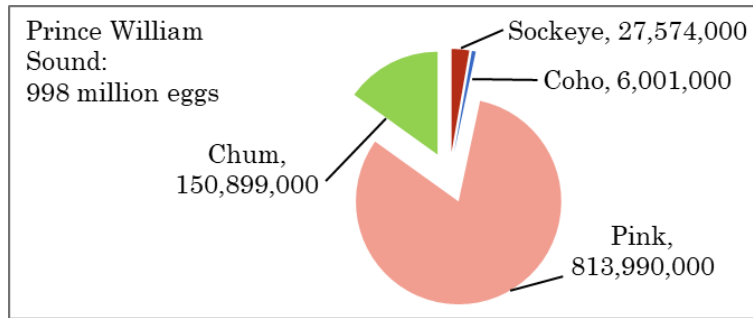


Figure 15.—Eggs collected by species for salmon hatchery programs in Prince William Sound, Alaska, 2023.

In 2023, there were 889 million juvenile salmon released in the Prince William Sound area: 739 million pink, 132 million chum, 13 million sockeye, 4 million coho, and 223 thousand Chinook salmon (Figure 16, Table 4). There were 1 thousand rainbow trout stocked in Prince William Sound lakes. The number of releases by area, operator, hatchery, release site, and species are in Appendix H1.

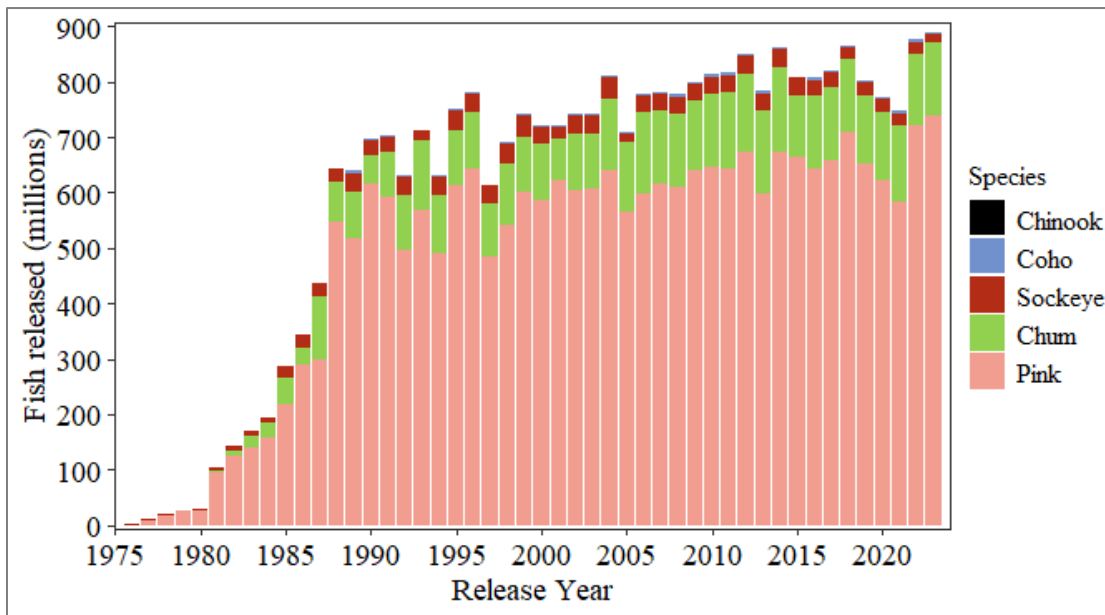


Figure 16.—Total salmon released for Prince William Sound Alaska hatchery programs, 1975–2023.

Permit alterations for Prince William Sound hatcheries

No PARs submitted for consideration in 2023 for Prince William Sound hatcheries.

Cook Inlet

The hatcheries in Cook Inlet operated by Cook Inlet Aquaculture Association are Trail Lakes, Tutka Bay Lagoon, and Port Graham (Figure 4). Cook Inlet hatcheries produce primarily sockeye

and pink salmon. Additionally, ADF&G operates the William Jack Hernandez Sport Fish Hatchery in Anchorage.

In Cook Inlet, there are 4 Chinook salmon and 1 chum salmon stocks of concern.²¹ The Chinook salmon stocks of concern are the Chuitna River, Theodore River, Alexander Creek, and East Susitna River stocks. The chum salmon stock of concern is the McNeil River stock.

Hatchery returns in Cook Inlet

In 2023, Cook Inlet had the 4th-ranked hatchery return of the 4 planning areas with active hatcheries with a total return of 2.4 million salmon (Table 1).

About 230 thousand hatchery fish were caught in the Cook Inlet CCP fisheries, worth an estimated exvessel value of \$335,000, or 2% of the exvessel value for CCP salmon fisheries in the region (Appendices D1 and D2). The contribution of pink and sockeye salmon to non-terminal mixed-stock common property fisheries could not be estimated because catch sampling results were not available at the time of reporting. The 206 thousand pink salmon produced by Cook Inlet hatcheries harvested in terminal-area fisheries accounted for 25% of the Cook Inlet pink salmon CCP harvest, in numbers of fish (Figure 17; Appendix D1) The 25 thousand sockeye salmon produced by Cook Inlet hatcheries harvested in the Cook Inlet CCP terminal-area fisheries accounted for 1% of the Cook Inlet sockeye CCP harvest, in numbers of fish (Figure 17; Appendix D1).

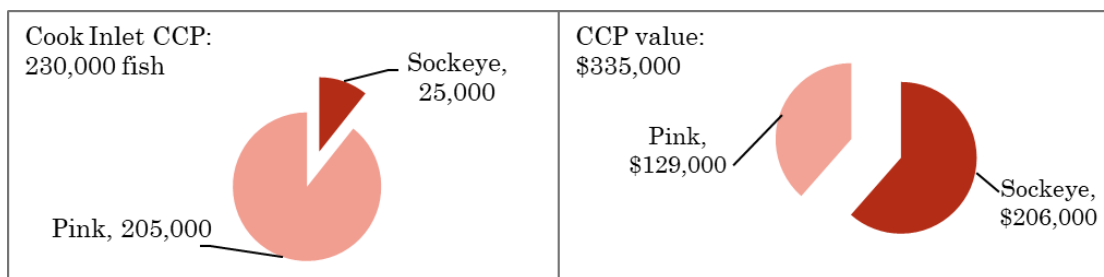


Figure 17.—Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of CCP hatchery harvest in Kodiak, Alaska, 2023.

An additional 2.1 million salmon were harvested for cost recovery. Hatchery harvest including cost recovery accounted for 47% of the commercial harvest and 16% of the total commercial harvest value in Cook Inlet. The total hatchery commercial harvest, including cost recovery, of 2.3 million salmon was the 7th largest for Cook Inlet since 1977 (Appendix K3).

For the Cook Inlet sport, personal use, and subsistence fisheries, sockeye salmon contributed the most hatchery-produced fish (20,500), followed by coho (17,600), Chinook (7,800), and pink salmon (2,500) (Table 2). Additionally, rainbow trout (16,500) and Arctic char (700) were caught in southcentral area lakes.

Details of the salmon returns in 2023 to the Cook Inlet region, by return type, project, and species are in Appendices J1–J5.

Egg takes and releases in Cook Inlet

In 2023, there were 60 million salmon eggs taken in Cook Inlet: 52.6 million pink, 2.9 million sockeye, 2.7 million Chinook, and 2.1 million coho salmon (Figure 18; Table 3). The number of

²¹ Source: <http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akfishstocks> (accessed December 12, 2022).

eggs by area, operator, location, and species are in Appendix G1. Historic PNP hatchery permitted egg capacity and number of green eggs are in Appendices K9–K12.

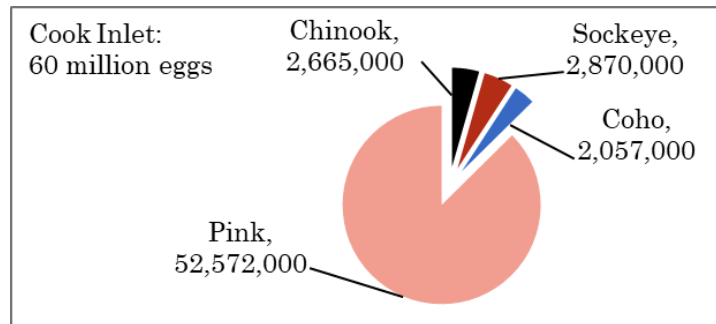


Figure 18.—Eggs collected, by species, for salmon hatchery programs in Cook Inlet, Alaska, 2023.

In 2023, there were 30 million salmon released from Cook Inlet hatcheries: 21 million pink, 5 million sockeye, 2 million Chinook, and 1.5 million coho salmon (Figure 19; Table 4). Additionally, there were 979 thousand rainbow trout and 48 thousand Arctic char stocked in southcentral lakes. The number of releases by area, operator, hatchery, release site, and species are in Appendix H1.

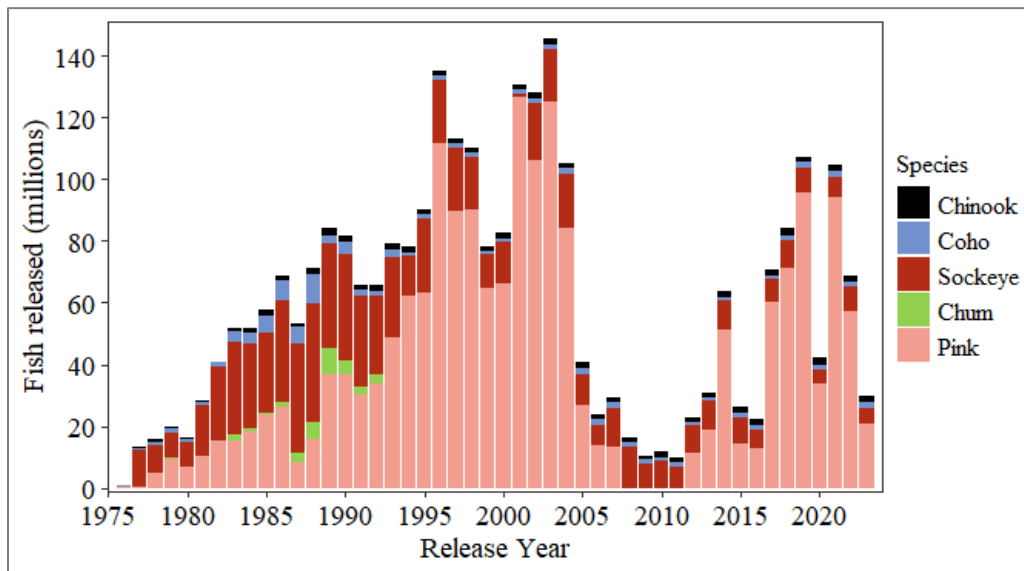


Figure 19.—Total salmon released for Cook Inlet Alaska hatchery programs, 1975–2023.

Permit alterations for Cook Inlet hatcheries

No PARs submitted for consideration in 2023 for Cook Inlet hatcheries.

Kodiak

The hatcheries in Kodiak include Kitoi Bay and Pillar Creek, operated by Kodiak Regional Aquaculture Association.

For several years, pink salmon were not marked because they return to a release site on Afognak Island where there are no substantial wild pink salmon stocks. In recent years, Kodiak Regional Aquaculture Association has been using innovative techniques to increase the number of otolith-marked fish including using thermally stratified lake water, dry marking, and salt water. These techniques are useful for when traditional otolith thermal marking methods, raising and lowering the temperature of rearing water, is logistically challenging. Starting in 2012, a portion of sockeye were otolith marked using a dry mark technique. Starting in 2013, 100% of chum salmon were otolith marked using thermally stratified lake water and a portion of coho salmon were otolith marked with a dry mark. In 2017 and 2018, a portion of pink salmon were otolith marked using salt water. Starting in 2018, 100% of late-run sockeye salmon were otolith marked with a dry mark; starting in 2019, 100% of pink salmon were otolith marked using salt water, and 100% of coho were otolith marked with a dry mark technique.

There are 2 stocks of concern in the Kodiak area: Karluk River and Ayakulik River Chinook salmon.²²

Hatchery returns in Kodiak

In 2023, Kodiak had the 3rd-ranked hatchery return of the 4 planning areas with active hatcheries with a total return of 12.1 million salmon (Table 1).

About 9.6 million hatchery fish were caught in the CCP fisheries, worth an estimated exvessel value of \$9.3 million, or 30% of the exvessel value for CCP salmon fisheries in the region (Figure 20; Appendices D1, D2). Pink salmon contributed most to the value of the CCP harvest (\$7.6 million), followed by sockeye (\$1.2 million), chum (\$424 thousand), and coho (\$122 thousand) salmon. The 9.6 million hatchery-produced salmon harvested in the Kodiak CCP fishery accounted for 36% of the total CCP catch in the region (Appendix D1). Hatcheries contributed an estimated 39% of the pink, 29% of the chum, 26% of the coho, and 12% of the sockeye salmon, in numbers of fish, to CCP fisheries by species.

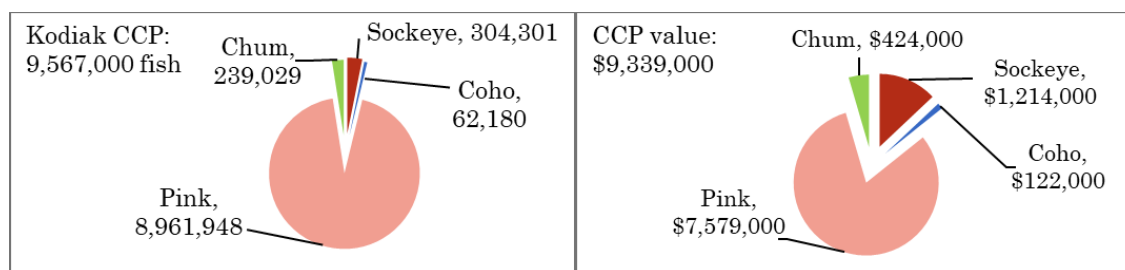


Figure 20.—Commercial common property (CCP) hatchery harvest in numbers of fish and exvessel value of CCP hatchery harvest in Kodiak, Alaska, 2023.

An additional 1.1 million salmon were harvested for cost recovery. Hatchery harvest including cost recovery accounted for 39% of the commercial harvest and 32% of the commercial harvest value in Kodiak. The total hatchery commercial harvest, including cost recovery, of 10.7 million salmon was the 6th largest for Kodiak since 1977 (Appendix K3).

Of the sport, personal use, and subsistence fisheries, coho salmon contributed the most hatchery-produced fish (8,800), followed by Chinook salmon (50) (Table 2).

²² Source: <http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akfishstocks> (accessed November 14, 2023).

Details of the salmon returns in 2023 to Kodiak, by return type, project, and species as reported by operators are in Appendices J1–J5.

Egg takes and releases in Kodiak

In 2023, there were 254 million salmon eggs taken in Kodiak: 218 million pink, 28 million chum, 6 million sockeye, 3 million coho, and 92 thousand Chinook salmon (Figure 21; Table 3). The number of eggs taken by area, operator, location, and species are in Appendix G1. Historic PNP hatchery permitted egg capacity and number of green eggs are in Appendices K18–K22.

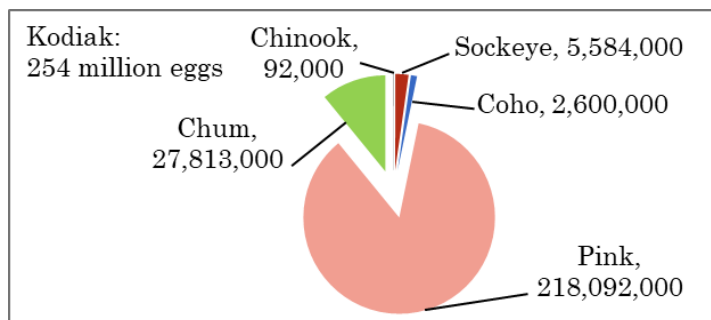


Figure 21.—Eggs collected, by species, for salmon hatchery programs in Kodiak, Alaska, 2023.

In 2023, there were 234 million salmon released from Kodiak hatcheries: 192 million pink, 30 million chum, 3.8 million sockeye, 1.1 million coho, and 46,000 Chinook salmon (Figure 22, Table 4). There were 47 thousand rainbow trout stocked in Kodiak lakes. See Appendix H1 for releases by species and release site.

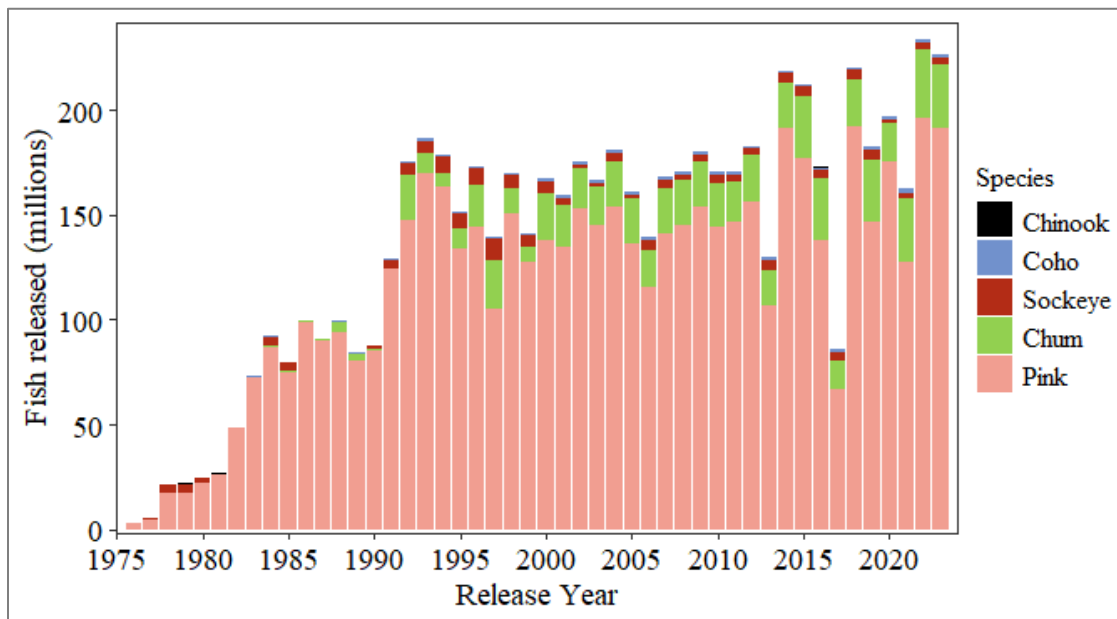


Figure 22.—Total salmon released for Kodiak Alaska hatchery programs, 1975–2023.

Permit alterations for Kodiak hatcheries

No permit alterations submitted for consideration in 2023 for Kodiak hatcheries.

Interior

There is one hatchery in Interior Alaska, Ruth Burnett Sport Fish Hatchery operated by ADF&G.

Hatchery returns in Interior

In 2023, an estimated combined total of 17,000 rainbow trout, Arctic char, Arctic grayling, Chinook salmon, and coho salmon were caught in Interior Alaska lakes (Table 2).

Egg takes and releases in Interior

In 2023, there were 360 thousand eggs taken in Interior: 162 thousand Arctic char, 138 thousand coho, and 60,000 Chinook salmon eggs. The number of eggs by area, operator, location, and species are in Appendix G1.

In 2023, there were 247,000 rainbow trout, 119,000 coho salmon, 40,000 Chinook salmon, and 29,000 Arctic char stocked in Interior Alaska lakes (Table 3). The number of releases by area, operator, hatchery, release site, and species are in Appendix H1.

Permit alterations for Interior hatcheries

There are no PNP hatchery permits issued for hatcheries in the interior area and there were no PARs submitted for consideration.

ACKNOWLEDGEMENTS

Thank you to the many hatchery operator staff members at the ADF&G, Armstrong-Keta Inc., Cook Inlet Aquaculture Association, Douglas Island Pink and Chum Inc., Kodiak Regional Aquaculture Association, Metlakatla Indian Community, National Marine Fisheries Service, Northern Southeast Regional Aquaculture Association, Prince William Sound Aquaculture Association, Southern Southeast Regional Aquaculture Association, Sitka Sound Science Center, and Valdez Fisheries Development Association who completed annual reports that are the basis for this document. Additionally, thank you to programming staff Bil Rosky, Eric Lardizabal, and Tim Frawley, who developed and maintain the data entry, management, and storage applications used by hatchery operators and ADF&G staff statewide.

REFERENCES CITED

- ADF&G (Alaska Department of Fish and Game). 1989. Bristol Bay comprehensive salmon plan. Alaska Department of Fish and Game, Division of Commercial Fisheries, CFSP.19, Juneau. <http://www.adfg.alaska.gov/FedAidpdfs/CFSP.19.pdf>
- ADF&G (Alaska Department of Fish and Game). 1993a. Alaska Peninsula/Aleutian Islands/Area M Regional comprehensive salmon plan 1993–2004. Alaska Department of Fish and Game, Division of Commercial Fisheries, CFSP.18, Juneau. <http://www.adfg.alaska.gov/FedAidpdfs/CFSP.18.pdf>
- ADF&G (Alaska Department of Fish and Game). 1993b. Chignik regional comprehensive salmon plan 1992–2001. Alaska Department of Fish and Game, Division of Commercial Fisheries, CFSP.20, Juneau. <http://www.adfg.alaska.gov/FedAidpdfs/CFSP.20.pdf>
- ADF&G (Alaska Department of Fish and Game). 1994. Prince William Sound—Copper River phase 3 comprehensive salmon plan. Alaska Department of Fish and Game, Division of Commercial Fisheries, CFSP.23, Juneau. <http://www.adfg.alaska.gov/FedAidpdfs/CFSP.23.pdf>
- Baer, R. T., and S. G. Honnold. 2002. A straying assessment of an introduced sockeye salmon stock on northern Afognak Island as determined by two methods of stock identification. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K02-56, Kodiak. <http://www.adfg.alaska.gov/FedAidpdfs/RIR.4K.2002.56.pdf>
- Bidlack, A., and E. M. Valentine. 2009. Assessment of Gulkana Hatchery sockeye straying into Upper Copper River tributaries. Ecotrust Copper River Program. Ecotrust Copper River Program. Cordova, Alaska. :
- Brenner, R. E., S. D. Moffitt, and W. S. Grant. 2012. Straying of hatchery salmon in Prince William Sound, Alaska. *Environmental Biology of Fishes* 94(1):179-195. <http://dx.doi.org/10.1007/s10641-012-9975-7>
- CIRPT 2007. Cook Inlet regional salmon enhancement planning: Phase II Plan 2006-2025
- Davis, B., B. Allee, D. Amend, B. Bachen, B. Davidson, T. Gharrett, S. Marshall, and A. Wertheimer. 1985. Genetic Policy. Alaska Department of Fish and Game, Division of Commercial Fisheries, FRED Genetic Policy, Juneau. <http://www.adfg.alaska.gov/FedAidPDFs/FRED.GeneticsPolicy.1985.pdf>
- Dittman, A. H., and T. P. Quinn. 1996. Homing in Pacific salmon: mechanisms and ecological basis. *Journal of Experimental Biology* 199(1):83-91.
- Duckett, K., D. Otte, J. Peckham, G. Pryor, A. McGregor, R. Holmes, S. Leask, D. Aho, G. Whistler, K. McDougal, A. Andersen, B. Pfundt, and E. Prestegard. 2010. Comprehensive salmon enhancement plan for Southeast Alaska: Phase III. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 5J10-03, Juneau. <http://www.adfg.alaska.gov/FedAidpdfs/RIR.5J.2010.03.pdf>
- Evenson, D. F., C. Habicht, M. Stopha, A. R. Munro, T. R. Meyers, and W. D. Templin. 2018. Salmon hatcheries in Alaska—A review of the implementation of plans, permits, and policies designed to provide protection for wild stocks. Alaska Department of Fish and Game, Special Publication No. 18-12, Anchorage <http://www.adfg.alaska.gov/FedAidPDFs/SP18-12.pdf>
- Habicht, C., T. M. Tobias, G. Fandrei, N. Webber, B. Lewis, and W. S. Grant. 2013. Homing of sockeye salmon within Hidden Lake, Alaska, can be used to achieve hatchery management goals. *North American Journal of Fisheries Management* 33(4):777-782.
- Hagen, P., K. Munk, B. W. Van Alen, and B. White. 1995. Thermal mark technology for inseason fisheries management: a case study. *Alaska Fishery Research Bulletin* 2(2):143-155.
- Holder, R. R., and D. Senecal-Albrecht. 1998. Yukon River comprehensive salmon plan for Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, CFSP.26, Juneau. <http://www.adfg.alaska.gov/FedAidpdfs/CFSP.26.pdf>
- Hollowell, G., E. O. Otis, and E. Ford. 2017. 2016 Lower Cook Inlet area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 17-26, Anchorage. <http://www.adfg.alaska.gov/FedAidPDFs/FMR17-26.pdf>

REFERENCES CITED (Continued)

- Jefferts, K. B. 1963. A coded wire tag identification system for macroorganisms. *Nature* 198(4879):460-462.
- KRPT 2011. Kodiak comprehensive salmon plan, Kodiak.
- Meyers, T. R. 2010. Regulation changes, policies and guidelines for Alaska fish and shellfish health and disease control. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 5J10-01, Juneau. <http://www.adfg.alaska.gov/FedAidPDFs/RIR.5J.2010.01.pdf>
- NSBSRPT 2015. Norton Sound-Bering Strait Regional Comprehensive Salmon Plan: Phase II, Nome.
- Piston, A. W., and S. C. Heinl. 2012a. Hatchery chum salmon straying in Southeast Alaska, 2011. Alaska Department of Fish and Game, Fishery Data Series No. 12-45, Anchorage. <http://www.adfg.alaska.gov/FedAidpdfs/FDS12-45.pdf>
- Piston, A. W., and S. C. Heinl. 2012b. Hatchery chum salmon straying studies in Southeast Alaska, 2008–2010. Alaska Department of Fish and Game, Fishery Manuscript Series No. 12-01, Anchorage. <http://www.adfg.alaska.gov/FedAidpdfs/FMS12-01.pdf>
- Stopha, M. 2012. An evaluation of the Trail Lakes salmon hatchery for consistency with statewide policies and prescribed management practice. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 5J.2012.21, Anchorage. <http://www.adfg.alaska.gov/FedAidPDFs/RIR.5J.2012.21.pdf>
- Volk, E. C., S. L. Schroder, and J. J. Grimm. 1999. Otolith thermal marking. *Fisheries Research* 43:205-219.
- Wilson, L. I. 2023. Alaska salmon fisheries enhancement report 2022. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 5J23-04, Anchorage. <http://www.adfg.alaska.gov/FedAidPDFs/RIR.5J.2023.04.pdf>
- YRPT 2014. Yakutat Regional Comprehensive Salmon Plan: Phase II (YCSP), Kodiak.

**APPENDIX A: ALASKA SALMON FISHERIES
ENHANCEMENT PROGRAM TIMELINE**

Appendix A1.—Alaska salmon fisheries enhancement program timeline.

Year	Event	No. of state operated hatcheries	No. of PNP owned or operated hatcheries	No. of federal hatcheries
1934	Federal research station Little Port Walter constructed			1
1950	Federal hatchery at Auke Creek constructed			2
1953	1 territorial hatchery constructed at Kitoi Bay	1		
1954	1 territorial hatchery constructed at Deer Mountain	2		
1958	1 territorial hatchery constructed at Fort Richardson	3		
1959	Statehood. Alaska becomes the 49th US state.			
1965	1 state hatchery constructed at Fire Lake	4		
1969	1 state hatchery constructed at Crystal Lake	5		
1971	Fisheries Rehabilitation, Enhancement and Development Division created by Legislature			
1973	2 state hatcheries constructed: Crooked Creek and Gulkana State enhancement projects at Starrigavan and Halibut Cove started Limited Entry law enacted, creating fishery limitations for the purpose of conservation.	7		
1974	2 state hatcheries constructed: Beaver Falls and East Creek Legislature authorizes permitting for PNP corporations to operate hatcheries.	9		
1975	4 PNP permits issued: Perry Island (#1), Port San Juan (renamed Armin F. Koernig Hatchery in 1985; #2), Sheldon Jackson (#3), and Sandy Bay (#4) 2 state hatcheries constructed: Big Lake and Tutka Bay Lagoon	11	4	
1976	AS 16.10.375 passed, designating regions for Regional Planning Teams and enhancing salmon 1 state hatchery constructed at Elmendorf 2 PNP permits issued: Burnett Inlet (#5) and Kowee Creek (#6)	12	6	
1977	1 PNP permit issued to Gunnuk Creek (#7) 2 state hatcheries constructed: Klawock River and Russell Creek State enhancement project at Karluk Lake started	14	7	
1978	1 PNP permit issued to Whitman Lake (#8) 2 state hatcheries constructed: Cannery Creek and Hidden Falls	16	8	
1979	3 PNP permits issued: Salmon Creek (#9), Meyers Chuck (#10), Sheep Creek (#11) 1 state hatchery constructed: Snettisham 1 state hatchery closed (Fire Lake) and Starrigavan project ended	16	11	
1980	1 PNP permit issued to Burro Creek (#12) 2 state hatcheries constructed: Clear and Main Bay; and 1 hatchery at Tamgas Creek constructed (Metlakatla Indian Community/Bureau of Indian Affairs)	18	12	3

-continued-

Year	Event	No. of state operated hatcheries	No. of PNP owned or operated hatcheries	No. of federal hatcheries
1981	1 state hatchery closed: East Creek	17	12	3
	2 state hatcheries constructed: Sikusuilag and Trail Lakes	19		
	1 PNP hatchery permit rescinded and new permit issued to new operator at Salmon Creek (#9, new #14)		12	
	3 PNP permits issued: Port Armstrong (#13), Solomon Gulch (#15), Medvejie Creek (#16)		15	
1982	2 PNP permits issued: Eklutna (#17) and Favorite Bay (#18)		17	
1983	3 PNP permits issued: Neets Bay (#19), Esther Island (renamed Wally Noerenberg Hatchery in 1990; #20), Crittenden Creek (#22)		20	
	1 state hatchery completed: Broodstock Development Center	20		
1984	1 PNP permit issued to Santa Anna (#21)		21	
1985	1 PNP permit issued to Port Camden (#23)		22	
1986	1 PNP permit issued to Beaver Falls (#24) jointly operated ADF&G/SSRAA	19	23	
1987	1 PNP permit issued to Gastineau (renamed Macaulay Salmon Hatchery in 2000; #25)		24	
1988	4 state hatcheries contracted to private sector (Cannery Creek, Trail Lakes, Hidden Falls, Kitoi Bay)	15		
	4 PNP permits issued: Cannery Creek (#26), Trail Lakes (#27), Hidden Falls (#28), Kitoi Bay (#29)		28	
	1 state hatchery constructed (Pillar Creek)	16		
	1 PNP permit rescinded: Sandy Bay PNP (#4)		27	
	1 PNP permit rescinded: Salmon Creek (#14)		26	
1990	CSHB432 becomes law (AS 16.40.210) prohibiting finfish farming in Alaska			
	1 PNP permit issued to Bell Island (#30)		27	
1991	5 state hatcheries contracted to private sector: Beaver Falls (#24), already operated by PNP; Main Bay, Tutka, Pillar Creek, Gulkana	12	31	
	Portions of 6 state hatcheries paid for by private or federal funds			
1992	1 state hatchery closed: Russell Creek	11		
	2 PNP permits issued: Port Graham (#33), Haines Projects (#34)		33	
	1 PNP permit revoked: Meyers Chuck (#10)		32	
1992	3 state hatcheries transferred from Commercial Fisheries Management and Development to Sport Fish Division (Broodstock Development Center, Elmendorf, and Ft. Richardson)	11	32	3

-continued-

Year	Event	No. of state operated hatcheries	No. of PNP owned or operated hatcheries	No. of federal hatcheries
1993	Fisheries Rehabilitation, Enhancement and Development Division merged with the Commercial Fisheries Division to form the Commercial Fisheries Management and Development Division			
	2 state hatcheries contracted to private sector: Crooked Creek and Klawock River	9	34	
	1 state hatchery closed: Big Lake	8		
1994	1 state hatchery conveyed: Deer Mountain	7		
	3 PNP permits issued: Tutka Bay Lagoon (#32), Crooked Creek (#35), Klawock River (#36), Deer Mountain (#37)		35	
	Ft. Richardson Hatchery merged with Broodstock Development Center	6		
1995	1 PNP hatchery permit rescinded and new permit issued to new operator at Klawock River (#36, new #38)		35	
	1 state hatchery transferred from Division of Commercial Fisheries Management & Development to Division of Sport Fish: Crystal Lake			
	1 state hatchery closed: Sikusuilaq	5		
1996	1 state hatchery contracted to private sector: Snettisham (#39)	4	36	
	1 state hatchery transferred from Commercial Fisheries Management and Development Division to Sport Fish Division: Clear			
	3 PNP permits revoked: Crittenden Creek (#22), Santa Anna (#21), and Favorite Bay (#18)		33	
1997	1 state hatchery closed: Clear	3		
	2 state contracted (PNP) hatcheries closed: Beaver Falls (#24), Crooked Creek (#35)		31	
	1 PNP hatchery rescinded and new permit issued to new operator at Burnett Inlet (#5, new #40)		31	
1998	1 PNP hatchery permit issued: Pillar Creek (#41), already operating under contract			
2000	1 state hatchery contracted to private sector: Crystal Lake Hatchery (PNP permit not issued)	2	32	
	1 PNP hatchery permit rescinded: Port Camden (# 23)		31	
	1 PNP hatchery permit issued: Gulkana (#42), already operating under contract			
2001	1 PNP hatchery permit rescinded: Kowee Creek (#6)		30	
	1 PNP permit issued: Main Bay (#31)			

-continued-

Appendix A1.–Page 4 of 4.

Year	Event	No. of state operated hatcheries	No. of PNP owned or operated hatcheries	No. of federal hatcheries
2002	1 PNP hatchery closed: Bell Island (#30)		29	
2004	1 PNP hatchery permit issued: Port Saint Nicholas (#43)		30	
2007	1 PNP hatchery permit issued: Sawmill Creek (#44)		31	
2008	1 PNP hatchery permit rescinded: Burro Creek (#12)		30	
2011	1 PNP hatchery permit rescinded and new permit issued to new operator at Sheldon Jackson (#3, new #45)		30	
	1 state hatchery closed (Elmendorf), 1 state hatchery opened (William Jack Hernandez)	2		
2012	1 state hatchery opened (Ruth Burnett)	3		
	1 PNP hatchery permit rescinded (#33) and a new permit issued to new operator at Port Graham (#46)		30	
2014	1 state hatchery closed: Fort Richardson	2	30	
2015	1 PNP Hatchery, Sheep Creek in Juneau, permit was voluntarily rescinded		29	
2016	1 PNP hatchery permit rescinded (#38) and a new permit issued to new operator at Klawock River (#47)		29	
	1 PNP hatchery permit rescinded (#43) and a new permit issued to new operator at Port St. Nicholas (#48)			
2017	1 PNP hatchery permit rescinded (#37) and a new permit issued to new operator at Deer Mountain (#49)		29	
2018	1 PNP hatchery permit rescinded (#7) and a new permit issued to new operator at Gunnuk Creek Hatchery (#50)	2	30	3
	1 PNP hatchery permit issued: Little Port Walter Hatchery (#51)			

Note: Four private nonprofit (PNP) hatchery facilities are permitted but currently inactive: Perry Island Hatchery (Prince William Sound), Eklutna Hatchery (Eklutna), Little Port Walter operated by Armstrong-Keta Incorporated (southeast), and Haines Projects (Haines).

Note: There are 11 state-owned hatcheries that are contracted to PNP operators.

Note: Of the 3 federal facilities, 2 are hatchery research: Little Port Walter Hatchery (active) and Auke Creek Hatchery (inactive). Tamgas Creek Hatchery (Metlakatla, active) is a tribal hatchery under tribal and federal regulation.

**APPENDIX B: PERMITTED CAPACITY OF ALASKA
PRIVATE NONPROFIT HATCHERIES, 2023**

Appendix B1.—Permitted capacity of Alaska private nonprofit hatcheries, in millions of eggs, 2023.

Region/Area	Corp.	Hatchery	Chinook	Sockeye	Coho	Pink	Chum	Other	Total
Southeast									
Southern Southeast	SSRAA	Burnett Inlet	0	2.70	4.50	0	97.20	0	104.40
		Neets Bay	2.00	0	5.00	0	102.70	0	109.70
		Whitman Lake	2.30	0	7.50	0	45.10	0	54.70
		Deer Mountain	0.60	0	0	0	0	0.20	0.80
		Klawock River	0	1.00	5.50	0	0	0	6.6
		Port Saint Nicholas	0.77	0	0	0	8.00	0	8.77
Southern Southeast total			5.67	3.70	22.50	0	253.00	0.20	285.07
Northern Southeast	NSRAA	Gunnuk Creek	0	0	0.50	20.00	65.00	0	85.50
		Haines projects ^a	0	2.00	0	0	4.80	0	6.80
		Hidden Falls ^b	3.80	0	7.70	0	101.00	0	112.50
		Medvejie Creek	5.20	0	3.30	0.30	77.00	0	85.80
		Sawmill Creek	2.00	0	4.33	0	30.00	0	36.33
	AKI	Port Armstrong ^{b,c}	2.00	0	6.00	105.00	60.00	0	171.00
		Little Port Walter ^{a,d}	0.60	0	0	0	0	0	0.60
	DIPAC	Macaulay	1.25	0	1.50	0	135.00	0.05	137.80
		Snettisham	0	33.50	0	0	0	0	33.50
	SSSC	Sheldon Jackson	0	0	0.25	3.00	12.00	0	15.25
		Medvejie	0	0	0	0	9.00	0	9.0
Northern Southeast total			12.85	35.50	23.58	128.30	493.80	0.05	694.08
Southeast total			18.52	39.20	46.08	128.30	746.80	0.25	979.15
Southcentral									
Prince William Sound	PWSAC	Armin F. Koernig	0	0	0	190.00	34.00	0	224.00
		Cannery Creek	0	0	0	187.00	0	0	187.00
		Gulkana	0	36.75	0	0	0	0	36.75
		Main Bay	0	12.40	0	0	0	0	12.40
		Wally Noerenberg	4.00	0	4.00	148.00	131.00	0	287.00
	VFDA	Solomon Gulch	0.30	0	2.00	270.00	0	0	272.30
Prince William Sound total			4.30	49.15	6.00	795.00	165.00	0	1,019.45
Cook Inlet									
	CIAA	Eklutna ^a	0	18.00	0.16	0	0	0	18.16
		Trail Lakes	4.00	30.00	6.00	0	0	0	40.00
		Tutka Bay	0	0.66	0	125.00	0	0	125.66
		Port Graham	0	0	0	125.00	0	0	125.00
Cook Inlet total			4.00	48.66	6.16	250.00	0	0	308.82
Southcentral total			8.30	97.81	12.16	1,045.00	165.00	0	1,328.27
Kodiak/Westward									
Kodiak	KRAA	Kitoy Bay	0	0.85	2.30	215.00	36.00	0	254.15
		Pillar Creek	0.45	20.00	0.50	0	0	0.20	21.15
Kodiak/Westward total			0.45	20.85	2.80	215.00	36.00	0.20	275.30
Statewide total			27.27	157.86	61.04	1,388.30	947.80	0.45	2,582.72

-continued-

Note: Perry Island Hatchery (Prince William Sound) is permitted but currently has zero capacity.

Note: SSRAA = Southern Southeast Regional Aquaculture Association; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a Inactive.

^b The chum salmon egg take at Hidden Falls Hatchery includes 40 million summer chum salmon eggs that can be taken on behalf of the Port Armstrong Hatchery to be released at Hidden Falls Hatchery-permitted sites. The chum salmon egg take at Hidden Falls Hatchery that is on behalf of Port Armstrong Hatchery and the chum salmon egg take at Port Armstrong Hatchery will not exceed the Port Armstrong Hatchery permitted capacity.

^c Port Armstrong can take up to 6.0 million Chinook and coho salmon eggs in combination, not to exceed 2.0 million Chinook salmon eggs. Egg capacity is broken out by species in table cells, and the coho capacity but not the Chinook capacity are added in the totals.

^d Little Port Walter operated by AKI is under a use agreement with NMFS. Little Port Walter operated by NMFS is under Aquatic Resource Permits and not a PNP permit and does not have a permitted capacity.

**APPENDIX C: ACTIVE ALASKA HATCHERIES AND
CONTACT INFORMATION**

Appendix C1.–Active Alaska hatcheries, 2023.

Type ^a	Region	Agency	Corporate name	Hatchery	PNP Permit #	PNP permit issued	Species permitted	Website
Southern Southeast								
R		SSRAA	Southern Southeast Regional Aquaculture Assoc.	Burnett Inlet	40	09/30/1997	sockeye, coho, chum	http://ssraa.org
				Crystal Lake ^b	NA		Chinook, coho	
				Neets Bay	19	06/17/1983	chum, coho, Chinook	
				Whitman Lake	8	03/09/1978	chum, coho, Chinook	
				Klawock River ^b	47	07/01/2016	coho, sockeye	
				Port Saint Nicholas	43	06/25/2004	Chinook, chum	
				Deer Mountain	49	08/17/2017	Chinook	
F		MIC	Tamgas Creek Hatchery	Tamgas Creek ^c	NA		chum, coho, Chinook, sockeye, pink	
Northern Southeast								
R		NSRAA	Northern Southeast Regional Aquaculture Assoc.	Hidden Falls ^b	28	06/22/1988	chum, Chinook, coho	https://www.nsraa.org/
				Medvejie Creek	16	08/17/1981	chum, coho, Chinook, pink	
				Sawmill Creek	44	03/11/2007	coho, chum	
				Gunnuk Creek	50	04/11/2018	coho, pink, chum	
N		AKI	Armstrong-Keta, Inc.	Port Armstrong	13	02/23/1981	pink, chum, Chinook, coho	https://www.armstrong-keta.org/
N		DIPAC	Douglas Island Pink and Chum, Inc.	Macaulay	25	06/03/1987	chum, coho, Chinook	http://www.dipac.net/
				Snettisham ^b	39	07/15/1996	sockeye	
N		SSSC	Sitka Sound Science Center	Sheldon Jackson	45	04/13/2011	pink, chum, coho	https://sitkascience.org/
F		NMFS	National Marine Fisheries Service	Little Port Walter ^d	NA		Chinook	https://www.fisheries.noaa.gov/about/auke-bay-laboratories
Prince William Sound								
R		PWSAC	Prince William Sound Aquaculture Assoc.	AF Koernig	2	09/29/1975	pink, chum	https://pwsac.com
				Cannery Creek ^b	26	06/22/1988	pink	
				Gulkana ^b	42	07/05/2000	sockeye	
				Main Bay ^b	31	04/17/2001	sockeye	
				W. Noerenberg	20	06/17/1983	pink, chum, Chinook, coho	
N		VFDA	Valdez Fisheries Development Association, Inc.	Solomon Gulch	15	06/26/1981	pink, coho, Chinook	https://www.valdezfisheries.org

-continued-

Appendix C1.–Page 2 of 2.

Type ^a	Region	Agency	Corporate name	Hatchery	PNP Permit #	PNP permit issued	Species permitted	Website
Cook Inlet								
R		CIAA	Cook Inlet Aquaculture Association	Trail Lakes ^b	27	06/22/1988	sockeye, coho, Chinook	https://www.ciaa.net/
				Tutka Bay Lagoon ^b	32	01/03/1994	pink, sockeye	
				Port Graham	46	01/14/2014	pink	
S		ADF&G	Alaska Department of Fish and Game	W.J. Hernandez ^c	NA		char, grayling, rainbow trout, Chinook, coho	https://www.adfg.alaska.gov/index.cfm?adfg=fishingSportStockingHatcheries.main
Kodiak								
R		KRAA	Kodiak Regional Aquaculture Association	Kitoi Bay ^b	29	07/05/1988	pink, chum, coho, sockeye	https://kraa.org/
				Pillar Creek ^b	41	05/01/1998	sockeye, coho, Chinook, rainbow trout	
Arctic-Yukon-Kuskokwim								
S		ADF&G	Alaska Department of Fish and Game	Ruth Burnett ^c	NA		char, grayling, rainbow trout, Chinook, coho	https://www.adfg.alaska.gov/index.cfm?adfg=fishingSportStockingHatcheries.main

Note: MIC = Metlakatla Indian Community.

^a R = Regional Aquaculture Association PNP hatchery, N = Nonregional Association PNP hatchery, F = Federal/Bureau of Indian Affairs hatchery, S = State hatchery.

^b State-owned facility contracted to the private sector to operate.

^c Federally recognized tribal reservation hatchery.

^d Hatchery research facility.

^e ADF&G Sport Fish Division hatchery.

Appendix C2.–Actively operated Alaska hatcheries contact information, 2023.

Type ^a	Region	Agency	Address	Office phone	Hatchery	Hatchery manager	Director	Email
Southern Southeast								
R		SSRAA	14 Borch St., Ketchikan, AK 99901	(907) 225-9605			Susan Doherty	sdoherty@ssraa.org
				(907) 254-1242	Burnett Inlet	Cody Pederson		burnettinlet@ssraa.org
				(907) 650-7181	Crystal Lake ^b	Loren Thompson		crystallake@ssraa.org
				(907) 225-8790	Neets Bay	Charlie Currit		neetsbay@ssraa.org
				(907) 225-2635	Whitman Lake	Matt Allen		whitman@ssraa.org
				(907) 225-9606	Deer Mountain	Matt Allen		deermountain@ssraa.org
				(907) 755-2231	Klawock River ^b	Troy Liske		tliske@ssraa.org
				(907) 755-2231	Port Saint Nicholas	Troy Liske		tliske@ssraa.org
F		MIC	PO Box 8, Metlakatla, AK 99929	(907) 886-3150	Tamgas Creek ^c	Steve Leask		tchsteve@hughes.net
Northern Southeast								
R		NSRAA	1308 Sawmill Cr. Rd., Sitka, AK 99835	(907) 747-6850			Scott Wagner	scott_wagner@nsraa.org
				(907) 747-6850	Gunnuk Creek	Ryan Schuman		ryan_schuman@nsraa.net
				(907) 725-0995	Hidden Falls ^b	Kevin Connell		kevin_connell@nsraa.org
				(907) 738-1438	Medvejie Creek	Jared Nelson		jared_nelson@nsraa.org
				(907) 747-5863	Sawmill Creek	Rebecca Olson		rebecca_olson@nsraa.org
N		AKI	PO Box 1075, Sitka, AK 99835	(907) 586-3443			Bryanna Graham	aki@ak.net
				(907) 568-2228	Port Armstrong	Rob Sangster		portarmstronghatchery@gmail.com
N		DIPAC	2697 Channel Dr., Juneau, AK 99801	(907) 463-5114			Katie Harms	katie_harms@dipac.net
				(907) 463-5114	Macaulay Salmon	Arthur Hamlett		arthur_hamlett@dipac.net
				(907) 586-3830	Snettisham ^b	Kevin Steck		kevin_steck@dipac.net
N		SSSC	834 Lincoln St., Sitka, AK 99835	(907) 747-8878			Lisa Busch	lbusch@sitkascience.org
					Sheldon Jackson	Bill Coltharp		wcoltharp@sitkascience.org
F		NMFS	17109 Lena Pt Loop Rd., Juneau, AK 99801	(907) 789-6033	Little Port Walter ^d	Charlie Waters		Charlie.waters@noaa.gov

-continued-

Appendix C2.–Page 2 of 2.

Type ^a	Region	Agency	Address	Office phone	Hatchery	Hatchery manager	Director	Email
Prince William Sound								
R		PWSAC	Cordova, AK 99574	(907) 424-7511			Goeff Clark	geoff.clark@pwsac.com
					A F Koernig Cannery Creek ^b Gulkana ^b Main Bay ^b W Noerenberg	Anthony Tornatore Neil Wright Luis Romero Jason Myhrer Mike Anderson		afk.pwsac@ak.net cch.pwsac@ak.net gkh.pwsac@ak.net mbh.pwsac@ak.net wnh.pwsac@ak.net
N		VFDA	PO Box 125, Valdez, AK 99686	(907) 835-4874 (907) 835-1329	Solomon Gulch	Rob Unger	Mike Wells	mike.wells@valdezfisheries.com rob.unger@valdezfisheries.com
Cook Inlet								
R		CIAA	40610 Kalifornsky Beach Rd., Kenai, AK 99611	(907) 283-5761 (907) 288-3688 (866) 309-6301 (907) 284-2233	Trail Lakes ^b Tutka Bay Lagoon ^b Port Graham	Alyson Crocker Brett Jenkins Brett Jenkins	Dean Day	dday@ciaa.net acrocker@ciaa.net bjenkins@ciaa.net bjenkins@ciaa.net
Kodiak								
R		KRAA	104 Center St., Suite 205, Kodiak, AK 99615	(907) 486-6555 (877) 628-4449 (907) 486-4730	Kitoy Bay ^b Pillar Creek ^b	Lauren Deal James “Hawk” Turman	Tina Fairbanks	kraa.fairbanks@gci.net kraa@gci.net kitoi@gci.net pch@gci.net
S		ADF&G, Division of Sport Fish	941 N. Reeve Blvd., Anchorage, AK 99501 1150 Wilbur St., Fairbanks, AK 99701	(907) 269-0296 (907) 451-2661	WJ Hernandez Ruth Burnett	Andrew Garry Travis Hyer	Chuck Pratt	charles.pratt@alaska.gov andrew.garry@alaska.gov travis.hyer@alaska.gov

Note: SSRAA = Southern Southeast Regional Aquaculture Association; MIC = Metlakatla Indian Community; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; NMFS = National Marine Fisheries Service; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a R=Regional Aquaculture Association PNP hatchery, N=Nonregional Association PNP hatchery, F=Federal/Bureau of Indian Affairs hatchery, S=State hatchery.

^b State-owned facility contracted to the private sector to operate.

^c Federally recognized tribal reservation hatchery.

^d Hatchery research facility.

**APPENDIX D: COMMERCIAL SALMON HARVEST AND
VALUE, 2023**

Appendix D1.—Alaska (preliminary) commercial harvest and Alaska hatchery-produced harvest by region, 2023.

Area	Harvest	Chinook	Sockeye	Coho	Pink	Chum	Total
Southeast ^a	Total commercial harvest ^b	194,584	910,446	1,765,609	46,303,064	14,650,978	63,824,681
	Hatchery commercial cost-recovery harvest	7,782	57,544	236,534	840,409	3,653,505	4,795,774
	Common property commercial harvest	186,802	852,902	1,529,075	45,462,655	10,997,473	59,028,907
	Hatchery-produced fish in comm. common prop. harvest ^c	37,592	44,629	361,121	350,345	9,821,845	10,615,532
	% of hatchery-produced fish in comm. common prop. harv.	20%	5%	24%	0.8%	89%	18%
	Hatchery-produced fish in total commercial harvest	45,374	102,173	597,655	1,190,754	13,475,350	15,411,306
	% of hatchery-produced fish in total commercial harvest	23%	11%	34%	3%	92%	24%
Prince William Sound	Total commercial harvest ^b	11,564	1,980,407	185,571	57,052,569	5,136,502	64,366,613
	Hatchery commercial cost-recovery harvest	44	227,603	16	10,201,351	1,228,250	11,657,264
	Common property commercial harvest	11,520	1,752,804	185,555	46,851,218	3,908,252	52,709,349
	Hatchery-produced fish in comm. common prop. harvest ^c	0	581,577	18,487	36,621,666	3,092,005	40,313,735
	% of hatchery-produced fish in comm. common prop. harv.	0%	33%	10%	78%	79%	76%
	Hatchery-produced fish in total commercial harvest	44	809,000	19,000	46,823,000	4,320,000	51,971,000
	% of hatchery-produced fish in total commercial harvest	0%	41%	10%	82%	84%	81%
Cook Inlet	Total commercial harvest ^b	1,076	1,912,020	81,802	2,729,934	165,144	4,889,976
	Hatchery commercial cost-recovery harvest	0	166,000	15	1,906,294	186	2,072,775
	Common property commercial harvest	1,076	1,745,740	81,787	823,640	164,958	2,817,201
	Hatchery-produced fish in comm. common prop. harvest ^c	0	24,623	0	205,496	0	230,119
	% of hatchery-produced fish in comm. common prop. harv.	0%	1%	0%	25%	0%	8%
	Hatchery-produced fish in total commercial harvest	0	191,000	15	2,112,000	186	2,303,000
	% of hatchery-produced fish in total commercial harvest	0%	10%	0%	77%	0%	47%
Kodiak	Total commercial harvest ^b	8,765	2,558,153	238,721	23,858,800	827,223	27,500,217
	Hatchery commercial cost-recovery harvest	1	25,835	1,382	1,103,473	412	1,139,658
	Common property commercial harvest	8,764	2,532,318	237,339	22,755,327	826,811	26,360,559
	Hatchery-produced fish in comm. common prop. harvest ^c	0	304,301	62,180	8,961,948	239,029	9,567,458
	% of hatchery-produced fish in comm. common prop. harv.	0%	12%	26%	39%	29%	36%
	Hatchery-produced fish in total commercial harvest	1	330,136	63,562	10,065,421	239,441	10,707,116
	% of hatchery-produced fish in total commercial harvest	0%	13%	27%	42%	29%	39%
Chignik, AK Peninsula	Common property commercial harvest	14,758	3,958,428	256,719	19,262,507	1,321,203	24,813,615
	Hatchery-produced fish in total comm. harvest	0	0	0	0	0	0
	% of hatchery-produced fish in comm. common prop. harv.	0%	0%	0%	0%	0%	0%
Bristol Bay	Common property commercial harvest	7,983	40,578,235	17,579	3,140	341,504	40,948,441
	Hatchery-produced fish in total comm. harvest	0	0	0	0	0	0
	% of hatchery-produced fish in comm. common prop. harv.	0%	0%	0%	0%	0%	0%

-continued-

Appendix D1.–Page 2 of 2.

Area	Harvest	Chinook	Sockeye	Coho	Pink	Chum	Total
Arctic- Yukon- Kuskokwim	Common property commercial harvest	0	370	5,426	3,613	157,474	166,883
	Hatchery-produced fish in total comm. harvest	0	0	0	0	0	0
	% of hatchery-produced fish in comm. common prop. harv.	0%	0%	0%	0%	0%	0%
Statewide ^d	Total commercial harvest ^b	238,730	51,898,059	2,551,427	149,213,627	22,600,028	226,501,871
	Hatchery commercial cost-recovery harvest	7,827	477,262	237,947	14,051,527	4,900,000	19,674,563
	Common property commercial harvest	230,903	51,420,797	2,313,480	135,162,100	17,700,028	206,827,308
	Hatchery-produced fish in comm. common prop. harvest ^c	37,592	955,130	441,788	46,139,455	13,152,879	60,726,844
	% of hatchery-produced fish in comm. common prop. harv.	16%	2%	19%	34%	74%	29%
	Hatchery-produced fish in total commercial harvest	45,419	1,432,392	679,735	60,190,982	18,052,879	80,401,407
	% of hatchery-produced fish in total commercial harvest	19%	3%	27%	40%	80%	35%

^a Does not include Annette Island Reserve harvest.

^b Total commercial harvest by all commercial gear types, including fish harvested by hatcheries for cost recovery from ADF&G Oceans AK statewide salmon fish ticket database, excluding 1024 Chinook salmon sold at carcass price on fish tickets processed in the Douglas office and 8555 coho salmon sold for \$0 on fish tickets processed in the Kodiak office [URL not publicly available; accessed January 13, 2023].

^c Hatchery-produced fish in CCP harvest data is as reported by operators.

^d Some figures may not total exactly due to rounding.

Appendix D2.—Estimated exvessel value of the total Alaska CCP harvest (preliminary), by region, 2023.

Area	Harvest	Chinook	Sockeye	Coho	Pink	Chum	Total
Southeast ^a	Value of the commercial harvest ^{b,c}	\$12,685,951	\$5,490,268	\$11,797,476	\$33,885,357	\$53,207,667	\$117,066,719
	Value of hatchery-produced fish in cost recovery harvest	\$507,349	\$347,008	\$1,580,477	\$615,025	\$13,268,362	\$16,318,221
	Value of the CCP harvest	\$12,178,602	\$5,143,260	\$10,216,999	\$33,270,332	\$39,939,305	\$100,748,498
	Value of hatchery-produced fish in CCP	\$2,450,820	\$269,127	\$2,412,944	\$256,388	\$35,669,800	\$41,059,079
	% value of hatchery-produced fish in CCP	20%	5%	24%	0.8%	89%	41%
	Value of hatchery-produced fish in total comm. harvest	\$2,958,169	\$616,135	\$3,993,421	\$871,413	\$48,938,162	\$57,377,300
	% of hatchery-produced fish in total comm. harvest value	23%	11%	34%	3%	92%	49%
Prince William Sound	Value of the commercial harvest ^{b,c}	\$1,845,258	\$18,802,271	\$1,555,055	\$47,878,049	\$15,979,826	\$86,060,459
	Value of hatchery-produced fish in cost recovery harvest	\$7,021	\$2,160,896	\$134	\$8,560,890	\$3,821,126	\$14,550,067
	Value of the CCP harvest	\$1,838,237	\$16,641,375	\$1,554,921	\$39,317,159	\$12,158,700	\$71,510,392
	Value of hatchery-produced fish in CCP	\$0	\$5,521,576	\$154,918	\$30,732,603	\$9,619,329	\$46,028,426
	% value of hatchery-produced fish in CCP	0%	33%	10%	78%	79%	64%
	Value of hatchery-produced fish in total comm. harvest	\$7,021	\$7,682,472	\$155,052	\$39,293,493	\$13,440,455	\$60,578,493
	% of hatchery-produced fish in total comm. harvest value	0%	41%	10%	82%	84%	70%
Cook Inlet	Value of the commercial harvest ^{b,c}	\$51,674	\$15,997,112	\$255,985	\$1,718,066	\$495,628	\$18,518,465
	Value of hatchery-produced fish in cost recovery harvest	\$0	\$1,391,199	\$47	\$1,199,714	\$558	\$2,591,518
	Value of the CCP harvest	\$51,674	\$14,605,913	\$255,938	\$518,352	\$495,070	\$15,926,947
	Value of hatchery-produced fish in CCP	\$0	\$206,000	\$0	\$129,000	\$0	\$335,000
	% value of hatchery-produced fish in CCP	0.0%	1.4%	0.0%	24.9%	0.0%	2%
	Value of hatchery-produced fish in total comm. harvest	\$0	\$1,600,000	\$47	\$1,329,000	\$558	\$2,930,000
	% of hatchery-produced fish in total comm. harvest value	0%	10%	0%	77%	0%	16%
Kodiak	Value of the commercial harvest ^{b,c}	\$42,100	\$10,201,907	\$468,548	\$20,176,591	\$1,467,906	\$32,357,052
	Value of hatchery-produced fish in cost recovery harvest	\$5	\$103,030	\$2,713	\$933,170	\$731	\$1,331,282
	Value of the CCP harvest	\$42,095	\$10,098,877	\$465,835	\$19,243,421	\$1,467,175	\$31,317,403
	Value of hatchery-produced fish in CCP	\$0	\$1,213,552	\$122,043	\$7,578,820	\$424,157	\$9,338,572
	% value of hatchery-produced fish in CCP	0%	12%	26%	39%	29%	30%
	Value of hatchery-produced fish in total comm. harvest	\$5	\$1,316,582	\$124,756	\$8,511,990	\$424,888	\$10,378,221
	% of hatchery-produced fish in total comm. harvest value	0%	13%	27%	42%	29%	32%
Chignik, AK Penin., Aleut. Is.	Value of the CCP harvest	\$51,277	\$13,836,096	\$270,869	\$10,078,817	\$2,107,073	\$26,344,132
	Value of hatchery-produced fish in total comm. harvest	\$0	\$0	\$0	\$0	\$0	\$0
	% Value of hatchery-produced fish in CCP	0%	0%	0%	0%	0%	0%
Bristol Bay	Value of the CCP harvest	\$9,254	\$116,829,585	\$26,535	\$611	\$574,777	\$117,440,762
	Value of hatchery-produced fish in total comm. harvest	\$0	\$0	\$0	\$0	\$0	\$0
	% Value of hatchery-produced fish in CCP	0%	0%	0%	0%	0%	0%

-continued-

Appendix D2.–Page 2 of 2.

Area	Harvest	Chinook	Sockeye	Coho	Pink	Chum	Total
Arctic-	Value of the CCP harvest	\$0	\$4,910	\$44,239	\$3,606	\$791,501	\$844,256
Yukon-	Value of hatchery-produced fish in total comm. harvest	\$0	\$0	\$0	\$0	\$0	\$0
Kuskokwim	% Value of hatchery-produced fish in CCP	0%	0%	0%	0%	0%	0%
Statewide ^d	Value of the commercial harvest	\$14,685,514	\$181,162,149	\$14,418,707	\$113,741,097	\$74,624,378	\$398,631,845
	Value of hatchery-produced fish in cost recovery harvest	\$514,375	\$4,004,934	\$1,583,371	\$11,309,085	\$17,090,777	\$34,502,937
	Value of the CCP harvest	\$14,171,139	\$177,157,215	\$12,835,336	\$102,432,012	\$57,533,601	\$364,128,908
	Value of hatchery-produced fish in CCP	\$2,450,820	\$7,210,255	\$2,689,905	\$38,696,811	\$45,713,286	\$96,761,077
	% value of hatchery-produced fish in CCP	17%	4%	19%	34%	61%	24%
	Value of hatchery-produced fish in total comm. harvest	\$2,965,195	\$11,215,189	\$4,273,276	\$50,005,896	\$62,804,063	\$131,264,014
	% of hatchery-produced fish in total comm. harvest value	20%	6%	30%	44%	84%	33%

Note: CCP = commercial common property harvest.

^a Does not include Annette Island Reserve harvest.

^b Total commercial harvest by all commercial gear types, including fish harvested by hatcheries for cost recovery.

^d Value source: https://www.adfg.alaska.gov/static/fishing/pdfs/commercial/2022_preliminary_salmon_summary_table.pdf (accessed 1/5/2023).

^d Some figures may not total exactly due to rounding.

**APPENDIX E: PROJECTED HATCHERY RETURN BY
SPECIES, 2023**

Appendix E1.—Projected adult return, by species, to Alaska fisheries enhancement projects in 2024.

Region/Operator/Hatchery/Location			Chinook	Sockeye	Coho	Pink	Chum	Rainbow Trout	Landlocked Salmon	Total
Southern Southeast										
SSRAA	Burnett Inlet	Burnett Inlet	0	0	0	0	1,005,000	0	0	1,005,000
		Nakat Inlet	0	0	0	0	415,000	0	0	415,000
	Crystal Lake	Anita Bay	0	0	0	0	458,000	0	0	458,000
		Anita Bay	7,600	0	0	0	0	0	0	7,600
		Crystal Creek	2,700	0	4,100	0	0	0	0	6,800
	Neets Bay	Neets Bay	100	0	0	0	0	0	0	100
		Neets Bay	0	0	109,700	0	1,580,000	0	0	1,689,700
	Whitman Lake	Nakat Inlet	0	0	0	0	20,000	0	0	20,000
		Kendrick Bay	0	0	0	0	1,238,000	0	0	1,238,000
		Carroll Inlet	6,200	0	0	0	0	0	0	6,200
		Herring Cove	6,700	0	18,400	0	0	0	0	25,100
		Nakat Inlet	0	0	24,500	0	0	0	0	24,500
	Deer Mountain	Anita Bay	0	0	14,300	0	0	0	0	14,300
		Ketchikan Creek	500	0	0	0	0	0	0	500
	Klawock River	Klawock Lake	0	0	185,800	0	0	0	0	185,800
		Port Saint Nicholas	7,200	0	0	0	0	0	0	7,200
	Port Saint Nicholas	Port Saint Nicholas	7,200	0	0	0	0	0	0	7,200
		Port Asumcion	0	0	0	0	755,000	0	0	755,000
Southern Southeast total			31,000	0	356,800	0	5,471,000	0	0	5,858,800
Northern Southeast										
NSRAA	Hidden Falls	Hidden Falls	550	0	36,000	0	1,996,000	0	0	2,032,550
		Southeast Cove	0	0	0	0	260,000	0	0	260,000
		Thomas Bay	0	0	0	0	381,000	0	0	381,000
		Gunnuk Creek	350	0	0	0	0	0	0	350
		Mist Cove	0	0	82,000	0	0	0	0	82,000
Medvejie		Bear Cove	15,094	0	0	2,868	1,001,100	0	0	1,019,062
		Crawfish Inlet	674	0	0	0	0	0	0	674
		Crescent Bay	1,139	0	0	0	0	0	0	1,139
		Deep Inlet	0	0	0	0	1,309,100	0	0	1,309,100
Sawmill Creek		Bear Cove	0	0	11,000	0	0	0	0	11,000
		Deep Inlet	0	0	17,000	0	0	0	0	17,000
		Crawfish Inlet	0	0	0	0	1,246,000	0	0	1,246,000
Gunnuk Creek	Gunnuk Creek	0	0	0	0	211,000	0	0	211,000	

-continued-

Region/Operator/Hatchery/Location			Chinook	Sockeye	Coho	Pink	Chum	Rainbow Trout	Landlocked Salmon	Total
Southern Southeast										
AKI	Port Armstrong	Port Armstrong	0	0	90,349	477,396	86,431	0	0	654,176
DIPAC	Macaulay	Amalga Harbor	0	0	0	0	1,683,009	0	0	1,683,009
		Boat Harbor	0	0	0	0	782,788	0	0	782,788
		Limestone Inlet	0	0	0	0	165,201	0	0	165,201
		Fish Creek	48	0	0	0	0	0	0	48
		Lena Cove	507	0	0	0	0	0	0	507
		Gastineau Channel	2,431	0	46,400	0	1,011,264	0	0	1,060,095
		Auke Bay	164	0	0	0	0	0	0	164
	Snettisham	Speel Arm	0	125,741	0	0	0	0	0	125,741
		Stikine River	0	0 ^a	0	0	0	0	0	0
		Sweetheart Lake	0	4,400	0	0	0	0	0	4,400
		Taku River	0	0 ^a	0	0	0	0	0	0
SSSC	Sheldon Jackson	Crescent Bay	0	0	8,424	360,000	58,000	0	0	426,424
		Deep Inlet	0	0	0	0	149,088	0	0	149,088
NMFS	Little Port Walter	Little Port Walter	787	0	0	0	0	0	0	787
Northern Southeast total			21,744	130,141	291,173	840,264	10,339,981	0	0	11,623,303
Southeast total			52,744	130,141	647,973	840,264	15,810,981	0	0	17,482,103
Prince William Sound										
PWSAC	A F Koernig	Sawmill Bay	0	0	0	2,800,000	240,000	0	0	3,040,000
	Cannery Creek	Unakwik Inlet	0	0	0	4,100,000	0	0	0	4,100,000
	Gulkana	Crosswind Lake	0	45,000	0	0	0	0	0	45,000
		Paxson Lake	0	22,800	0	0	0	0	0	22,800
	Main Bay	Main Bay	0	864,000	0	0	0	0	0	864,000
	Wally Noerenberg	Lake Bay	0	0	62,000	3,300,000	2,820,000	0	0	6,182,000
		Chenega Bay	2	0	1,900	0	0	0	0	1,902
		Chenega Cove	650	0	0	0	0	0	0	650
		Fleming Spit	0	0	1,400	0	0	0	0	1,400
		Port Chalmers	0	0	0	0	920,000	0	0	920,000
		Whittier	0	0	1,400	0	0	0	0	1,400
VFDA	Solomon Gulch	Solomon Gulch	0	0	54,375	15,530,878	0	0	0	15,585,253
		Boulder Bay	0	0	588	0	0	0	0	588

-continued-

Appendix E1.–Page 3 of 4.

Region/Operator/Hatchery/Location			Chinook	Sockeye	Coho	Pink	Chum	Rainbow Trout	Landlocked Salmon	Total	
ADFG	William Jack Hernandez	Whittier	1,085	0	0	0	0	0	0	1,085	
		Fleming Spit	1,113	0	0	0	0	0	0	1,113	
		Prince William Sound lakes	0	0	0	0	0	1,183	0	1,183	
	Ruth Burnett	Glennallen lakes	0	0	0	0	0	1,418	4	1,438	
Prince William Sound total			2,850	931,800	121,663	25,730,878	3,980,000	2,601	4	30,769,812	
Cook Inlet											
CIAA	Trail Lakes	Hazel Lake	0	7,535	0	0	0	0	0	7,535	
		Leisure Lake	0	21,605	0	0	0	0	0	21,605	
		Hidden Lake	0	16,255	0	0	0	0	0	16,255	
		Kirschner Lake	0	30,311	0	0	0	0	0	30,311	
		Tutka Bay	0	42,155	0	0	0	0	0	42,155	
		Bear Lake/Resurrection Bay	0	111,486	0	0	0	0	0	111,486	
		Bear Creek	0	0	9,694	0	0	0	0	9,694	
	Tutka Bay	Tutka Bay	0	0	0	232,914	0	0	0	232,914	
	Port Graham	Port Graham	0	0	0	415,563	0	0	0	415,563	
ADFG	William Jack Hernandez	Bird Creek	0	0	8,563	0	0	0	0	8,563	
		Campbell Creek	0	0	3,821	0	0	0	0	3,821	
		Eklutna Tailrace	4,304	0	8,337	0	0	0	0	0	12,641
		Ship Creek	5,957	0	16,289	0	0	0	0	0	22,246
		Crooked Creek	1,413	0	0	0	0	0	0	0	1,413
		Ninilchik River	1,580	0	0	0	0	0	0	0	1,580
		Homer Spit	3,153	0	8,321	0	0	0	0	0	11,474
		Seldovia	1,025	0	0	0	0	0	0	0	1,025
		Seward Lagoon	3,172	0	16,402	0	0	0	0	0	19,574
		Anchorage lakes	12,606	0	0	0	0	0	37,341	0	53,521
		Kenai lakes	0	0	0	0	0	0	7,735	0	12,099
		Matanuska lakes	0	0	0	0	0	0	52,862	0	59,240
Cook Inlet total			33,210	229,347	71,427	648,477	0	97,938	0	1,094,715	
Southcentral total			36,060	1,161,147	193,090	26,379,355	3,980,000	100,539	4	31,864,527	

-continued-

Appendix E1.—Page 4 of 4.

Region/Operator/Hatchery/Location			Chinook	Sockeye	Coho	Pink	Chum	Rainbow Trout	Landlocked Salmon	Total
Arctic-Yukon-Kuskokwim										
ADFG	Ruth Burnett ^b	Delta Junction lakes	0	0	0	0	0	2,677	567	3,442
		Fairbanks lakes	0	0	0	0	0	9,933	1,237	11,604
Arctic-Yukon-Kuskokwim total			0	0	0	0	0	12,610	1,804	15,046
Westward/Kodiak										
KRAA	Kitoi Bay	Kitoi Bay	0	0	52,588	3,835,774	137,975	0	0	4,026,337
		Little Kitoi Bay	0	6,002	0	0	0	0	0	6,002
		Ouzinkie Village	0	1,031	0	0	0	0	0	1,031
	Pillar Creek	Pillar Creek	0	0	3,600	0	0	0	0	3,600
		Island Lake	0	0	1,400	0	0	0	0	1,400
		Monashka Creek	0	0	1,800	0	0	0	0	1,800
		Mission Lake	0	0	900	0	0	0	0	900
		Spiridon Lake	0	99,000	0	0	0	0	0	99,000
		Telrod Cove	0	85,000	0	0	0	0	0	85,000
Westward/Kodiak total			0	191,033	60,288	3,835,774	137,975	0	0	4,225,070
Statewide total			88,804	1,482,321	901,351	31,055,393	19,928,956	113,149	1,808	53,586,746

Note: SSRAA = Southern Southeast Regional Aquaculture Association; MIC = Metlakatla Indian Community; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; NMFS = National Marine Fisheries Service; PWS = Prince William Sound; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association; L = lake and Cr = creek.

^a Data not available at the time of publication.

^b The forecasted harvest of Arctic grayling, statewide total = 605, is not shown.

**APPENDIX F: EGG PRODUCTION FROM AQUATIC
RESOURCE PERMITS, 2023**

Appendix F1.—Summary of salmon production of eggs collected in 2021 from Aquatic Resource Permits issued by the ADF&G.

The egg number represented is the maximal number allowed to be collected, not necessarily the number allowed to be released, by the issued permit for the project.

Bioenhancement Research Permits

Eggs collected under this type of propagation permit are for bioenhancement research by accredited institutions of higher learning and cooperative governmental projects.

Area	Permittee	Stock/Species	Max. no. allowed to be collected
Southeast			
	NOAA Little Port Walter	Keta River king at LPW	100 spawning pair
Southcentral			
	University of Alaska Fairbanks	Iliamna Lake sockeye	9 adults
Arctic-Yukon-Kuskokwim			
	Norton Sound Economic Development Corporation	Snake River coho	50 spawning pair
	Norton Sound Economic Development Corporation	Solomon River chum	50 spawning pair
	Norton Sound Economic Development Corporation	Unalakleet River king	20 spawning pair

Educational and Vocational Permits

Eggs collected under this type of propagation permit are for educational and vocational purposes.

Area	Permittee	Stock/Species	Max. no. allowed to be collected
Southeast			
	Petersburg High School	Five Mile pink	30 spawning pair
Westward			
	Unalaska City School	Iliuliuk River coho	3 spawning pair

Scientific and Educational Permits

Eggs collected under this type of propagation permit are for Classroom Incubation Projects and in most cases are provided by hatcheries. Resultant fry can be released at approved locations or are destroyed.

Area	Permittee	Species	Max. no. to be collected
Southeast	Fawn Mountain Elementary	coho	150
	Ketchikan Charter School	coho	150
	Skagway Traditional Council	coho	500
	Skagway Traditional Council	pink	500
	U.S.F.S./N. Point Higgins Elementary	coho	100
Southcentral	Airport Heights	coho	500
	Alaska Native Cultural Charter School	coho	500
	Alpenglow Elementary	coho	500
	Anchor Lutheran School	coho	500
	Anchorage ADF&G lobby	coho	500
	Anchorage Christian School	coho	500
	Aurora Borealis Charter School	coho	500
	Big Lake Elementary	coho	500

-continued-

Appendix F1.–Page 2 of 3.

Area	Permittee	Species	Max. no. to be collected
Southcentral (cont.)	Bear Valley	coho	500
	Birchtree Charter School	coho	500
	Birchwood ABC Elementary	coho	500
	Bowman Elementary	coho	500
	Butte Elementary	coho	500
	Campbell STEM Elementary	coho	500
	Central Middle School	coho	500
	Chapman Elementary	coho	500
	Chester Valley Elementary	coho	500
	Chinook Elementary	coho	500
	Chugiak Elementary	coho	500
	Colony High School	coho	500
	Cook Inlet Academy	coho	500
	Copper River Watershed Project	coho	200
	Denali Montessori Elementary	coho	500
	Dimond High School	coho	500
	Eagle Academy Charter School	coho	500
	Eagle River Elementary	coho	500
	East Anchorage High School	coho	500
	Fairview Elementary	coho	500
	Finger Lake Elementary	coho	500
	Fronteras	coho	500
	Glennallen School	coho	200
	Government Hill Elementary	coho	500
	Grace Christian Elementary	coho	500
	Grace Lutheran School	coho	500
	Hermon Hutchens Elementary	coho	200
	Homer Middle School	coho	500
	Hope School	coho	500
	IDEA Homeschool	coho	500
	Inlet View Elementary	coho	500
	Kaleidoscope Elementary	coho	500
	Kalifornsky Beach Elementary	coho	500
	Kenai Middle School	coho	500
	Kenny Lake School	coho	200
	Kincaid Elementary	coho	500
	Klatt Elementary	coho	500
	Knik Charter School	coho	500
	Little Firewood Academy	coho	500
	Maplewood School	coho	500
	McNeil Canyon Elementary	coho	500
	Meadow Lakes	coho	500
Mentasta Lake School	coho	200	
Mountain City Christian Academy	coho	500	
Mountain View Elementary	coho	500	
Nikiski North Star Elementary	coho	500	

-continued-

Appendix F1.–Page 3 of 3.

Area	Permittee	Species	Max. no. to be collected
Southcentral (cont.)	Nikolaevsk Elementary/High School	coho	500
	O'Malley Elementary	coho	500
	Ocean View Elementary	coho	500
	PAIDEIA Cooperative School	coho	500
	Palmer Junior Middle School	coho	500
	Paul Banks Elementary	coho	500
	Ravenwood Elementary	coho	500
	Redoubt Elementary	coho	500
	Rilke Schule	coho	500
	Rogers Park Elementary	coho	500
	Saint Elizabeth Ann Seton School	coho	500
	Sand Lake Elementary	coho	500
	Service High School	coho	500
	Seward Elementary School	coho	500
	Shaw Elementary	coho	500
	Slana School	coho	500
	Snowshoe Elementary	coho	500
	Soldotna ADF&G lobby	coho	500
	Soldotna Elementary School	coho	500
	Sterling Elementary	coho	500
	Susitna Elementary	coho	500
	Talkeetna Elementary	coho	500
	Tebughna School	coho	500
	Teeland Middle School	coho	500
	The Study (Soldotna)	coho	500
	Tyson Elementary	coho	500
	Upstream Learning School	coho	500
	West Anchorage High School	coho	500
	West Homer Elementary	coho	500
	Willow Elementary	coho	500
	Winterberry School	coho	500
	Ya Ne Dah Ah School	coho	400
	Arctic-Yukon-Kuskokwim	ADF&G Fairbanks lobby	coho
Anne Wien Elementary		coho	300
Barnette Magnet School		coho	300
Nome schools		coho	500
Pearl Creek Elementary		coho	300
Salcha Elementary		coho	300
Two Rivers Elementary		coho	300
Watershed School		coho	300
Weller Elementary		coho	300
Westward		East Elementary School	coho
	Kodiak Christian School	coho	500
	Main Elementary School	coho	500
	North Star Elementary School	coho	500
	Peterson Elementary School	coho	500

APPENDIX G: HATCHERY EGG COLLECTION, 2023

Appendix G1.—Eggs collected at Alaska hatcheries as reported by operators, 2023 (transferred eggs are listed with the receiving hatchery).

Region	Area	Operator	Egg-take location	Receiving hatchery	Chinook	Sockeye	Coho	Pink	Chum	Total
Southeast										
Southern Southeast										
		SSRAA	Burnett Inlet	Burnett Inlet	0	0	0	0	94,900,000	94,900,000
			Crystal Lake	Crystal Lake	510,000	0	0	0	0	510,000
			Medvejie	Crystal Lake	105,000	0	0	0	0	105,000
			Neets Bay	Neets Bay	0	0	1,000,000	0	89,900,000	90,900,000
				Whitman Lake	0	0	0	0	38,000,000	38,000,000
			Whitman Lake	Whitman Lake	2,200,000	0	5,400,000	0	0	7,600,000
				Crystal Lake	1,000,000	0	0	0	0	1,000,000
			Klawock River	Klawock River	0	0	5,400,000	0	0	5,400,000
		MIC	Tamgas Creek	Tamgas Creek	2,720,000	0	6,630,000	5,960,000	24,380,000	39,690,000
		Southern Southeast total			6,535,000	0	18,430,000	5,960,000	247,180,000	278,105,000
Northern Southeast										
		NSRAA	Hidden Falls	Hidden Falls	1,454,364	0	4,506,518	0	160,158,444 ^a	166,119,326
			Gunnuk Creek	Hidden Falls	369,597	0	0	0	0	369,597
				Gunnuk Creek	0	0	0	0	7,642,725	7,642,725
			Hidden Falls	Gunnuk Creek	0	0	0	0	12,708,457	12,708,457
			Medvejie	Medvejie	2,025,000	0	0	299,900	45,609,183	47,934,083
				Sawmill Creek	0	0	0	0	47,657,782 ^b	47,657,782
			Macaulay	Medvejie	202,500	0	0	0	0	202,500
			Hidden Falls	Medvejie	603,900	0	0	0	31,199,974	31,803,874
			Sawmill Creek	Sawmill Creek	0	0	2,264,700	0	0	2,264,700
		AKI	Port Armstrong	Port Armstrong	0	0	9,192,000 ^c	46,066,531	20,055,918	75,314,449
		DIPAC	Macaulay	Macaulay	1,212,065	0	133,282	0	134,597,147	135,942,494
			Fish Creek	Macaulay	0	0	300,062	0	0	300,062
			Snettisham	Snettisham	0	12,321,619	0	0	0	12,321,619
			Tahltan L (BC)	Snettisham	0	2,521,395	0	0	0	2,521,395
			Tatsamenie L (BC)	Snettisham	0	2,128,863	0	0	0	2,128,863
			Trapper L (BC)	Snettisham	0	997,726	0	0	0	997,726
		SSSC	Sheldon Jackson	Sheldon Jackson	0	0	102,400	3,315,954 ^d	3,324,295	6,742,649
			Medvejie	Medvejie	0	0	0	0	9,000,000 ^e	9,000,000
		Northern Southeast total			5,867,426	17,969,603	16,498,962	49,682,385	471,953,925	561,972,301
		Southeast total			12,402,426	17,969,603	34,928,962	55,642,385	719,133,925	840,077,301

-continued-

Appendix G1.–Page 2 of 3.

Region	Area	Operator	Egg-take location	Receiving hatchery	Chinook	Sockeye	Coho	Pink	Chum	Total
Southcentral										
Prince William Sound										
	PWSAC	A F Koernig	A F Koernig	A F Koernig	0	0	0	196,700,000 ^d	0	196,700,000
		Cannery Creek	Cannery Creek	Cannery Creek	0	0	0	192,023,621 ^d	0	192,023,621
		Gulkana	Gulkana	Gulkana	0	13,935,400	0	0	0	13,935,400
		Main Bay	Main Bay	Main Bay	0	13,638,348 ^d	0	0	0	13,638,348
		Wally Noerenberg	Wally Noerenberg	Wally Noerenberg	0	0	876,000	152,022,000	130,909,488	283,807,488
				A F Koernig	0	0	0	0	19,990,000	19,990,000
		Ship Cr	Wally Noerenberg	Wally Noerenberg	50,000	0	0	0	0	50,000
		Power Cr	Wally Noerenberg	Wally Noerenberg	0	0	123,000	0	0	123,000
	VFDA	Solomon Gulch	Solomon Gulch	Solomon Gulch	0	0	2,000,596	273,243,921 ^d	0	275,244,517
			Wally Noerenberg	Wally Noerenberg	0	0	3,001,000	0	0	3,001,000
Prince William Sound total					50,000	27,573,748	6,000,596	813,989,542	150,899,488	998,513,373
Cook Inlet										
	CIAA	Trail Lakes	Trail Lakes	Trail Lakes	0	2,870,264	0	0	0	2,870,264
		Bear Cr	Trail Lakes	Trail Lakes	0	0	576,738	0	0	576,738
		Tutka Bay	Tutka Bay	Tutka Bay	0	0	0	52,572,499	0	52,572,499
	ADFG	William Jack Hernandez	William Jack Hernandez ^f	William Jack Hernandez ^f	0	0	1,153,358	0	0	5,227,608
		Ship Cr	William Jack Hernandez	William Jack Hernandez	1,598,916	0	0	0	0	1,598,916
		Crooked Cr	William Jack Hernandez	William Jack Hernandez	545,510	0	0	0	0	545,510
		Bear Cr	William Jack Hernandez	William Jack Hernandez	0	0	326,823	0	0	326,823
		Ninilchik R	William Jack Hernandez	William Jack Hernandez	520,747	0	0	0	0	520,747
Cook Inlet total					2,665,173	2,870,264	2,056,919	52,572,499	0	63,391,535
Southcentral Total					2,715,173	30,444,012	8,057,515	866,562,041	150,899,488	1,062,752,478
Arctic-Yukon-Kuskokwim										
	ADFG	Ruth Burnett	Ruth Burnett ^g	Ruth Burnett ^g	0	0	0	0	0	40,000
		William Jack Hernandez	Ruth Burnett	Ruth Burnett	60,004	0	137,665	0	0	197,669
Arctic-Yukon-Kuskokwim total					60,004	0	137,665	0	0	237,669

-continued-

Appendix G1.–Page 3 of 3

Region	Area	Operator	Egg-take location	Receiving hatchery	Chinook	Sockeye	Coho	Pink	Chum	Total
Kodiak										
		KRAA	Kitoi Bay	Kitoi Bay	0	0	2,300,000	218,091,555	27,813,026	248,204,581
			Saltery Lake	Kitoi Bay	0	863,315	0	0	0	863,315
			Saltery Lake	Pillar Creek	0	3,990,680	0	0	0	3,990,680
			Afognak Lake	Pillar Creek	0	729,870	0	0	0	729,870
			Karluk River	Pillar Creek	92,208	0	0	0	0	92,208
			Pillar Creek	Pillar Creek	0	0	299,700	0	0	299,700
			William Jack Hernandez	Pillar Creek	0	0	0	0	0	0
Kodiak total					92,208	5,583,865	2,599,700	218,091,555	27,813,026	254,180,354
Statewide total					15,269,811	53,997,480	45,723,842	1,140,295,981	897,846,438	2,157,247,802

Note: SSRAA = Southern Southeast Regional Aquaculture Association; MIC = Metlakatla Indian Community; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; NMFS = National Marine Fisheries Service; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

- ^a Chum salmon eggs taken at Hidden Falls Hatchery include 30 million eggs taken on behalf of Port Armstrong Hatchery and up to 55 million chum eggs taken on behalf of Gunnuk Creek Hatchery.
- ^b Chum salmon eggs taken at Sawmill Creek Hatchery includes up to 20 million eggs taken on behalf of Medvejie Creek Hatchery.
- ^c Coho salmon eggs taken at Port Armstrong Hatchery includes 3,192,000 eggs to be sent to Hidden Falls Hatchery.
- ^d Includes eggs culled as green or eyed eggs.
- ^e Eggs taken and reared at Medvejie Hatchery on behalf of Sheldon Jackson Hatchery.
- ^f Total eggs taken at William Jack Hernandez Sport Fish Hatchery includes 161,968 Arctic char and 3,912,282 rainbow trout eggs.
- ^g Total eggs at Ruth Burnett Sport Fish Hatchery includes 40,000 eggs from Sevenmile Lake lake trout.

APPENDIX H: HATCHERY RELEASES, 2023

Appendix H1.—Alaska hatchery releases as reported by operators, 2023.

Region	Area	Operator	Hatchery	Release site	Chinook	Sockeye	Coho	Pink	Chum	R. Trout	Total
Southeast											
Southern Southeast											
		SSRAA	Burnett Inlet	Burnett Inlet	0	0	0	0	27,070,000	0	27,070,000
				Anita Bay	0	0	0	0	23,273,407	0	23,273,407
				Nakat Inlet	0	0	0	0	13,599,836	0	13,599,836
				Port Asumcion	0	0	0	0	11,129,210	0	11,129,210
			Crystal Lake	Crystal Creek	652,104	0	130,340	0	0	0	782,444
				Anita Bay	403,586	0	0	0	0	0	403,586
			Neets Bay	Neets Bay	0	0	3,351,424	0	62,939,881	0	66,291,305
				Burnett Inlet	0	0	0	0	1,200,000	0	1,200,000
				Nakat Inlet	0	0	0	0	2,433,432	0	2,433,432
				Port Asumcion	0	0	0	0	7,024,889	0	7,024,889
			Whitman Lake	Nakat Inlet	0	0	551,447	0	0	0	551,447
				Anita Bay	0	0	500,497	0	0	0	500,497
				Carroll Inlet	626,000	0	0	0	0	0	626,000
				Ketchikan Creek	83,100	0	0	0	0	0	83,100
				Herring Cove	699,000	0	394,000	0	0	0	1,093,000
				Kendrick Bay	0	0	0	0	39,441,696	0	39,441,696
				Port St Nicholas	99,342	0	0	0	0	0	99,342
			Klawock River	Klawock Lake	0	0	4,381,748	0	0	0	4,381,748
			Port Saint Nicholas	Port St Nicholas	362,752	0	0	0	0	0	362,752
				Port Asumcion	0	0	0	0	7,300,029	0	7,300,029
			Deer Mountain	Harriet Hunt Lake	0	0	0	0	0	31,400	31,400
				Ketchikan Creek	9,846	0	0	0	0	0	9,846
				Carlanna Lake	0	0	0	0	0	14,400	14,400
				City Park	0	0	0	0	0	1,000	1,000
		MIC	Tamgas Creek	Tamgas	153,061	0	1,650,681	10,229,000	20,600,000	0	32,632,742
				Port Chester	0	0	4,259,531	0	0	0	4,259,531
			Southern Southeast total		3,088,791	0	15,219,668	10,229,000	216,012,380	46,800	244,596,639

-continued-

Appendix H1.–Page 2 of 5.

Region	Area	Operator	Hatchery	Release site	Chinook	Sockeye	Coho	Pink	Chum	R. Trout	Total
Northern Southeast											
		NSRAA	Hidden Falls	Thomas Bay	0	0	0	0	19,918,363	0	19,918,363
				Kasnyku Bay	0	0	2,964,242	0	45,592,387	0	48,556,629
				Southeast Cove	347,658	0	0	0	41,895,230	0	42,242,888
				Gunnuk Creek	154,649	0	0	0	0	0	154,649
				Mist Cove	0	0	1,261,409	0	0	0	1,261,409
				Little Port Walter	40,313	0	0	0	0	0	40,313
			Medvejie	Bear Cove	2,397,410	0	0	286,748	34,884,444	0	37,568,602
				Deep Inlet	0	0	0	0	33,230,163	0	33,230,163
				Crescent Bay	298,223	0	0	0	0	0	298,223
				Crawfish Inlet	160,633	0	0	0	0	0	160,633
			Sawmill Creek	Bear Cove	0	0	199,477	0	0	0	199,477
				Deep Inlet	0	0	1,568,497	0	18,566,218	0	20,134,715
				Crawfish Inlet	0	0	0	0	27,212,457	0	27,212,457
			Gunnuk Creek	Gunnuk Creek	0	0	0	0	12,799,791	0	12,799,791
		AKI	Port Armstrong	Port Armstrong	0	0	3,011,644	47,739,624	30,954,207	0	81,705,475
		DIPAC	Macaulay	Gastineau Channel	324,540	0	1,350,730	0	11,732,000	0	13,407,270
				Fish Creek	249,587	0	0	0	0	0	249,587
				Lena Cove	199,848	0	0	0	0	0	199,848
				Amalga Harbor	0	0	0	0	43,411,000	0	43,411,000
				Boat Harbor	0	0	0	0	22,680,000	0	22,680,000
				Limestone Inlet	0	0	0	0	14,320,000	0	14,320,000
				Sheep Creek	0	0	0	0	22,295,000	0	22,295,000
			Snettisham	Speel Arm	0	9,038,000	0	0	0	0	9,038,000
				Sweetheart Lake	0	472,200	0	0	0	0	472,200
				Tahltn Lake (BC)	0	1,662,000	0	0	0	0	1,662,000
				Trapper Lake (BC)	0	487,300	0	0	0	0	487,300
				Tatsamenie Lake	0	1,476,600	0	0	0	0	1,476,600
		SSSC	Sheldon Jackson	Crescent Bay	0	0	165,499	2,975,000	3,209,000	0	6,349,499
				Deep Inlet	0	0	0	0	8,366,000	0	8,366,000
Northern Southeast total					4,172,861	13,136,100	10,521,498	51,001,372	391,066,260	0	469,898,091
Southeast total					7,261,652	13,136,100	25,741,166	61,230,372	607,078,640	46,800	714,494,730

-continued-

Appendix H1.–Page 3 of 5.

Region	Area	Operator	Hatchery	Release site	Chinook	Sockeye	Coho	Pink	Chum	R. Trout	Total
Southcentral											
Prince William Sound											
	PWSAC	A F Koernig		Sawmill Bay	0	0	0	173,700,000	19,200,000	0	192,900,000
				Cannery Creek	0	0	0	169,500,000	0	0	169,500,000
				Gulkana	0	3,764,325	0	0	0	0	3,764,325
				Main Bay	0	9,549,706	0	0	0	0	9,549,706
				Wally Noerenberg	0	0	1,636,330	134,778,600	72,694,513	0	209,109,443
				Port Chalmers	0	0	0	0	40,300,000	0	40,300,000
				Fleming Spit	0	0	100,000	0	0	0	100,000
				Chenega Bay	6,153	0	0	0	0	0	6,153
				Chenega Cove	0	0	50,000	0	0	0	50,000
				Whittier	0	0	100,000	0	0	0	100,000
	VFDA	Solomon Gulch		Solomon Gulch	0	0	1,835,937	261,462,601	0	0	263,298,538
				Boulder Bay	0	0	19,898	0	0	0	19,898
	ADFG	William Jack Hernandez		Ruth Lake	0	0	0	0	0	958	958
				Whittier	107,444	0	0	0	0	0	107,444
				Fleming Spit	109,739	0	0	0	0	0	109,739
	Prince William Sound total				223,336	13,314,031	3,742,165	739,441,201	132,194,513	958	888,916,204
Cook Inlet											
	CIAA	Trail Lakes		Bear Lake	0	1,287,067	447,583	0	0	0	1,734,650
				Bear Creek	0	0	53,923	0	0	0	53,923
				Resurrection Bay	0	1,077,225	0	0	0	0	1,077,225
				Kirschner Lake	0	148,633	0	0	0	0	148,633
				Hazel Lake	0	701,991	0	0	0	0	701,991
				Leisure Lake	0	988,252	0	0	0	0	988,252
				Tutka Lagoon	0	783,697	0	0	0	0	783,697
				Tutka Bay	0	0	0	8,031,496	0	0	8,031,496
				Port Graham	0	0	0	12,986,358	0	0	12,986,358
	ADFG	William Jack Hernandez		Bird Creek	0	0	120,312	0	0	0	120,312
				Campbell Creek	0	0	48,304	0	0	1,992	50,296
				Ship Creek	560,629	0	253,424	0	0	0	814,053
				Southcentral lakes	94,843	0	156,653	0	0	976,993	1,276,153
				Eklutna Tailrace	424,758	0	122,621	0	0	0	547,379
				Crooked Creek	91,801	0	0	0	0	0	91,801

-continued-

Appendix H1.–Page 4 of 5.

Region	Area	Operator	Hatchery	Release site	Chinook	Sockeye	Coho	Pink	Chum	R. Trout	Total
				Ninilchik River	118,615	0	0	0	0	0	118,615
				Homer Spit	317,630	0	115,741	0	0	0	433,371
				Seldovia Harbor	91,983	0	0	0	0	0	91,983
				Seward Lagoon	332,346	0	242,515	0	0	0	574,861
		Ruth Burnett		Southcentral Lakes	0	0	0	0	0	91	91
	Cook Inlet total				2,032,605	4,986,865	1,561,076	21,017,854	0	979,076	30,625,140
Southcentral total					2,255,941	18,300,896	5,303,241	760,459,055	132,194,513	980,034	919,541,344
Arctic-Yukon-Kuskokwim											
	ADFG	Ruth Burnett		Interior Lakes	39,649	0	119,288	0	0	246,807	434,814
Arctic-Yukon-Kuskokwim Total					39,649	0	119,288	0	0	246,807	434,814
Kodiak											
	KRAA	Kitoi Bay		Kitoi Bay	0	0	535,004	191,750,551	29,718,848	0	222,004,403
				Crescent Lake	0	0	190,074	0	0	0	190,074
				Jennifer Lake	0	0	145,145	0	0	0	145,145
				Ouzinkie	0	50,000	0	0	0	0	50,000
				Ruth Lake	0	0	40,128	0	0	0	40,128
				Little Kitoi Lake	0	403,880	0	0	0	0	403,880
		Pillar Creek		Pillar Creek	0	0	81,922	0	0	0	81,922
				Crescent Lake	0	84,562	0	0	0	0	84,562
				Hidden Lake	0	229,307	0	0	0	0	229,307
				Jennifer Lake	0	75,460	0	0	0	0	75,460
				Monashka River	27,001	0	40,037	0	0	0	67,038
				Ruth Lake	0	22,749	0	0	0	0	22,749
				Salonie Creek	19,502	0	0	0	0	0	19,502
				Spiridon Lake	0	2,701,417	0	0	0	0	2,701,417
				Telrod Cove	0	276,912	0	0	0	0	276,912
				Kodiak Lakes	0	0	50,422	0	0	46,670	97,092
Kodiak/Westward total					46,503	3,844,287	1,082,732	191,750,551	29,718,848	46,670	226,489,591
Statewide total					9,603,745	35,281,283	32,246,427	1,013,439,978	768,992,001	1,320,311	1,860,960,479

Note: SSRAA = Southern Southeast Regional Aquaculture Association; MIC = Metlakatla Indian Community; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a William Jack Hernandez and Ruth Burnett Sport Fish hatcheries released 76,734 Arctic char in southcentral and Interior lakes.

APPENDIX I: COMMERCIAL HARVEST SUMMARY, 2023

Appendix II.—Commercial harvest of salmon from Alaska fisheries enhancement projects, 1977–2023.

Year	Total commercial harvest (includes cost recovery)	Total cost-recovery harvest	Commercial common property harvest	Hatchery-produced fish in commercial common property harvest	% Hatchery-produced fish in total commercial harvest	% Hatchery-produced fish in commercial common property harvest
1977	50,811,833	108,718	50,703,115	17,183	0%	0%
1978	82,288,581	114,188	82,174,393	15,976	0%	0%
1979	88,761,967	253,303	88,508,664	581,717	1%	1%
1980	110,012,352	346,834	109,665,518	1,710,649	2%	2%
1981	113,332,999	856,408	112,476,591	3,501,065	4%	3%
1982	111,579,999	1,363,885	110,216,114	4,893,392	6%	4%
1983	127,706,450	856,231	126,850,219	4,873,509	4%	4%
1984	133,643,554	1,043,376	132,600,178	5,728,203	5%	4%
1985	144,007,295	640,062	143,367,233	12,861,393	10%	9%
1986	126,242,147	1,310,047	124,932,100	9,140,199	8%	7%
1987	95,306,478	4,796,866	90,509,612	17,918,802	23%	20%
1988	98,853,713	3,178,175	95,675,538	12,784,051	15%	13%
1989	150,570,124	8,555,258	142,014,866	16,063,656	21%	11%
1990	152,565,396	10,201,029	142,364,367	32,834,148	29%	23%
1991	183,353,889	7,913,961	175,439,928	28,105,818	24%	16%
1992	134,786,799	6,747,075	128,039,724	9,934,815	14%	8%
1993	190,550,158	4,958,010	185,592,148	21,992,600	15%	12%
1994	193,879,849	17,344,697	176,535,152	33,679,696	26%	19%
1995	214,547,197	9,039,811	205,507,386	24,156,917	16%	12%
1996	172,513,521	13,560,684	158,952,837	27,815,855	25%	17%
1997	121,394,948	18,980,612	102,414,336	16,144,523	38%	16%
1998	149,513,473	15,698,677	133,814,796	34,553,704	33%	26%
1999	214,749,955	21,980,570	192,769,385	42,656,151	31%	22%
2000	135,553,198	18,742,415	116,810,783	39,780,299	43%	34%
2001	172,168,611	18,234,573	153,934,038	38,500,563	33%	25%
2002	128,007,463	18,875,218	109,132,245	25,743,907	35%	24%
2003	159,062,707	22,316,043	136,746,664	49,881,589	46%	36%
2004	164,004,449	22,000,394	142,004,055	20,106,465	25%	14%
2005	218,950,575	21,574,730	197,375,845	53,566,262	34%	27%
2006	139,241,316	18,823,333	120,417,983	23,723,769	30%	20%
2007	210,950,151	19,649,615	191,300,536	57,682,118	37%	30%
2008	144,468,575	13,630,339	130,838,236	44,920,941	40%	34%
2009	160,281,291	15,030,525	145,250,766	28,139,179	26%	19%
2010	169,018,075	11,589,578	157,428,497	77,324,429	52%	49%
2011	174,852,544	13,765,986	161,086,558	32,209,872	25%	20%
2012	125,160,197	8,124,458	117,035,739	36,903,254	35%	32%
2013	279,257,164	9,878,645	269,378,519	97,104,919	38%	36%
2014	153,610,833	7,118,906	146,491,927	50,782,796	38%	35%
2015	262,898,655	13,852,398	249,046,257	78,028,937	35%	31%
2016	108,491,425	8,380,917	100,110,508	16,147,000	22%	16%
2017	221,002,924	9,328,168	211,674,756	37,580,000	21%	18%
2018	112,767,938	7,759,899	105,008,039	31,559,018	33%	30%

-continued-

Year	Total commercial harvest (includes cost recovery)	Total cost-recovery harvest	Commercial common property harvest	Hatchery-produced fish in commercial common property harvest	% Hatchery-produced fish in total commercial harvest	% Hatchery-produced fish in commercial common property harvest
2019	203,013,087	9,124,586	193,888,501	40,967,787	24%	21%
2020	115,767,025	7,208,680	108,558,345	23,480,281	26%	22%
2021	228,117,374	10,767,897	217,349,477	53,215,470	28%	24%
2022	157,900,109	7,999,318	149,900,791	31,655,788	25%	21%
2023	226,501,871	19,534,674	206,967,197	60,726,844	35%	29%

Source: Total commercial and cost-recovery harvest 1977–1984 from ADF&G Headquarters fish ticket staff, 1985–2022 from OceanAK statewide salmon fish ticket database [URL not publicly available]. Common property hatchery harvest from PNP annual reports in the PNP hatchery database [URL not publicly available].

APPENDIX J: HATCHERY RETURNS, 2023

Appendix J1.—Details of the estimated Chinook salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.

Region	Area	Agency	Hatchery	Project	Common property harvest				Broodstock	Cost		Total return
					Seine	Gillnet	Troll	Sp/PU/S ^a		recovery	Other ^b	
Southeast												
Southern Southeast												
	SSRAA	Crystal Lake	Crystal Lake		0	101	320	235	288	0	0	944
			Anita Bay		2,149	5,595	413	154	0	0	28	8,339
			City Creek		0	56	43	198	0	0	0	297
			Neets Bay		2,600	3,063	812	307	0	0	577	7,359
		Whitman Lake	Whitman Lake		328	98	2,886	582	1,941	8,329	0	14,164
			Carroll Inlet		4,529	2,997	1,572	493	0	2,500	279	12,370
		Deer Mountain	Ketchikan Creek		12	12	164	94	0	0	0	282
		Port Saint Nicholas	Port Saint Nicholas		7	145	754	256	0	0	0	1,162
	MIC	Tamgas Creek ^c	Tamgas		0	39	213	67	1,295	0	217	1,831
			Port Chester		18	55	100	54	0	0	299	526
Southern Southeast total					9,643	12,161	7,277	2,440	3,524	10,829	1,400	47,274
Northern Southeast												
	NSRAA	Hidden Falls	Kasnyku Bay		832	53	105	0	607	0	65	1,662
			Gunnuk Creek		284	18	142	141	350	0	80	1,015
		Medvejie	Medvejie Creek		587	731	2,189	299	1,001	8	2,721	7,536
			Crawfish Inlet		0	0	457	25	30	0	0	512
			Crescent Bay		769	927	489	61	482	0	0	2,728
	DIPAC	Macaulay	Macaulay Hatchery		4	377	134	4,372	1,457	599	110	7,053
	NMFS	Little Port Walter	L. Port Walter - Keta		27	18	323	51	0	0	851	1,270
			L. Port Walter - Unuk		16	0	29	18	0	0	222	285
Northern Southeast total					2,519	2,124	3,868	4,967	3,927	607	4,049	22,061
Southeast total					12,162	14,285	11,145	7,407	7,451	11,436	5,449	69,335
Southcentral												
Prince William Sound												
	ADF&G	WJ Hernandez	Fleming Spit		0	0	0	144	0	0	0	144
	PWSAC	Wally Noerenberg	Chenega		0	0	0	0	0	0	0	0

-continued-

Appendix J1.–Page 2 of 2.

Region	Area	Agency	Hatchery	Project	Common property harvest				Broodstock	Cost		Total return
					Seine	Gillnet	Troll	Sp/PU/S ^a		recovery	Other ^b	
Prince William Sound total					0	0	0	144	0	0	0	144
Cook Inlet												
		ADF&G	WJ Hernandez ^d	Crooked Creek	0	0	0	1,576	0	0	0	1,576
				Eklutna Tailrace	0	0	0	440	0	0	0	440
				Homer Spit	0	0	0	901	0	0	0	901
				Kachemak Bay	0	0	0	0	0	0	0	0
				Ninilchik River	0	0	0	408	0	0	0	408
				Resurrection Bay	0	0	0	417	0	0	0	417
				Ship Creek	0	0	0	801	0	0	0	801
				Whittier	0	0	0	14	0	0	0	14
				RII Lakes	0	0	0	3,271	0	0	0	3,271
Cook Inlet total					0	0	0	7,828	0	0	0	7,828
Southcentral total					0	0	0	7,972	0	0	0	7,972
Kodiak/Westward												
Kodiak												
		KRAA	Pillar Creek	Kodiak Road System	0	0	0	53	47	0	0	100
Kodiak total					0	0	0	53	47	0	0	100
Kodiak/Westward total					0	0	0	53	47	0	0	100
Statewide total					12,162	14,285	11,145	15,432	7,498	11,436	5,449	77,407

Note: SSRAA = Southern Southeast Regional Aquaculture Association; MIC = Metlakatla Indian Community; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; NMFS = National Marine Fisheries Service; PWSAC = Prince William Sound Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a Sp/PU/S is the sum of the sport, personal use, and subsistence harvest.

^b Other includes Metlakatla fishery harvest, raceway returns excess to broodstock needs, holding mortalities, bear and sea lion mortality, channel and bay mortality, escapement to watershed, and donations.

^c Tamgas Creek Hatchery harvest contribution does not include contribution to Metlakatla Indian Community-managed fisheries.

^d Wally Noerenberg Hatchery and William Jack Hernandez contribution to fisheries is underestimated and cannot be estimated at some locations where there are mixed returns.

Appendix J2.—Details of the estimated sockeye salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.

Region	Area	Agency	Hatchery	Project	Common property harvest					Cost		Total return	
					Seine	Gillnet	Set Net	Other	Sp/PU/S ^a	Broodstock	recovery		Other ^b
Southeast													
	DIPAC	Snettisham	Snettisham		5,757	31,353	0	0	0	6,848	60,062	0	104,020
			Sweetheart Lake		412	691	0	0	4,400	0	0	0	5,503
			Tahltan-Stikine River		0	2,972	0	0	495	1,384	0	35,994	40,845
			Taku R		0	3,444	0	0	179	537	0	7,383	11,543
Southeast total					6,169	38,460	0	0	5,074	8,769	60,062	43,377	161,911
Southcentral													
Prince William Sound													
	PWSAC	Gulkana	Gulkana		0	9,175	0	0	46	5,509	0	0	14,730
			Crosswind Lale		0	30,230	0	0	151	510	0	3,972	34,863
			Gulkana II		0	2,613	0	0	13	889	0	0	3,515
		Main Bay	Main Bay		28,338	363,600	147,621	0	5,000	9,384	226,987	74,205	855,135
Prince William Sound total					28,338	405,618	147,621	0	5,210	16,292	226,987	78,177	908,243
Cook Inlet													
	CIAA	Trail Lakes	Bear L/Resurrection Bay		226	0	0	0	20,000	2,029	86,160	10,004	118,419
			Hidden Lake		0	0	0	0	0	0	0	8,675	8,675
			Kirschner Lake		0	0	0	0	0	0	31,348	0	31,348
			Leisure/Hazel Lake		23,412	0	0	0	0	0	27,697	0	51,109
			Tutka Bay		985	0	0	0	500	134	20,080	0	21,699
Cook Inlet total					24,623	0	0	0	20,500	2,163	165,285	18,679	231,250
Southcentral total					52,961	405,618	147,621	0	25,710	18,455	392,272	96,856	1,139,493
Kodiak/Westward													
Kodiak													
	KRAA	Kitoy Bay	Kitoy Bay		43,359	0	0	0	0	0	209	266	43,834
		Pillar Creek	Spiridon Lake		0	0	0	260,942 ^c	0	0	33,301	0	294,243
Kodiak total					43,359	0	0	260,942 ^c	0	0	33,510	266	338,077
Kodiak/Westward total					43,359	0	0	260,942 ^c	0	0	33,510	266	338,077
Statewide total					102,489	444,078	147,621	260,942	30,784	27,224	485,844	140,499	1,639,481

^a Sp/PU/S is the sum of the sport, personal use, and subsistence harvest.

^b *Other* includes Canadian harvest, raceway returns excess to broodstock needs, and escapement to watershed.

^c Gillnet and seine combined.

Appendix J3.—Details of the estimated coho salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.

Region	Area	Agency	Hatchery	Project	Common property harvest				Broodstock	Cost		Total return
					Seine	Gillnet	Troll	Sp/PU/S ^a		recovery	Other ^b	
Southeast												
Southern Southeast												
	SSRAA	Crystal Lake	Crystal Lake		46	293	871	122	1,454	0	0	2,786
		Neets Bay	Neets Bay		4,577	9,140	58,601	4,302	3,340	41,927	11,170	133,057
		Whitman Lake	Anita Bay		257	14,194	8,879	1,419	0	0	0	24,749
			Nakat Inlet		1,619	11,603	9,799	533	0	0	749	24,303
			Whitman Lake		490	978	10,731	843	3,299	17,795	1,934	36,070
		Klawock River	Klawock		22,320	0	96,410	48,720	3,525	63,066	9,919	243,960
	MIC	Tamgas Creek ^c	Tamgas		320	986	4,356	2,348	9,407	0	319	17,736
			Port Chester		1,538	1,493	14,588	1,604	0	0	2,370	21,593
Southern Southeast total					31,167	38,687	204,235	59,891	21,025	122,788	26,461	504,254
Northern Southeast												
	NSRAA	Hidden Falls	Hidden Falls		3,340	0	6,231	602	9,157	12,739	10,705	42,774
			Deer Lake		94	0	12,956	914	0	17,864	0	31,828
		Sawmill Creek	Deep Inlet		53	0	6,744	2,011	29	0	0	8,837
			Bear Cove		0	0	4,964	1,347	1,842	0	565	8,718
	AKI	Port Armstrong	Port Armstrong		0	0	44,467	2,134	11,771	91,306	41,489	191,167
	DIPAC	Macaulay	Macaulay Hatchery		0	1,019	196	29	354	0	4	1,602
	SSSC	Sheldon Jackson	Sheldon Jackson		2,751	1,179	3,038	1,315	106	401	168	8,958
Northern Southeast total					6,238	2,198	78,596	8,352	23,259	122,310	52,931	293,884
Southeast total					37,405	40,885	282,831	68,243	44,284	245,098	79,392	798,138
Southcentral												
Prince William Sound												
	PWSAC	Wally Noerenberg	Lake Bay		1,593	8,152	0	0	556	0	0	10,301
			Cordova		0	0	0	1,000	0	0	0	1,000
			Chenega ^d		0	0	0	0	0	0	0	0
			Whittier		0	0	0	320	0	0	0	320
	VFDA	Solomon Gulch	Solomon Gulch		8,742	0	0	19,309	4,284	633	5,065	38,033
Prince William Sound total					10,335	8,152	0	20,629	4,840	633	5,065	49,654

-continued-

Appendix J3.–Page 2 of 2.

Region	Area	Agency	Hatchery	Project	Common property harvest				Broodstock	Cost		Total return
					Seine	Gillnet	Troll	Sp/PU/S ^a		recovery	Other ^b	
Cook Inlet												
		CIAA	Trail Lakes	Bear Lake	0	0	0	500	281	0	300	1,081
		ADF&G	WJ Hernandez	Bird Creek	0	0	0	2,491	0	0	0	2,491
				Campbell Creek	0	0	0	552	0	0	0	552
				Eklutna Tailrace	0	0	0	1,206	0	0	0	1,206
				Homer Spit	0	0	0	2,474	0	0	0	2,474
				Resurrection Bay	0	0	0	5,848	0	0	0	5,848
				Ship Creek	0	0	0	4,206	0	0	0	4,206
				RII lakes	0	0	0	308	0	0	0	308
Cook Inlet total					0	0	0	17,585	281	0	300	18,166
Southcentral total					10,335	8,152	0	38,214	5,121	633	5,365	67,820
Kodiak/Westward												
Kodiak												
		KRAA	Kitoi Bay	Kitoi Bay	62,180	0	0	0	5,295	2,814	24,726	95,015
			Pillar Creek	Kodiak road system	0	0	0	8,800	136	0	1,864	10,800
Kodiak total					62,180	0	0	8,800	5,431	2,814	26,590	105,815
Kodiak/Westward total					62,180	0	0	8,800	5,431	2,814	26,590	105,815
Statewide total					109,920	49,037	282,831	115,257	54,836	248,545	111,347	971,773

Note: SSRAA = Southern Southeast Regional Aquaculture Association; MIC = Metlakatla Indian Community; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; NMFS = National Marine Fisheries Service; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a Sp/PU/S is the sum of the sport, personal use, and subsistence harvest.

^b *Other* includes Metlakatla fishery harvest, raceway returns excess to broodstock needs, holding mortalities, bear and sea lion mortality, channel and bay mortality, escapement to watershed, and donations.

^c Tamgas Creek Hatchery harvest contribution does not include Metlakatla Indian Community-managed fisheries.

^d Returns anticipated but were not estimated at the time of reporting.

Appendix J4.—Details of the estimated pink salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.

Region	Area	Agency	Hatchery	Project	Common property harvest					Broodstock	Cost recovery	Other ^b	Total return
					Seine	Gillnet	Troll	Other	Sp/PU/S ^a				
Southeast													
Southern Southeast													
	MIC		Tamgas Creek	Tamgas	0	0	0	0	0	37,604	0	0	37,604
Southern Southeast total					0	0	0	0	0	37,604	0	0	37,604
Northern Southeast													
	NSRAA		Medvejie	Medvejie Creek	0	0	0	0	0	942	0	600	1,542
	AKI		Port Armstrong	Port Armstrong	285,010	0	0	0	0	107,353	445,173	160,000	997,536
	SSSC		Sheldon Jackson	Sheldon Jackson	49,088	15,257	990	0	1,418	11,914	331,683	3,300	413,650
Northern Southeast total					334,098	15,257	990	0	1,418	120,209	776,856	163,900	1,412,728
Southeast total					334,098	15,257	990	0	1,418	157,813	776,856	163,900	1,450,332
Southcentral													
Prince William Sound													
	PWSAC	A F Koernig		Armin F Koernig	7,142,339	2,072	0	0	0	320,185	4,041,275	174,500	11,680,371
				Cannery Creek	8,151,483	25,613	0	0	0	379,462	2,138,782	346,000	11,041,340
				Wally Noerenberg	2,862,815	47,229	0	0	0	406,356	1,390,825	124,200	4,831,425
	VFDA		Solomon Gulch	Solomon Gulch	18,390,115	0	0	0	10,420	474,088	2,795,145	36,765	21,706,533
Prince William Sound total					36,546,752	74,914	0	0	10,420	1,580,091	10,366,027	681,465	49,259,669
Cook Inlet													
	CIAA		Tutka Bay	Tutka Bay	205,496 ^c	0	0	0	500	99,809	1,824,804	8,572	2,139,181
			Port Graham	Port Graham	0 ^c	0	0	0	2,000	0	0	0	2,000
Cook Inlet total					205,496 ^c	0	0	0	2,500	99,809	1,824,804	8,572	2,141,181
Southcentral total					36,752,248	74,914	0	0	12,920	1,679,900	12,190,831	690,037	51,400,850
Kodiak/Westward													
Kodiak													
	KRAA		Kitoi Bay	Kitoi Bay	8,961,948	0	0	0	0	357,696	1,130,318	941,116	11,391,078
Kodiak total					8,961,948	0	0	0	0	357,696	1,130,318	941,116	11,391,078
Kodiak/Westward total					8,961,948	0	0	0	0	357,696	1,130,318	941,116	11,391,078
Statewide total					46,048,294	90,171	990	0	14,338	2,195,409	14,098,005	1,795,053	64,242,260

Note: NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; SSSC = Sitka Sound Science Center; PWSAC = Prince William Sound Aquaculture Association; VFDA = Valdez Fisheries Development Association, Inc.; CIAA = Cook Inlet Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a Sp/PU/S is the sum of the sport, personal use, and subsistence harvest.

^b Other includes test fishery harvest, raceway unharvested returns, sea lion predation, beach and brood pond area mortalities, brackish water spawners, escapement to watershed, and donations.

^c The contribution to non-terminal common property fisheries could not be estimated because catch sampling results were not available at the time of reporting.

Appendix J5.—Details of the estimated chum salmon returns to Alaska fisheries enhancement projects, as reported by operators, 2023.

Region	Area	Agency	Hatchery	Project	Common property harvest					Broodstock	Cost		Total return
					Seine	Gillnet	Troll	Set Net	Sp/PU/S ^a		recovery	Other ^b	
Southeast													
Southern Southeast													
	SSRAA	Burnett Inlet	Anita Bay		222,062	118,999	779	0	0	0	2,138	7,069	351,047
			BI-Summer		227,541	63,952	6,282	0	0	119,433	490,462	15,215	922,885
			Burnett Inlet		2,706	6,240	0	0	0	43,410	0	0	52,356
			Nakat Inlet-Summer		62,954	188,901	67	0	0	0	0	4,955	256,877
			Port Asumcion		160,571	1,267	0	0	0	0	160,737	0	322,575
		Neets Bay	Neets Bay		603,873	67,093	146,083	0	0	268,401	138,367	145,285	1,369,102
			Neets Bay-Fall		22,325	14,003	0	0	0	118,253	80,996	0	235,577
			Nakat Inlet		6,673	111,049	0	0	0	0	0	0	117,722
		Whitman Lake	Kendrick Bay		1,447,681	79,766	1,327	0	0	0	0	71,055	1,599,829
			Nakat Inlet-Summer		78,946	242,519	106	0	0	0	0	7,108	328,679
		Port Saint Nicholas	Port Asumcion		102,565	815	0	0	0	0	103,548	0	206,928
	MIC	Tamgas Creek	Tamgas-Summer		0	0	0	0	0	24,319	0	0	24,319
			Tamgas-Fall		0	0	0	0	0	6,439	0	0	6,439
Southern Southeast total					2,937,897	894,604	154,644	0	0	580,255	976,248	250,687	5,794,335
Northern Southeast													
	NSRAA	Hidden Falls	Hidden Falls		873,062	1,941	215	0	0	290,838	24,165	58,683	1,248,904
			Southeast Cove		2,800	340	0	0	0	1,592	362,305	16,539	383,576
			Thomas Bay		109,591	16,009	0	0	0	0	0	4,434	130,034
		Medvejie	Medvejie Creek		415,592	255,302	77,274	0	0	93,001	2,231	45,615	889,015
			Medvejie Creek-Kadashan		341,892	146,930	20,631	0	0	49,642	16,121	3,885	579,101
		Sawmill Creek	Crawfish Inlet		912,448	4,386	51,175	0	0	650	618,998	71,427	1,659,084
		Gunnuk Creek	Gunnuk Creek		2,338	719	0	0	0	18,548	2,546	13,845	37,996
	AKI	Port Armstrong	Port Armstrong		498	409	16,281	0	0	26,606	111,204	25,094	180,092
	DIPAC	Macaulay	Gastineau		21,997	501,962	2,454	0	5,000	200,039	284,790	32,438	1,048,680
			Amalga Harbor		439,504	499,239	4,481	0	0	0	971,376	299	1,914,899
			Boat Harbor		15,320	713,233	1,709	0	0	0	0	114	730,376
			Limestone Inlet		4,037	187,938	450	0	0	0	0	30	192,455
	SSSC	Sheldon Jackson	Sheldon Jackson		51,796	19,042	5,300	0	185	20,838	58,710	55,000	210,871
			Deep Inlet		64,660	39,722	12,023	0	0	0	0	5,360	121,765
Northern Southeast total					3,255,535	2,387,172	191,993	0	5,185	701,754	2,452,446	332,763	9,326,848

-continued-

Appendix J5.—Page 2 of 2.

Region	Area	Agency	Hatchery	Project	Common property harvest					Cost		Total return	
					Seine	Gillnet	Troll	Set Net	Sp/PU/S ^a	Broodstock	recovery		Other ^b
Southeast total					6,193,432	3,281,776	346,637	0	5,185	1,282,009	3,428,694	583,450	15,121,183
Southcentral													
Prince William Sound													
		PWSAC	Wally Noerenberg	Lake Bay	122,756	1,601,449	0	17,132	0	180,132	1,261,831	59,373	3,242,673
				Port Chalmers	41,872	1,147,915	0	2,848	0	0	0	0	1,192,635
			A F Koernig	Armin F Koernig	126,091	28,156	0	3,786	0	0	0	0	158,033
Prince William Sound total					290,719	2,777,520	0	23,766	0	180,132	1,261,831	59,373	4,593,341
Southcentral total					290,719	2,777,520	0	23,766	0	180,132	1,261,831	59,373	4,593,341
Kodiak/Westward													
Kodiak													
		KRAA	Kitoi Bay	Kitoi Bay	239,029	0	0	0	0	55,559	319	1,000	295,907
Kodiak total					239,029	0	0	0	0	55,559	319	1,000	295,907
Kodiak/Westward total					239,029	0	0	0	0	55,559	319	1,000	295,907
Statewide total					6,723,180	6,059,296	346,637	23,766	5,185	1,517,700	4,690,844	643,823	20,010,431

Note: SSRAA = Southern Southeast Regional Aquaculture Association; NSRAA = Northern Southeast Regional Aquaculture Association; AKI = Armstrong-Keta Inc.; DIPAC = Douglas Island Pink and Chum, Incorporated; SSSC = Sitka Sound Science Center; PWSAC = Prince William Sound Aquaculture Association; KRAA = Kodiak Regional Aquaculture Association.

^a Sp/PU/S is the sum of the sport, personal use, and subsistence harvest.

^b Other includes Metlakatla and test fishery harvest, donations, bear and sea lion predation mortalities, other mortalities, hatchery watershed escapement, and donations.

**APPENDIX K: PNP HATCHERY PERMITEE, PERMITTED
EGG CAPACITY, AND NUMBER OF EYED EGGS,
1975–2023**

Appendix K1.–Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Southern Southeast-area hatcheries, 1975–2023.

Year	Crystal Lake			Deer Mountain			Port Saint Nicholas			Whitman Lake		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	1	N/A	111,000	1	N/A	0	N/A	N/A	0	0	N/A	0
1976	1	N/A	859,200	1	N/A	0	N/A	N/A	0	0	N/A	0
1977	1	N/A	780,000	1	N/A	26,500	N/A	N/A	0	0	N/A	0
1978	1	N/A	28,675	1	N/A	115,793	N/A	N/A	0	2	0	0
1979	1	N/A	28,675	1	N/A	160,000	N/A	N/A	0	2	0	0
1980	1	N/A	378,000	1	N/A	150,948	N/A	N/A	0	2	0	152,833
1981	1	N/A	361,543	1	N/A	245,321	N/A	N/A	0	2	0	335,166
1982	1	N/A	795,737	1	N/A	286,501	N/A	N/A	0	2	400,000	171,778
1983	1	N/A	269,229	1	N/A	491,642	N/A	N/A	0	2	400,000	29,119
1984	1	N/A	1,043,000	1	N/A	635,000	N/A	N/A	0	2	400,000	210,000
1985	1	N/A	1,605,000	1	N/A	678,000	N/A	N/A	0	2	1,500,000	1,266,951
1986	1	N/A	1,450,000	1	N/A	679,000	N/A	N/A	0	2	1,500,000	1,668,266
1987	1	N/A	2,400,000	1	N/A	243,000	N/A	N/A	0	2	1,500,000	861,386
1988	1	N/A	1,990,000	1	N/A	198,000	N/A	N/A	0	2	1,500,000	1,380,000
1989	1	N/A	1,684,000	1	N/A	0	N/A	N/A	0	2	1,500,000	1,354,500
1990	1	N/A	1,513,000	1	N/A	300,000	N/A	N/A	0	2	1,500,000	2,729,000
1991	1	N/A	1,445,000	1	N/A	0	N/A	N/A	0	2	1,500,000	2,353,300
1992	1	N/A	1,882,000	1	N/A	269,000	N/A	N/A	0	2	1,500,000	1,649,000
1993	1	N/A	1,873,807	1	N/A	168,000	N/A	N/A	0	2	1,500,000	809,000
1994	1	N/A	1,796,971	3	133,000	223,375	N/A	N/A	0	2	1,500,000	948,700
1995	1	N/A	2,432,000	3	133,000	140,000	N/A	N/A	0	2	1,500,000	1,292,242
1996	1	N/A	1,803,226	3	133,000	149,242	N/A	N/A	0	2	1,500,000	1,939,141
1997	1	N/A	2,118,275	3	133,000	83,189	N/A	N/A	0	2	1,500,000	1,259,500
1998	1	N/A	2,181,150	3	133,000	103,532	N/A	N/A	0	2	1,500,000	1,625,269
1999	1	N/A	1,990,000	3	133,000	114,000	N/A	N/A	0	2	1,500,000	1,619,000
2000	2	N/A	1,915,000	3	133,000	111,032	N/A	N/A	0	2	1,500,000	1,189,278
2001	2	N/A	2,020,450	3	133,000	111,937	N/A	N/A	0	2	1,500,000	1,208,211
2002	2	N/A	2,009,360	3	133,000	133,127	N/A	N/A	0	2	1,500,000	1,765,000
2003	2	N/A	1,966,000	3	133,000	102,732	N/A	N/A	0	2	1,500,000	1,092,416
2004	2	N/A	2,360,500	3	133,000	39,577	4	385,000	0	2	1,500,000	1,588,905

-continued-

Appendix K1.–Page 2 of 2.

Year	Crystal Lake			Deer Mountain			Port Saint Nicholas			Whitman Lake		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	2	N/A	1,962,000	3	133,000	138,332	4	770,000	0	2	1,500,000	1,453,243
2006	2	N/A	2,015,000	3	133,000	77,065	4	770,000	620,947	2	1,500,000	1,074,975
2007	2	N/A	2,112,100	3	133,000	74,250	4	770,000	597,017	2	1,500,000	1,225,000
2008	2	N/A	2,213,925	3	133,000	122,007	4	770,000	259,609	2	1,500,000	1,100,000
2009	2	N/A	1,630,200	3	133,000	118,163	4	770,000	455,589	2	1,500,000	1,100,000
2010	2	N/A	1,411,250	3	133,000	122,343	4	770,000	400,000	2	1,500,000	1,120,000
2011	2	N/A	2,301,330	3	133,000	131,165	4	770,000	320,000	2	1,500,000	1,135,000
2012	2	N/A	2,212,900	3	133,000	123,778	4	770,000	330,000	2	1,500,000	1,123,007
2013	2	N/A	2,253,915	3	133,000	0	4	770,000	319,000	2	1,500,000	1,741,768
2014	2	N/A	2,018,000	0	N/A	0	4	770,000	318,620	2	2,100,000	1,660,000
2015	2	N/A	1,774,500	0	N/A	0	4	770,000	150,000	2	2,100,000	1,800,000
2016	2	N/A	1,915,000	0	N/A	0	2	770,000	160,000	2	2,100,000	1,619,500
2017	2	N/A	2,067,500	2	600,000	0	2	770,000	0	2	2,100,000	1,016,431
2018	2	N/A	2,025,000	2	600,000	0	2	770,000	130,000	2	2,100,000	1,580,000
2019	2	N/A	1,793,000	2	600,000	47,000	2	770,000	120,000	2	2,100,000	1,400,000
2020	2	N/A	2,022,000	2	600,000	126,000	2	770,000	0	2	2,100,000	2,400,000
2021	2	N/A	1,750,300	2	600,000	30,000	2	770,000	0	2	2,300,000	1,400,000
2022	2	N/A	1,825,000	2	600,000	30,000	2	770,000	0	2	2,300,000	2,050,000
2023	2	N/A	1,530,000	2	600,000	0	2	770,000	0	2	2,300,000	2,000,000

Note: Bell Island Net Pens (1990–2002) and Klawock River (1999–2006) had egg capacities but did not use these capacities. Beaver Falls had capacity in 1989–1996 and had eyed eggs in one year, 1990. Burnett Inlet had capacity in 1986–1992 and had eyed eggs in 1987–1991. Neets Bay had egg capacity in 1983–present and eyed eggs in 1983–1992.

Note: Operator 0 = None, 1 = ADF&G, 2 = Southern Southeast Regional Aquaculture Association, 3 = Ketchikan Tribal Hatchery Corporation, 4 = Prince of Wales Hatchery Association.

Appendix K2.–Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Northern Southeast-area hatcheries, 1975–2023.

Year	Hidden Falls			Macaulay			Medvejie			Sawmill Creek		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	1	N/A	0	N/A	N/A	0	0	0	0
1976	0	N/A	0	1	N/A	0	N/A	N/A	0	0	0	0
1977	0	N/A	0	1	N/A	0	N/A	N/A	0	0	0	0
1978	0	N/A	0	1	N/A	0	N/A	N/A	0	0	0	0
1979	0	N/A	0	1	N/A	0	N/A	N/A	0	0	0	0
1980	0	N/A	0	1	N/A	0	N/A	N/A	0	0	0	0
1981	1	N/A	133,587	1	N/A	0	2	0	0	0	0	0
1982	1	N/A	75,700	1	N/A	0	2	150,000	29,620	0	0	0
1983	1	N/A	126,271	1	N/A	0	2	150,000	32,153	0	0	0
1984	1	N/A	47,400	1	N/A	0	2	300,000	151,500	0	0	0
1985	1	N/A	298,000	1	N/A	0	2	300,000	249,000	0	0	0
1986	1	N/A	178,200	1	N/A	0	2	300,000	188,950	0	0	0
1987	1	N/A	380,589	3	200,000	0	2	2,000,000	1,133,600	0	0	0
1988	2	3,100,000	388,078	3	200,000	0	2	2,000,000	1,254,380	0	0	0
1989	2	3,100,000	246,791	3	200,000	50,964	2	2,000,000	1,113,100	0	0	0
1990	2	3,500,000	2,058,097	3	200,000	205,068	2	2,000,000	1,489,000	0	0	0
1991	2	3,500,000	2,292,394	3	200,000	317,234	2	2,000,000	831,000	0	0	0
1992	2	3,500,000	1,767,028	3	250,000	259,490	2	2,000,000	1,142,000	0	0	0
1993	2	3,500,000	1,164,028	3	250,000	231,496	2	2,000,000	1,236,200	0	0	0
1994	2	3,500,000	1,399,565	3	700,000	429,545	2	2,000,000	1,284,900	0	0	0
1995	2	3,500,000	1,406,165	3	700,000	647,690	2	2,000,000	1,163,100	0	0	0
1996	2	3,500,000	1,299,376	3	700,000	624,821	2	2,000,000	1,197,600	0	0	0
1997	2	3,500,000	1,343,562	3	700,000	656,615	2	3,200,000	1,820,000	0	0	0
1998	2	3,500,000	1,378,000	3	700,000	591,638	2	3,200,000	2,400,000	0	0	0
1999	2	3,500,000	1,361,000	3	700,000	696,097	2	3,200,000	2,429,000	0	0	0
2000	2	3,500,000	1,365,000	3	700,000	638,901	2	3,200,000	2,571,000	0	0	0
2001	2	3,500,000	1,358,000	3	700,000	410,733	2	3,200,000	2,445,800	0	0	0
2002	2	3,500,000	1,700,413	3	700,000	783,117	2	3,200,000	2,775,000	0	0	0
2003	2	3,500,000	1,400,000	3	1,250,000	913,422	2	5,200,000	2,539,000	0	0	0
2004	2	3,500,000	1,379,840	3	1,250,000	722,823	2	5,200,000	3,073,000	0	0	0

-continued-

Appendix K2.–Page 2 of 2.

Year	Hidden Falls			Macaulay			Medvejie			Sawmill Creek		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	2	3,500,000	1,739,432	3	1,250,000	750,206	2	5,200,000	4,369,307	0	0	0
2006	2	3,500,000	1,344,109	3	1,250,000	728,647	2	5,200,000	4,607,348	0	0	0
2007	2	3,800,000	2,172,728	3	1,250,000	942,039	2	5,200,000	4,435,757	2	0	0
2008	2	3,800,000	2,430,865	3	1,250,000	914,454	2	5,200,000	4,589,014	2	0	0
2009	2	3,800,000	2,547,581	3	1,250,000	913,000	2	5,200,000	4,714,342	2	0	0
2010	2	3,800,000	1,765,554	3	1,250,000	844,000	2	5,200,000	4,943,921	2	0	0
2011	2	3,800,000	767,173	3	1,250,000	678,000	2	5,200,000	3,075,200	2	0	0
2012	2	3,800,000	876,286	3	1,250,000	693,000	2	5,200,000	4,712,545	2	0	0
2013	2	3,800,000	878,323	3	1,250,000	1,101,700	2	5,200,000	3,476,306	2	0	0
2014	2	3,800,000	877,317	3	1,250,000	942,000	2	5,200,000	3,646,054	2	0	0
2015	2	3,800,000	991,254	3	1,250,000	626,400	2	5,200,000	4,053,358	2	0	0
2016	2	3,800,000	765,832	3	1,250,000	615,636	2	5,200,000	2,786,235	2	0	0
2017	2	3,800,000	870,353	3	1,250,000	1,026,700	2	5,200,000	4,143,349	2	0	0
2018	2	3,800,000	778,697	3	1,250,000	1,067,200	2	5,200,000	4,887,785	2	0	0
2019	2	3,800,000	800,588	3	1,250,000	1,149,000	2	5,200,000	5,169,511	2	2,000,000	0
2020	2	3,800,000	698,511	3	1,250,000	1,078,000	2	5,200,000	5,312,607	2	2,000,000	914,614
2021	2	3,800,000	621,581	3	1,250,000	820,500	2	5,200,000	3,943,853	2	2,000,000	721,045
2022	2	3,800,000	842,760	3	1,250,000	1,059,800	2	5,200,000	4,036,893	2	2,000,000	293,975
2023	2	3,800,000	1,213,835	3	1,250,000	1,190,417	2	5,200,000	2,562,909	2	2,000,000	0

Note: Burro Creek had capacity in 1997–2006 and eyed eggs in 1990–1999. Little Port Walter operated by Armstrong Keta, Incorporated, has permitted capacity in 2018–present. Little Port Walter operated by the National Marine Fisheries Service took eggs during most years from 1976–2020. Port Armstrong had capacity in 1984–present and had eyed eggs in 1986–1991 and 2001–2015. Sheldon Jackson had capacity in 1993–2011 and reared eggs in 1984–2003 and 2005–2010. Snettisham hatchery reared eggs in 1977, 1979–1991, and 1993.

Note: Operator 0 = None, 1 = ADF&G, 2 = Northern Southeast Regional Aquaculture Association, 3 = Douglas Island Pink and Chum, Incorporated.

Appendix K3.–Hatchery operator (Op.), PNP Hatchery permitted sockeye salmon green egg capacity (Cap.), and number of sockeye salmon eyed eggs at Southeast-area hatcheries, 1975–2023.

Year	Snettisham		
	Op.	Cap.	Eyed eggs
1975	1	N/A	0
1976	1	N/A	0
1977	1	N/A	0
1978	1	N/A	0
1979	1	N/A	0
1980	1	N/A	0
1981	1	N/A	0
1982	1	N/A	0
1983	1	N/A	0
1984	1	N/A	0
1985	1	N/A	0
1986	1	N/A	0
1987	1	N/A	0
1988	1	N/A	251,400
1989	1	N/A	5,492,329
1990	1	N/A	9,328,374
1991	1	N/A	8,053,674
1992	1	N/A	11,350,009
1993	1	N/A	16,229,862
1994	1	N/A	11,941,542
1995	1	N/A	16,009,540
1996	2	33,500,000	22,902,564
1997	2	33,500,000	13,315,848
1998	2	33,500,000	13,235,978
1999	2	33,500,000	11,075,750
2000	2	33,500,000	14,198,137
2001	2	33,500,000	13,844,738
2002	2	33,500,000	12,788,940
2003	2	33,500,000	14,330,108
2004	2	33,500,000	16,697,266
2005	2	33,500,000	14,617,402
2006	2	33,500,000	20,237,300
2007	2	33,500,000	17,988,898
2008	2	33,500,000	18,452,000
2009	2	33,500,000	17,211,000
2010	2	33,500,000	18,738,000
2011	2	33,500,000	22,107,100
2012	2	33,500,000	208,000
2013	2	33,500,000	4,777,700
2014	2	33,500,000	16,339,300
2015	2	33,500,000	14,857,300
2016	2	33,500,000	16,955,800
2017	2	33,500,000	16,739,600
2018	2	33,500,000	14,912,000
2019	2	33,500,000	17,440,800
2020	2	33,500,000	12,709,500
2021	2	33,500,000	3,567,100
2022	2	33,500,000	15,614,800
2023	2	33,500,000	15,559,549

-continued-

Appendix K3.–Page 2 of 2.

Note: Operator 1 = ADF&G, 2 = Douglas Island Pink and Chum, Incorporated.

Note: Whitman Lake had sockeye salmon egg capacity but did not use this capacity. Beaver Falls had egg capacity in 1986–1996 and had eyed eggs in 1983, 1989, and 1990. Burnett Inlet had capacity in 1997–present and reared eggs in 1998–2009. Haines Projects had capacity in 1992–present and had eyed eggs in 1992–1998 and 2003. Klawock River had capacity in 1994–present and had eyed eggs in 1986–2004.

Appendix K4.—Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Southern Southeast-area hatcheries, 1975–2023.

Year	Crystal Lake			Klawock River			Neets Bay			Whitman Lake		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	1	N/A	3,727,000	1	N/A	0	0	N/A	0	0	N/A	0
1976	1	N/A	3,903,000	1	N/A	0	0	N/A	0	0	N/A	0
1977	1	N/A	1,416,000	1	N/A	0	0	N/A	0	0	N/A	0
1978	1	N/A	420,000	1	N/A	17,600	0	N/A	0	2	2,300,000	635,000
1979	1	N/A	820,000	1	N/A	50,300	0	N/A	0	2	2,300,000	889,000
1980	1	N/A	65,000	1	N/A	77,000	0	N/A	0	2	2,300,000	596,967
1981	1	N/A	432,000	1	N/A	118,000	0	N/A	0	2	2,300,000	1,819,962
1982	1	N/A	3,030,000	1	N/A	1,206,000	2	N/A	1,616,091	2	2,300,000	335,437
1983	1	N/A	2,213,000	1	N/A	1,206,000	2	5,000,000	2,758,409	2	3,400,000	1,073,435
1984	1	N/A	1,360,000	1	N/A	1,500,000	2	5,000,000	2,704,000	2	3,400,000	1,014,000
1985	1	N/A	1,510,000	1	N/A	1,520,000	2	5,000,000	2,898,000	2	3,400,000	0
1986	1	N/A	688,000	1	N/A	2,100,000	2	5,000,000	1,696,000	2	3,400,000	1,916,000
1987	1	N/A	788,000	1	N/A	1,703,000	2	5,000,000	1,049,000	2	3,400,000	2,600,000
1988	1	N/A	952,000	1	N/A	1,791,500	2	5,000,000	1,832,000	2	3,400,000	3,560,000
1989	1	N/A	0	1	N/A	0	2	5,000,000	1,718,000	2	3,400,000	1,054,000
1990	1	N/A	558,000	1	N/A	0	2	5,000,000	818,000	2	3,400,000	2,480,000
1991	1	N/A	429,000	1	N/A	1,099,000	2	5,000,000	2,314,000	2	3,400,000	2,571,000
1992	1	N/A	451,000	1	N/A	0	2	5,000,000	2,143,000	2	3,400,000	2,205,000
1993	1	N/A	421,525	1	N/A	510,376	2	5,000,000	1,933,000	2	3,400,000	2,244,000
1994	1	N/A	449,887	3	5,000,000	0	2	5,000,000	2,078,000	2	3,400,000	2,668,000
1995	1	N/A	282,000	3	5,000,000	250,000	2	5,000,000	2,230,740	2	3,400,000	4,903,438
1996	1	N/A	263,000	3	5,000,000	2,339,000	2	5,000,000	2,021,000	2	3,400,000	4,894,000
1997	1	N/A	341,000	3	5,000,000	3,218,638	2	5,000,000	2,751,000	2	3,400,000	5,935,000
1998	1	N/A	292,500	3	5,000,000	661,433	2	5,000,000	2,160,000	2	3,400,000	0
1999	1	N/A	218,981	3	5,000,000	2,200,000	2	5,000,000	2,035,000	2	3,400,000	2,157,429
2000	2	N/A	208,003	3	5,000,000	2,263,280	2	5,000,000	2,347,318	2	3,400,000	4,247,611
2001	2	N/A	470,365	3	5,000,000	3,387,093	2	5,000,000	2,188,591	2	3,400,000	4,115,591
2002	2	N/A	337,500	3	5,000,000	4,904,194	2	5,000,000	2,178,743	2	3,400,000	4,266,000
2003	2	N/A	250,500	3	5,000,000	3,145,685	2	5,000,000	2,591,527	2	3,400,000	4,100,000
2004	2	N/A	235,000	3	5,000,000	1,534,746	2	5,000,000	2,818,151	2	3,400,000	1,665,765

-continued-

Appendix K4.–Page 2 of 2.

Year	Crystal Lake			Klawock River			Neets Bay			Whitman Lake		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	2	N/A	175,000	3	5,000,000	4,914,459	2	5,000,000	2,554,996	2	3,400,000	1,780,538
2006	2	N/A	223,700	3	5,000,000	4,724,963	2	5,000,000	2,505,000	2	3,400,000	2,116,000
2007	2	N/A	223,700	3	5,000,000	4,929,278	2	5,000,000	2,577,000	2	3,400,000	2,425,000
2008	2	N/A	254,650	3	5,000,000	4,686,898	2	5,000,000	2,900,000	2	3,400,000	2,550,000
2009	2	N/A	233,050	3	5,000,000	4,979,665	2	5,000,000	2,560,000	2	3,400,000	2,200,000
2010	2	N/A	260,000	3	5,000,000	4,812,806	2	5,000,000	2,507,078	2	7,000,000	2,638,000
2011	2	N/A	249,000	3	5,000,000	4,487,765	2	5,000,000	2,564,000	2	7,000,000	2,842,500
2012	2	N/A	236,400	3	5,000,000	5,104,845	2	5,000,000	2,410,000	2	7,000,000	1,491,868
2013	2	N/A	210,000	3	5,000,000	4,106,251	2	5,000,000	2,551,812	2	7,000,000	1,691,474
2014	2	N/A	175,000	3	5,000,000	4,896,900	2	5,000,000	3,431,498	2	7,000,000	4,170,291
2015	2	N/A	171,300	3	5,000,000	5,130,492	2	5,000,000	2,630,000	2	7,000,000	2,387,000
2016	2	N/A	190,000	3	5,000,000	5,187,957	2	5,000,000	2,820,000	2	7,000,000	1,940,000
2017	2	N/A	150,000	3	5,000,000	4,477,895	2	5,000,000	2,500,000	2	7,000,000	4,678,000
2018	2	N/A	240,000	3	5,000,000	5,335,037	2	5,000,000	4,050,000	2	7,000,000	3,041,000
2019	2	N/A	140,000	2	5,500,000	5,623,863	2	5,000,000	3,800,000	2	7,500,000	3,900,000
2020	2	N/A	150,000	2	5,500,000	3,962,400	2	5,000,000	3,450,000	2	7,500,000	2,000,000
2021	2	N/A	140,000	2	5,500,000	4,450,000	2	5,000,000	3,600,000	2	7,500,000	1,800,000
2022	2	N/A	155,000	2	5,500,000	4,445,000	2	5,000,000	4,000,000	2	7,500,000	1,750,000
2023	2	N/A	N/A ^a	2	5,500,000	N/A ^a	2	5,000,000	N/A ^a	2	7,500,000	N/A ^a

Note: Beaver Falls reared eggs in 1978 and had capacity during 1989–1997. Burnett Inlet Hatchery had capacity in 1984–1992 and in 1997–2006 and reared eggs in 1997–2006. Burnett Inlet Hatchery had capacity in 2007–present and eggs in 2007–2020. Deer Mountain had permitted capacity in 1994–2012 and reared eggs in 1977–1980, 1981, 1982, 1986–1988, 1990–1993, and 1994–2012.

Note: Operator 0 = None, 1 = ADF&G, 2 = Southern Southeast Regional Aquaculture Association, 3 = Prince of Wales Hatchery Association.

^a Estimated number of eyed eggs unknown at time of reporting.

Appendix K5.—Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Northern Southeast-area hatcheries, 1975–2023.

Year	Hidden Falls			Macaulay			Port Armstrong			Sawmill Creek			Sheldon Jackson		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	1	N/A	0	0	N/A	0	0	N/A	0	5	0	12,369
1976	0	N/A	0	1	N/A	0	0	N/A	0	0	N/A	0	5	0	0
1977	0	N/A	0	1	N/A	0	0	N/A	0	0	N/A	0	5	0	9,451
1978	0	N/A	0	1	N/A	0	0	N/A	0	0	N/A	0	5	0	0
1979	0	N/A	0	1	N/A	0	0	N/A	0	0	N/A	0	5	0	3,518
1980	0	N/A	0	1	N/A	0	0	N/A	0	0	N/A	0	5	200,000	25,313
1981	1	N/A	0	1	N/A	0	4	N/A	0	0	N/A	0	5	200,000	63,252
1982	1	N/A	0	1	N/A	0	4	N/A	0	0	N/A	0	5	200,000	66,225
1983	1	N/A	0	1	N/A	0	4	N/A	0	0	N/A	0	5	200,000	10,104
1984	1	N/A	0	1	N/A	0	4	N/A	0	0	N/A	0	5	200,000	97,724
1985	1	N/A	0	1	N/A	0	4	N/A	0	0	N/A	0	5	200,000	117,000
1986	1	N/A	0	1	N/A	0	4	N/A	0	0	N/A	0	5	150,000	174,816
1987	1	N/A	0	3	1,000,000	0	4	500,000	0	0	N/A	0	5	150,000	110,300
1988	2	N/A	63,800	3	1,000,000	0	4	500,000	132,000	0	N/A	0	5	150,000	61,800
1989	2	70,000	65,871	3	1,000,000	1,053,650	4	500,000	232,000	0	N/A	0	5	150,000	111,000
1990	2	250,000	223,300	3	1,000,000	1,084,818	4	500,000	190,000	0	N/A	0	5	150,000	117,931
1991	2	250,000	431,396	3	1,000,000	1,064,990	4	500,000	589,000	0	N/A	0	5	150,000	83,583
1992	2	1,700,000	1,690,200	3	1,000,000	1,056,091	4	1,500,000	898,000	0	N/A	0	5	150,000	133,777
1993	2	1,700,000	1,529,338	3	1,500,000	1,095,737	4	1,500,000	808,000	0	N/A	0	5	150,000	108,447
1994	2	5,700,000	1,651,187	3	1,500,000	951,619	4	2,000,000	1,764,000	0	N/A	0	5	150,000	84,529
1995	2	5,700,000	1,521,097	3	1,500,000	1,094,305	4	2,000,000	1,756,000	0	N/A	0	5	150,000	168,344
1996	2	5,700,000	1,507,379	3	1,500,000	960,810	4	2,000,000	1,805,200	0	N/A	0	5	150,000	131,962
1997	2	5,700,000	1,692,325	3	1,500,000	860,254	4	2,000,000	734,000	0	N/A	0	5	150,000	2,284
1998	2	5,700,000	1,631,049	3	1,500,000	881,314	4	2,000,000	1,531,000	0	N/A	0	5	150,000	96,327
1999	2	5,700,000	2,162,345	3	1,500,000	900,085	4	2,000,000	1,500,000	0	N/A	0	5	150,000	60,756
2000	2	6,100,000	2,061,422	3	1,500,000	850,293	4	2,000,000	1,677,888	0	N/A	0	5	150,000	102,600
2001	2	6,100,000	2,099,232	3	1,500,000	825,000	4	2,000,000	1,787,141	0	N/A	0	5	150,000	0
2002	2	6,100,000	2,676,927	3	1,500,000	675,000	4	2,000,000	1,782,333	0	N/A	0	5	150,000	120,144
2003	2	6,100,000	2,600,000	3	1,500,000	520,442	4	2,000,000	2,000,189	0	N/A	0	5	150,000	70,702
2004	2	6,100,000	5,678,917	3	1,500,000	622,500	4	2,000,000	2,887,505	0	N/A	0	5	150,000	52,141

-continued-

Appendix K5.–Page 2 of 2.

Year	Hidden Falls			Macaulay			Port Armstrong			Sawmill Creek			Sheldon Jackson		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	2	6,100,000	4,130,366	3	1,500,000	580,060	4	3,000,000	2,411,039	0	N/A	0	5	150,000	85,220
2006	2	6,100,000	3,919,598	3	1,500,000	779,837	4	3,000,000	2,607,916	0	N/A	0	5	150,000	171,936
2007	2	6,100,000	5,679,286	3	1,500,000	572,590	4	5,000,000	3,323,061	2	4,332,000	0	5	150,000	172,567
2008	2	6,100,000	5,997,186	3	1,500,000	350,000	4	5,000,000	3,381,029	2	4,332,000	0	5	150,000	161,190
2009	2	6,100,000	5,708,287	3	1,500,000	379,000	4	5,000,000	3,390,543	2	4,332,000	0	5	150,000	97,963
2010	2	6,900,000	5,609,704	3	1,500,000	314,000	4	5,000,000	2,604,520	2	4,332,000	0	5	150,000	23,500
2011	2	6,900,000	6,900,335	3	1,500,000	551,000	4	5,000,000	2,339,489	2	4,332,000	0	5	150,000	306,872
2012	2	7,700,000	7,699,950	3	1,500,000	1,218,400	4	5,000,000	2,600,000	2	4,332,000	0	6	250,000	2,510
2013	2	7,700,000	7,267,550	3	1,500,000	1,033,600	4	5,000,000	2,343,000	2	4,332,000	1,085,722	6	250,000	52,959
2014	2	7,700,000	7,276,242	3	1,500,000	1,105,000	4	5,000,000	2,592,000	2	4,332,000	932,568	6	250,000	260,344
2015	2	7,700,000	7,241,714	3	1,500,000	1,056,200	4	5,000,000	2,664,632	2	4,332,000	1,228,009	6	250,000	31,624
2016	2	7,700,000	7,459,009	3	1,500,000	1,378,700	4	5,000,000	4,823,322	2	4,332,000	1,436,863	6	250,000	161,588
2017	2	7,700,000	6,519,930	3	1,500,000	1,207,200	4	5,000,000	4,838,400	2	4,332,000	2,786,144	6	250,000	241,160
2018	2	7,700,000	5,702,733	3	1,500,000	1,121,000	4	5,000,000	4,828,000	2	4,332,000	2,459,453	6	250,000	227,500
2019	2	7,700,000	8,180,651	3	1,500,000	792,500	4	5,000,000	4,521,127	2	4,332,000	2,442,182	6	250,000	255,500
2020	2	7,700,000	7,132,250	3	1,500,000	1,250,000	4	5,000,000	4,838,400	2	4,332,000	2,384,595	6	250,000	175,000
2021	2	7,700,000	7,500,054	3	1,500,000	1,473,000	4	5,000,000	3,304,000	2	4,332,000	2,056,587	6	250,000	171,722
2022	2	7,700,000	7,373,812	3	1,500,000	1,439,332	4	6,000,000	6,000,000	2	4,332,000	2,479,903	6	250,000	213,605
2023	2	7,700,000	NA ^a	3	1,500,000	NA ^a	4	6,000,000	9,192,000 ^b	2	4,332,000	NA ^a	6	250,000	NA ^a

Note: Burro Creek had egg capacity in 1986–2007 and had eyed eggs in most years during 1986–1999. Gunnuk Creek had egg capacity in 1985–present and reared eggs in 1982 and in most years during 1994–2013. Medvejie Creek had egg capacity in 1981–present and reared eggs in 1981–2014. Salmon Creek had capacity in 1981–1987 and reared eggs during 1981 and 1982. Sheep Creek had capacity in 1985–2015 and reared eggs in 1985–1988, 1992, 1993, and 1998. Snettisham reared eggs in 1978–1987, 1988, and 1989. Starrigavan reared eggs during 1975–1978.

Note: Operator 0 = None, 1 = ADF&G, 2 = Northern Southeast Regional Aquaculture Association, 3 = Douglas Island Pink and Chum, Incorporated, 4 = Armstrong Keta, Incorporated, 5 = Sheldon Jackson College, 6 = Sitka Sound Science Center.

^a Estimated number of eyed eggs unknown at time of reporting.

^b Includes eggs to be transferred to Hidden Falls.

Appendix K6.—Hatchery operator (Op.), PNP Hatchery permitted pink salmon green egg capacity (Cap.), and number of pink salmon eyed eggs at Southeast-area hatcheries, 1975–2023.

Year	Medvejie			Port Armstrong			Sheldon Jackson		
	Op.	Cap.	Green eggs ^a	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	0	N/A	0	3	1,000,000	1,678,017
1976	0	N/A	0	0	N/A	0	3	1,000,000	1,900,000
1977	0	N/A	0	0	N/A	0	3	15,000,000	10,000,000
1978	0	N/A	0	0	N/A	0	3	15,000,000	2,400,000
1979	0	N/A	0	0	N/A	0	3	15,000,000	9,025,450
1980	0	N/A	0	0	N/A	0	3	15,000,000	2,097,656
1981	1	0	0	2	11,000,000	0	3	16,000,000	12,032,191
1982	1	0	0	2	11,000,000	0	3	16,000,000	13,599,851
1983	1	0	0	2	11,000,000	7,500,000	3	16,000,000	14,737,726
1984	1	0	0	2	12,000,000	9,454,134	3	16,000,000	11,572,617
1985	1	0	59,000	2	16,000,000	10,628,000	3	16,000,000	10,689,315
1986	1	100,000	107,100	2	16,000,000	12,529,161	3	16,000,000	14,324,414
1987	1	100,000	102,000	2	16,000,000	19,681,510	3	16,000,000	14,433,652
1988	1	300,000	36,000	2	30,000,000	16,191,255	3	20,000,000	3,022,000
1989	1	300,000	20,000	2	30,000,000	22,660,709	3	20,000,000	5,611,430
1990	1	300,000	0	2	110,000,000	50,869,000	3	20,000,000	2,820,000
1991	1	300,000	251,000	2	110,000,000	40,132,316	3	20,000,000	9,146,735
1992	1	300,000	146,000	2	110,000,000	52,816,000	3	20,000,000	6,954,339
1993	1	300,000	48,800	2	110,000,000	51,277,241	3	20,000,000	728,064
1994	1	300,000	214,600	2	85,000,000	54,960,000	3	20,000,000	7,134,674
1995	1	300,000	195,000	2	85,000,000	73,390,000	3	20,000,000	8,067,280
1996	1	300,000	319,400	2	85,000,000	82,716,000	3	20,000,000	10,875,353
1997	1	300,000	224,000	2	85,000,000	76,542,000	3	20,000,000	4,507,130
1998	1	300,000	384,000	2	85,000,000	81,301,000	3	20,000,000	6,635,616
1999	1	300,000	220,000	2	85,000,000	86,456,000	3	20,000,000	1,791,562
2000	1	300,000	311,500	2	85,000,000	52,993,000	3	20,000,000	5,608,114
2001	1	300,000	266,000	2	85,000,000	75,613,638	3	20,000,000	874,540
2002	1	300,000	298,000	2	85,000,000	86,229,820	3	20,000,000	2,345,661
2003	1	300,000	312,000	2	85,000,000	84,146,051	3	20,000,000	37,429
2004	1	300,000	292,000	2	85,000,000	82,415,435	3	20,000,000	1,747,789
2005	1	300,000	466,740	2	85,000,000	81,856,418	3	1,000,000	1,462,935
2006	1	300,000	663,515	2	85,000,000	80,762,987	3	1,000,000	1,110,500
2007	1	300,000	368,000	2	85,000,000	62,760,913	3	1,000,000	1,021,428
2008	1	300,000	347,919	2	85,000,000	21,440,357	3	1,000,000	1,090,844
2009	1	300,000	314,675	2	85,000,000	53,907,049	3	1,000,000	1,009,937
2010	1	300,000	319,425	2	85,000,000	76,254,828	3	1,000,000	707,831
2011	1	300,000	377,400	2	85,000,000	83,697,292	3	1,000,000	2,699,588
2012	1	300,000	377,700	2	85,000,000	52,455,622	4	3,000,000	2,708,720
2013	1	300,000	304,800	2	85,000,000	84,420,994	4	3,000,000	3,020,444
2014	1	300,000	301,500	2	105,000,000	88,762,503	4	3,000,000	3,049,321
2015	1	300,000	300,000	2	105,000,000	98,787,422	4	3,000,000	2,494,844
2016	1	300,000	206,400	2	105,000,000	53,426,863	4	3,000,000	2,390,431
2017	1	300,000	131,546	2	105,000,000	79,247,008	4	3,000,000	2,555,105
2018	1	300,000	302,800	2	105,000,000	39,153,941	4	3,000,000	2,792,805
2019	1	300,000	265,568	2	105,000,000	40,578,284	4	3,000,000	2,861,159
2020	1	300,000	298,760	2	105,000,000	61,515,646	4	3,000,000	3,228,210
2021	1	300,000	299,000	2	105,000,000	59,364,471	4	3,000,000	3,106,183
2022	1	300,000	198,100	2	105,000,000	53,604,539	4	3,000,000	3,180,629
2023	1	300,000	299,900	2	105,000,000	43,175,563	4	3,000,000	3,100,984

-continued-

Note: Burnett Inlet had capacity in 1979–1996 and eggs in 1978–1996. Meyers Chuck had capacity in 1979–1987 and eggs in 1980–1983, 1985, and 1986. Burro Creek had capacity in 1980–2006 and eggs in 1980–1999. Gunnuk Creek had capacity in 1982–present and eggs in 1982, 1983, 1985–1993, and 2007–2013. Kowee Creek had capacity in 1977–1986 and eggs in 1981, 1983–1987, and 1992. Macaulay had capacity in 1987–2014 and eggs in 1987–2001. Salmon Creek had capacity in 1981–1987 and eggs in 1979–1983. Sheep Creek had capacity in 1982–1986 and eggs in 1981–1987 and 1989.

Note: Operator 0 = None, 1 = Northern Southeast Regional Aquaculture Association, 2 = Armstrong Keta, Incorporated, 3 = Sheldon Jackson College, 4 = Sitka Sound Science Center.

^a Estimated number of eyed eggs unknown.

Appendix K7.—Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap.), and number of chum salmon eyed eggs at Southern Southeast-area hatcheries, 1975–2023.

Year	Burnett Inlet			Neets Bay			Port Saint Nicholas			Whitman Lake		
	Op.	Cap.	Eyed eggs	Op.	Cap. ^a	Eyed eggs ^a	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	3	N/A	0	0	N/A	0	0	N/A	0
1976	1	2,000,000	0	3	N/A	0	0	N/A	0	0	N/A	0
1977	1	2,000,000	0	3	N/A	0	0	N/A	0	0	N/A	0
1978	1	2,000,000	35,000	3	N/A	0	0	N/A	0	2	26,000,000	0
1979	1	2,000,000	0	3	N/A	0	0	N/A	0	2	26,000,000	4,164,000
1980	1	2,000,000	241,000	3	N/A	0	0	N/A	0	2	26,000,000	19,303,319
1981	1	2,000,000	308,800	3	N/A	0	0	N/A	0	2	26,800,000	15,975,436
1982	1	2,000,000	280,200	3	N/A	0	0	N/A	0	2	26,800,000	23,442,000
1983	1	5,000,000	1,358,500	2	60,000,000	28,347,490	0	N/A	0	2	26,800,000	0
1984	1	5,000,000	493,258	2	60,000,000	43,617,083	0	N/A	0	2	26,800,000	17,733,309
1985	1	5,000,000	839,477	2	60,000,000	37,580,000	0	N/A	0	2	26,800,000	7,955,000
1986	1	20,000,000	4,475,596	2	60,000,000	47,460,000	0	N/A	0	2	26,800,000	11,711,000
1987	1	20,000,000	8,643,016	2	60,000,000	51,680,000	0	N/A	0	2	26,800,000	23,009,000
1988	1	20,000,000	7,704,634	2	60,000,000	57,647,000	0	N/A	0	2	26,800,000	32,000,000
1989	1	20,000,000	2,293,058	2	60,000,000	35,082,000	0	N/A	0	2	26,800,000	16,065,000
1990	1	20,000,000	11,005,700	2	60,000,000	64,639,000	0	N/A	0	2	26,800,000	32,111,112
1991	1	20,000,000	19,862,000	2	60,000,000	53,045,000	0	N/A	0	2	26,800,000	28,253,000
1992	1	60,000,000	19,755,000	2	60,000,000	69,412,000	0	N/A	0	2	26,800,000	31,901,000
1993	1	60,000,000	13,954,500	2	80,000,000	100,957,000	0	N/A	0	2	26,800,000	33,710,600
1994	1	60,000,000	21,470,000	2	80,000,000	100,827,000	0	N/A	0	2	26,800,000	32,423,000
1995	1	60,000,000	42,204,000	2	80,000,000	96,455,779	0	N/A	0	2	26,800,000	33,279,000
1996	1	60,000,000	55,461,000	2	80,000,000	107,495,972	0	N/A	0	2	26,800,000	26,546,000
1997	2	0	0	2	80,000,000	75,731,200	0	N/A	0	2	26,800,000	26,729,000
1998	2	0	0	2	80,000,000	76,056,000	0	N/A	0	2	26,800,000	26,163,000
1999	2	0	0	2	80,000,000	76,497,376	0	N/A	0	2	26,800,000	27,759,000
2000	2	0	0	2	80,000,000	70,809,766	0	N/A	0	2	35,800,000	28,657,000
2001	2	0	0	2	72,000,000	71,691,279	0	N/A	0	2	43,800,000	25,876,138
2002	2	0	0	2	72,000,000	68,053,879	0	N/A	0	2	43,800,000	29,293,000
2003	2	0	0	2	84,000,000	94,945,483	0	N/A	0	2	44,300,000	23,963,063
2004	2	0	0	2	84,000,000	97,077,386	4	0	0	2	44,300,000	28,983,851

-continued-

Appendix K7.–Page 2 of 2.

Year	Burnett Inlet			Neets Bay			Port Saint Nicholas			Whitman Lake		
	Op.	Cap.	Eyed eggs	Op.	Cap. ^a	Eyed eggs ^a	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	2	0	0	2	84,000,000	78,079,738	4	0	0	2	44,300,000	34,822,207
2006	2	0	0	2	84,000,000	100,506,874	4	0	0	2	44,300,000	36,195,000
2007	2	0	0	2	84,000,000	87,700,000	4	0	0	2	44,300,000	34,370,000
2008	2	0	0	2	84,000,000	98,800,000	4	0	0	2	44,300,000	36,335,000
2009	2	0	0	2	84,000,000	153,900,000	4	0	0	2	44,300,000	37,630,000
2010	2	25,000,000	0	2	102,700,000	82,414,021	4	0	0	2	44,300,000	34,236,000
2011	2	25,000,000	22,650,000	2	102,700,000	88,917,000	4	0	0	2	44,300,000	40,320,000
2012	2	25,000,000	22,373,000	2	102,700,000	100,470,000	4	0	0	2	44,300,000	40,902,000
2013	2	31,000,000	23,130,000	2	102,700,000	86,514,000	4	0	0	2	44,300,000	39,975,000
2014	2	31,000,000	23,500,000	2	102,700,000	94,778,682	4	8,000,000	0	2	44,300,000	39,899,899
2015	2	37,000,000	29,885,000	2	102,700,000	98,630,000	4	8,000,000	0	2	44,300,000	39,400,000
2016	2	66,000,000	42,819,531	2	102,700,000	88,305,000	2	8,000,000	0	2	44,300,000	39,500,000
2017	2	66,000,000	60,903,576	2	102,700,000	68,290,000	2	8,000,000	0	2	44,300,000	39,000,000
2018	2	84,000,000	69,219,261	2	102,700,000	85,500,000	2	8,000,000	7,330,739	2	44,300,000	40,600,000
2019	2	98,000,000	96,745,000	2	102,700,000	89,600,000	2	8,000,000	7,855,000	2	44,300,000	42,100,000
2020	2	97,200,000	85,830,000	2	102,700,000	71,370,000	2	8,000,000	7,350,000	2	45,100,000	43,300,000
2021	2	97,200,000	88,190,000	2	102,700,000	67,000,000	2	8,000,000	0	2	45,100,000	42,000,000
2022	2	97,200,000	87,350,000	2	102,700,000	83,300,000	2	8,000,000	7,050,000	2	45,100,000	40,000,000
2023	2	97,200,000	88,700,000	2	102,700,000	81,500,000	2	8,000,000	7,500,000	2	45,100,000	38,000,000

Note: Beaver Falls had egg capacity in 1989–1997 and reared eggs in 1975–1982. Crystal Lake reared eggs in 1977, 1980–1984, and 1986. Klawock River reared eggs in 1978–1985.

Note: Operator 0 = None, 1 = Alaska Aquaculture Incorporated, 2 = Southern Southeast Regional Aquaculture Association, 3 = ADF&G, 4 = Prince of Wales Hatchery Association.

^a Neets Bay Hatchery has been and is a central incubation facility for Southern Southeast Regional Aquaculture Association that takes eggs on behalf of other PNP hatcheries to help achieve the other hatcheries' egg take goal(s) (e.g., summer run Carroll River ancestral stock chum salmon eggs are permitted to Southern Southeast Regional Aquaculture Association-operated Neets Bay, Burnett Inlet, Whitman Lake, and Port Saint Nicholas hatcheries; and fall run Disappearance Creek + Lagoon Creek ancestral stock chum salmon eggs are permitted to Southern Southeast Regional Aquaculture Association-operated Neets Bay and Burnett Inlet).

Appendix K8.—Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap., millions), and number of chum salmon eyed eggs at Northern Southeast-area hatcheries, 1975–2023.

Year	Gunnuk Creek			Hidden Falls			Macaulay			Medveje			Port Armstrong			Sawmill Creek		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	0
1976	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	N/A	0	N/A	0	0	N/A	0
1977	1	2	0	3	N/A	454,000	0	N/A	0	0	N/A	N/A	0	N/A	0	0	N/A	0
1978	1	2	0	3	N/A	2,284,000	0	N/A	0	0	N/A	N/A	0	N/A	0	0	N/A	0
1979	1	2	0	3	N/A	3,748,000	0	N/A	0	0	N/A	N/A	0	N/A	0	0	N/A	0
1980	1	2	56,320	3	N/A	9,396,000	0	N/A	0	0	N/A	N/A	0	N/A	0	0	N/A	0
1981	1	2	0	3	N/A	10,901,779	0	N/A	0	2	20	236,811	5	11	0	0	N/A	0
1982	1	2	0	3	N/A	22,305,000	0	N/A	0	2	20	2,492,500	5	11	0	0	N/A	0
1983	1	2	262,891	3	N/A	30,800,000	0	N/A	0	2	20	2,599,182	5	11	0	0	N/A	0
1984	1	2	2,000,103	3	N/A	32,600,000	0	N/A	0	2	20	6,408,200	5	4	1,786,000	0	N/A	0
1985	1	7	8,200,000	3	N/A	48,200,000	0	N/A	0	2	25	26,055,000	5	4	2,147,000	0	N/A	0
1986	1	13	10,929,665	3	N/A	43,100,000	0	N/A	0	2	28	30,392,000	5	4	2,014,778	0	N/A	0
1987	1	13	10,856,000	3	N/A	57,460,000	4	111	0	2	30	28,467,900	5	4	1,301,087	0	N/A	0
1988	1	13	10,213,657	2	68	63,868,000	4	111	11,973,000	2	38	16,656,100	5	10	44,675	0	N/A	0
1989	1	60	10,444,720	2	68	63,686,200	4	111	18,335,145	2	38	35,329,400	5	10	144,421	0	N/A	0
1990	1	60	13,349,000	2	68	65,898,700	4	111	66,220,157	2	38	32,250,000	5	10	806,000	0	N/A	0
1991	1	60	13,570,000	2	68	64,762,762	4	111	58,468,000	2	38	24,697,000	5	10	425,434	0	N/A	0
1992	1	60	15,855,000	2	101	65,035,900	4	111	70,548,261	2	38	30,285,600	5	10	0	0	N/A	0
1993	1	60	15,122,000	2	101	86,794,954	4	111	71,105,124	2	38	29,634,000	5	10	0	0	N/A	0
1994	1	65	17,802,000	2	101	75,414,998	4	111	85,853,584	2	38	32,799,500	5	10	0	0	N/A	0
1995	1	65	41,550,425	2	101	77,867,756	4	111	98,898,678	2	42	40,312,000	5	10	0	0	N/A	0
1996	1	65	44,151,000	2	101	64,684,708	4	111	87,181,614	2	42	39,373,500	5	10	0	0	N/A	0
1997	1	65	61,018,000	2	101	66,451,866	4	111	104,976,501	2	42	39,605,000	5	10	0	0	N/A	0
1998	1	65	48,394,000	2	101	75,852,764	4	111	100,355,508	2	42	40,215,000	5	10	0	0	N/A	0
1999	1	65	64,332,000	2	101	75,512,998	4	111	143,277,766	2	42	39,358,000	5	0	0	0	N/A	0
2000	1	65	64,727,520	2	101	81,728,974	4	111	105,706,347	2	42	41,230,000	5	0	0	0	N/A	0
2001	1	65	47,582,800	2	101	82,410,490	4	121	115,011,547	2	42	48,191,000	5	0	0	0	N/A	0
2002	1	65	40,474,540	2	91	90,220,037	4	121	102,177,195	2	52	49,100,000	5	30	0	0	N/A	0
2003	1	65	64,135,040	2	91	90,241,144	4	121	114,948,091	2	52	49,130,900	5	30	13,796,077	0	N/A	0
2004	1	65	38,663,135	2	91	90,500,000	4	121	116,630,772	2	52	50,536,000	5	30	987,940	0	N/A	0

-continued-

Appendix K8.–Page 2 of 2.

Year	Gunnuk Creek			Hidden Falls			Macaulay			Medvejie		Port Armstrong			Sawmill Creek			
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	1	65	22,929,581	2	91	88,324,755	4	121	109,136,888	2	60	55,249,066	5	30	4,110,704	0	N/A	0
2006	1	65	40,513,225	2	91	90,131,071	4	121	118,582,248	2	60	54,659,015	5	30	18,187,600	0	N/A	0
2007	1	60	22,483,916	2	91	92,578,424	4	121	117,791,068	2	60	53,991,666	5	30	14,047,574	2	0	0
2008	1	60	6,584,617	2	91 ^a	84,104,205	4	121	117,266,903	2	60	45,418,583	5	30	12,586,647	2	0	0
2009	1	55	54,395,837	2	91 ^a	84,104,205	4	121	114,900,000	2	60	52,665,958	5	30	28,451,323	2	0	0
2010	1	45	6,926,465	2	101 ^a	81,122,702	4	125	113,990,000	2	60	52,660,806	5	30	29,032,705	2	0	0
2011	1	65	27,635,351	2	101 ^a	86,991,163	4	125	123,030,000	2	70	60,295,714	5	30	29,370,636	2	0	0
2012	1	65	51,681,095	2	101 ^a	101,139,102	4	125	119,690,000	2	77	64,204,256	5	30	28,178,933	2	0	0
2013	1	65	55,039,371	2	101 ^a	104,871,447	4	125	122,777,000	2	77	63,753,066	5	30	29,039,331	2	0	0
2014	1	65	0	2	101 ^a	120,519,347	4	125	118,110,000	2	77 ^b	73,700,854	5	30	24,399,863	2	30	14,582,802
2015	2	65	0	2	101 ^a	136,424,842	4	125	113,570,100	2	77 ^b	72,521,456	5	60	40,397,644	2	30	29,960,643
2016	2	65	0	2	101 ^a	151,902,173	4	125	114,755,800	2	77 ^b	73,996,543	5	60	27,294,671	2	30	28,967,518
2017	2	65	0	2	101 ^a	141,065,901	4	125	124,422,900	2	77 ^b	71,609,979	5	60	39,352,128	2	30 ^c	49,980,056
2018	2	65	0	2	101 ^a	123,995,213	4	135	123,945,300	2	77 ^b	44,308,699	5	60	54,741,081	2	30 ^c	36,494,665
2019	2	65	2,570,280	2	101 ^a	135,694,155	4	135	119,464,000	2	77 ^b	71,953,033	5	60	54,304,309	2	30 ^c	49,520,823
2020	2	65	10,410,536	2	101 ^a	107,542,166	4	135	119,845,000	2	77 ^b	73,299,759	5	60	14,063,784	2	30 ^c	49,723,246
2021	2	65	10,466,737	2	101 ^a	120,859,029	4	135	126,948,000	2	77 ^b	74,461,303	5	60	16,523,620	2	30 ^c	46,767,007
2022	2	65	18,461,064	2	101 ^a	123,514,894	4	135	125,826,000	2	77 ^b	72,218,309	5	60	33,379,614	2	30 ^c	49,460,958
2023	2	65	19,906,576	2	101 ^a	139,470,027	4	135	130,080,716	2	77 ^b	74,361,978	5	60	19,355,078	2	30 ^c	47,657,782

Note: Burro Creek had capacity in 1980–2006 and had eyed eggs in most years. Haines Projects had capacity in 1992–present and eggs in most years through 2014. Kowee Creek had capacity from 1976–2001 and eggs in 1976–1984 and 1988. Port Camden had capacity 1985–2000 and eggs in 1986–1997. Salmon Creek had capacity 1985–2000 and eggs in 1979–1983. Sheep Creek had capacity 1979–2000 and eggs in 1981–1997. Snettisham reared eggs in 1976–1990. Starrigavan reared eggs in 1977–1979.

Note: Operator 0 = None, 1 = Kake Nonprofit Fishery Corporation, 2 = Northern Southeast Regional Aquaculture Association, 3 = ADF&G, 4 = Douglas Island Pink and Chum, Incorporated, 5 = Armstrong Keta, Incorporated.

^a Does not reflect eggs taken on behalf of other hatcheries' permits. Up to 44 million chum salmon green eggs can be incubated at Hidden Falls to the eyed stage prior to transfer to Medvejie Creek. Up to 55 million chum salmon eggs may be taken for Gunnuk Creek, and up to 10 million may be taken for other hatcheries. An additional 40 million eggs may be taken on behalf of Port Armstrong. Years of permit alteration consolidated.

^b An additional 20 million eggs may be taken as an alternate for eggs taken at Hidden Falls.

^c An additional 20 million chum salmon eggs may be hatched and reared on behalf of Medvejie Creek.

Appendix K9.–Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap., millions), and number of chum salmon eyed eggs at Cook Inlet-area hatcheries, 1975–2023.

Year	Trail Lakes		Eyed eggs
	Op.	Cap.	
1975	0	N/A	0
1976	0	N/A	0
1977	0	N/A	0
1978	0	N/A	0
1979	0	N/A	0
1980	0	N/A	0
1981	0	N/A	0
1982	1	N/A	0
1983	1	N/A	1,094,000
1984	1	N/A	482,000
1985	1	N/A	1,211,000
1986	1	N/A	427,000
1987	1	N/A	0
1988	2	4,000,000	0
1989	2	4,000,000	0
1990	2	4,000,000	0
1991	2	4,000,000	0
1992	2	4,000,000	0
1993	2	4,000,000	0
1994	2	4,000,000	0
1995	2	4,000,000	0
1996	2	4,000,000	0
1997	2	4,000,000	0
1998	2	4,000,000	0
1999	2	4,000,000	0
2000	2	4,000,000	0
2001	2	4,000,000	0
2002	2	4,000,000	0
2003	2	4,000,000	0
2004	2	4,000,000	0
2005	2	4,000,000	0
2006	2	4,000,000	0
2007	2	4,000,000	0
2008	2	4,000,000	0
2009	2	4,000,000	0
2010	2	4,000,000	0
2011	2	4,000,000	0
2012	2	4,000,000	0
2013	2	4,000,000	0
2014	2	4,000,000	0
2015	2	4,000,000	0
2016	2	4,000,000	0
2017	2	4,000,000	0
2018	2	4,000,000	0
2019	2	4,000,000	0
2020	2	4,000,000	0
2021	2	4,000,000	0
2022	2	4,000,000	0
2023	2	4,000,000	0

Note: Eklutna had capacity in 1982–1993 and eggs in 1984. Tutka Bay Lagoon had eggs in 1978–1988 and 1991.

Note: Operator 0 = none, 1 = ADF&G, 2 = Cook Inlet Aquaculture Association.

Appendix K10.–Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs Cook Inlet-area hatcheries, 1975–2023.

Year	Trail Lakes		
	Op.	Cap.	Eyed eggs
1975	0	N/A	0
1976	0	N/A	0
1977	0	N/A	0
1978	0	N/A	0
1979	0	N/A	0
1980	0	N/A	0
1981	0	N/A	0
1982	1	N/A	0
1983	1	N/A	0
1984	1	N/A	0
1985	1	N/A	0
1986	1	N/A	441,000
1987	1	N/A	7,190,000
1988	2	30,000,000	6,460,000
1989	2	30,000,000	2,535,695
1990	2	30,000,000	5,121,810
1991	2	30,000,000	8,567,498
1992	2	30,000,000	5,398,217
1993	2	30,000,000	6,156,621
1994	2	30,000,000	5,236,213
1995	2	30,000,000	4,864,070
1996	2	30,000,000	3,040,909
1997	2	30,000,000	9,634,083
1998	2	30,000,000	9,047,661
1999	2	30,000,000	8,881,520
2000	2	30,000,000	9,687,710
2001	2	30,000,000	9,645,717
2002	2	30,000,000	9,690,023
2003	2	30,000,000	9,600,022
2004	2	30,000,000	10,240,381
2005	2	30,000,000	10,656,300
2006	2	30,000,000	9,952,410
2007	2	30,000,000	10,200,000
2008	2	30,000,000	10,200,000
2009	2	30,000,000	9,940,000
2010	2	30,000,000	11,900,000
2011	2	30,000,000	11,900,000
2012	2	30,000,000	11,900,000
2013	2	30,000,000	11,900,000
2014	2	30,000,000	11,000,000
2015	2	30,000,000	11,900,000
2016	2	30,000,000	11,600,000
2017	2	30,000,000	11,900,000
2018	2	30,000,000	11,841,255
2019	2	30,000,000	11,899,066
2020	2	30,000,000	11,455,411
2021	2	30,000,000	12,050,248
2022	2	30,000,000	11,900,000
2023	2	30,000,000	12,321,301

-continued-

Appendix K10.–Page 2 of 2.

Note: Eklutna reared eggs in 1982–1993. ADF&G operated Crooked Creek, Eklutna, Elmendorf, Fort Richardson, Trail Lakes, and William Jack Hernandez and reared eggs during 1975–present.

Note: Operator 0 = none, 1 = ADF&G, 2 = Cook Inlet Aquaculture Association.

Appendix K11.–Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Cook Inlet-area hatcheries, 1975–2023.

Year	Trail Lakes			William Jack Hernandez		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	0	N/A	0
1976	0	N/A	0	0	N/A	0
1977	0	N/A	0	0	N/A	0
1978	0	N/A	0	0	N/A	0
1979	0	N/A	0	0	N/A	0
1980	0	N/A	0	0	N/A	0
1981	0	N/A	0	0	N/A	0
1982	1	N/A	1,244,800	0	N/A	0
1983	1	N/A	1,639,000	0	N/A	0
1984	1	N/A	2,319,000	0	N/A	0
1985	1	N/A	2,199,000	0	N/A	0
1986	1	N/A	2,534,000	0	N/A	0
1987	1	N/A	817,000	0	N/A	0
1988	2	6,000,000	1,428,000	0	N/A	0
1989	2	6,000,000	712,000	0	N/A	0
1990	2	6,000,000	669,000	0	N/A	0
1991	2	6,000,000	533,355	0	N/A	0
1992	2	6,000,000	750,000	0	N/A	0
1993	2	6,000,000	696,000	0	N/A	0
1994	2	6,000,000	740,000	0	N/A	0
1995	2	6,000,000	738,000	0	N/A	0
1996	2	6,000,000	829,000	0	N/A	0
1997	2	6,000,000	606,000	0	N/A	0
1998	2	6,000,000	727,000	0	N/A	0
1999	2	6,000,000	637,000	0	N/A	0
2000	2	6,000,000	786,000	0	N/A	0
2001	2	6,000,000	864,000	0	N/A	0
2002	2	6,000,000	1,086,000	1	N/A	1,233,320
2003	2	6,000,000	1,093,892	1	N/A	1,941,294
2004	2	6,000,000	1,557,000	1	N/A	1,445,468
2005	2	6,000,000	1,252,814	1	N/A	1,350,397
2006	2	6,000,000	989,885	1	N/A	1,713,915
2007	2	6,000,000	581,000	1	N/A	1,044,354
2008	2	6,000,000	283,000	1	N/A	1,556,436
2009	2	6,000,000	462,000	1	N/A	1,825,488
2010	2	6,000,000	501,000	1	N/A	1,137,213
2011	2	6,000,000	312,400	1	N/A	1,514,724
2012	2	6,000,000	518,000	1	N/A	809,101
2013	2	6,000,000	577,000	1	N/A	1,261,813
2014	2	6,000,000	547,500	1	N/A	1,622,003
2015	2	6,000,000	522,359	1	N/A	1,406,735
2016	2	6,000,000	232,187	1	N/A	1,183,024
2017	2	6,000,000	525,000	1	N/A	1,226,219
2018	2	6,000,000	577,000	1	N/A	1,591,975
2019	2	6,000,000	467,651	1	N/A	1,159,194
2020	2	6,000,000	526,617	1	N/A	1,148,974
2021	2	6,000,000	533,223	1	N/A	1,175,935
2022	2	6,000,000	489,847	1	N/A	1,359,373
2023	2	6,000,000	407,581	1	N/A	1,190,541

-continued-

Appendix K11.–Page 2 of 2.

Note: Big Lake reared eggs in 1978, 1990–1993. Crooked Creek reared eggs in 1978 and 1990–1993. Eklutna had capacity in 1982–present and reared eggs in 1981–1996. Elmendorf and Fort Rich reared eggs in 1978–2001. Port Graham had permitted capacity during 1995–1999 and reared eggs in 1996–1998.

Note: Operator 0 = None, 1 = ADF&G, 2 = Cook Inlet Aquaculture Association.

Appendix K12.–Hatchery operator (Op.), PNP Hatchery permitted pink salmon green egg capacity (Cap.), and number of pink salmon eyed eggs at Cook Inlet-area hatcheries, 1975–2023.

Year	Port Graham			Tutka Bay Lagoon		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	0	N/A	0
1976	0	N/A	0	0	N/A	10,410,000
1977	0	N/A	0	0	N/A	7,100,000
1978	0	N/A	0	0	N/A	10,170,000
1979	0	N/A	0	0	N/A	6,900,000
1980	0	N/A	0	0	N/A	11,503,000
1981	0	N/A	0	0	N/A	15,878,000
1982	0	N/A	0	3	N/A	15,484,000
1983	0	N/A	0	3	N/A	20,300,000
1984	0	N/A	0	3	N/A	24,800,000
1985	0	N/A	0	3	N/A	25,800,000
1986	0	N/A	0	3	N/A	28,800,000
1987	0	N/A	0	3	N/A	17,560,000
1988	0	N/A	0	2	N/A	40,500,000
1989	0	N/A	0	2	N/A	43,335,000
1990	0	N/A	0	2	N/A	32,401,000
1991	0	N/A	0	2	N/A	32,500,000
1992	1	110,000,000	0	2	N/A	52,000,000
1993	1	110,000,000	1,712,000	2	N/A	65,500,000
1994	1	110,000,000	468,000	2	125,000,000	67,500,000
1995	1	110,000,000	6,939,182	2	125,000,000	110,000,000
1996	1	110,000,000	1,418,748	2	125,000,000	92,100,000
1997	1	110,000,000	9,708,881	2	125,000,000	93,400,000
1998	1	110,000,000	10,074,000	2	125,000,000	72,800,000
1999	1	110,000,000	1,330,632	2	125,000,000	68,597,000
2000	1	110,000,000	27,429,000	2	125,000,000	106,117,000
2001	1	110,000,000	7,317,369	2	125,000,000	102,034,000
2002	1	110,000,000	61,772,591	2	125,000,000	103,786,000
2003	1	110,000,000	38,846,484	2	125,000,000	51,237,000
2004	1	110,000,000	45,161,329	2	125,000,000	0
2005	1	110,000,000	15,141,552	2	125,000,000	0
2006	1	110,000,000	14,637,000	2	125,000,000	0
2007	1	110,000,000	0	2	125,000,000	0
2008	1	110,000,000	0	2	125,000,000	0
2009	1	110,000,000	0	2	125,000,000	0
2010	1	110,000,000	0	2	125,000,000	0
2011	1	110,000,000	0	2	125,000,000	12,649,027
2012	1	110,000,000	0	2	125,000,000	19,040,000
2013	1	110,000,000	0	2	125,000,000	64,647,000
2014	2	125,000,000	2,864,000	2	125,000,000	12,767,366
2015	2	125,000,000	1,375,295	2	125,000,000	13,672,066
2016	2	125,000,000	6,963,295	2	125,000,000	55,292,531
2017	2	125,000,000	23,091,390	2	125,000,000	55,000,000
2018	2	125,000,000	10,495,033	2	125,000,000	108,611,675
2019	2	125,000,000	6,079,811	2	125,000,000	30,790,248
2020	2	125,000,000	25,591,070	2	125,000,000	75,304,764
2021	2	125,000,000	2,392,422	2	125,000,000	59,506,127
2022	2	125,000,000	13,833,732	2	125,000,000	9,009,633
2023	2	125,000,000	0	2	125,000,000	45,902,374

Note: Eklutna had capacity 1981–present and eggs in 1981–1996.

Note: Operator 0 = None, 1 = Port Graham Hatchery Corporation, 2 = Cook Inlet Aquaculture Association, 3 = ADF&G.

Appendix K13.–Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.

Year	Wally Noerenberg		
	Op.	Cap.	Eyed eggs
1975	N/A	N/A	0
1976	N/A	N/A	0
1977	N/A	N/A	0
1978	N/A	N/A	0
1979	N/A	N/A	0
1980	N/A	N/A	0
1981	N/A	N/A	0
1982	N/A	N/A	0
1983	1	1,000,000	0
1984	1	1,000,000	0
1985	1	1,000,000	0
1986	1	1,000,000	228,611
1987	1	1,000,000	188,154
1988	1	4,000,000	255,745
1989	1	4,000,000	1,039,115
1990	1	4,000,000	835,504
1991	1	4,000,000	955,166
1992	1	4,000,000	1,165,350
1993	1	4,000,000	1,157,945
1994	1	4,000,000	401,722
1995	1	4,000,000	113,924
1996	1	4,000,000	164,257
1997	1	4,000,000	0
1998	1	4,000,000	0
1999	1	4,000,000	0
2000	1	4,000,000	0
2001	1	4,000,000	0
2002	1	4,000,000	0
2003	1	4,000,000	0
2004	1	4,000,000	0
2005	1	4,000,000	0
2006	1	4,000,000	0
2007	1	4,000,000	0
2008	1	4,000,000	0
2009	1	4,000,000	0
2010	1	4,000,000	50,000
2011	1	4,000,000	50,000
2012	1	4,000,000	28,000
2013	1	4,000,000	49,390
2014	1	4,000,000	52,500
2015	1	4,000,000	52,500
2016	1	4,000,000	52,500
2017	1	4,000,000	50,000
2018	1	4,000,000	0
2019	1	4,000,000	50,000
2020	1	4,000,000	54,000
2021	1	4,000,000	49,364
2022	1	4,000,000	50,043
2023	1	4,000,000	50,000

Note: Gulkana reared eggs in 1987–1991.

Note: Operator 1 = Prince William Sound Aquaculture Corporation.

Appendix K14.–Hatchery operator (Op.), PNP Hatchery permitted sockeye salmon green egg capacity (Cap.), and number of sockeye salmon eyed eggs at Prince William Sound area hatcheries, 1975–2023.

Year	Gulkana			Main Bay		
	Op.	Cap.	Green eggs	Op.	Cap.	Eyed eggs
1975	1	N/A	1,276,570	0	N/A	0
1976	1	N/A	1,288,142	0	N/A	0
1977	1	N/A	1,361,000	0	N/A	0
1978	1	N/A	1,320,472	0	N/A	0
1979	1	N/A	3,563,568	0	N/A	0
1980	1	N/A	6,228,897	0	N/A	0
1981	1	N/A	9,166,596	0	N/A	0
1982	1	N/A	10,931,889	1	N/A	0
1983	1	N/A	13,033,894	1	N/A	0
1984	1	N/A	26,771,104	1	N/A	0
1985	1	N/A	31,640,000	1	N/A	0
1986	1	N/A	28,694,258	1	N/A	441,000
1987	1	N/A	33,706,000	1	N/A	7,190,000
1988	1	N/A	36,193,000	1	N/A	6,460,000
1989	1	N/A	36,421,835	1	N/A	2,535,695
1990	1	N/A	31,413,000	1	N/A	5,121,810
1991	1	N/A	37,334,000	1	N/A	8,567,498
1992	1	N/A	21,080,412	2	N/A	5,398,217
1993	1	N/A	36,971,000	2	N/A	6,156,621
1994	1	N/A	37,972,757	2	N/A	5,236,213
1995	1	N/A	37,843,162	2	N/A	4,864,070
1996	1	N/A	37,350,742	2	N/A	3,040,909
1997	1	N/A	37,508,543	2	N/A	9,634,083
1998	1	N/A	37,347,822	2	N/A	9,047,661
1999	1	N/A	36,737,324	2	N/A	8,881,520
2000	2	36,750,000	15,639,738	2	N/A	9,687,710
2001	2	36,750,000	34,162,279	2	10,200,000	9,645,717
2002	2	36,750,000	36,707,137	2	10,200,000	9,690,023
2003	2	36,750,000	36,628,864	2	10,200,000	9,600,022
2004	2	36,750,000	8,329,610	2	10,200,000	10,240,381
2005	2	36,750,000	36,483,882	2	11,000,000	10,656,300
2006	2	36,750,000	36,206,090	2	11,000,000	9,952,410
2007	2	36,750,000	30,450,000	2	11,000,000	10,200,000
2008	2	36,750,000	33,650,000	2	11,000,000	10,200,000
2009	2	36,750,000	34,850,000	2	11,000,000	9,940,000
2010	2	36,750,000	31,850,000	2	12,400,000	11,900,000
2011	2	36,750,000	36,450,000	2	12,400,000	11,900,000
2012	2	36,750,000	34,850,000	2	12,400,000	11,900,000
2013	2	36,750,000	35,450,000	2	12,400,000	11,900,000
2014	2	36,750,000	29,650,000	2	12,400,000	11,000,000
2015	2	36,750,000	26,650,000	2	12,400,000	11,900,000
2016	2	36,750,000	25,924,000	2	12,400,000	11,600,000
2017	2	36,750,000	19,110,000	2	12,400,000	11,900,000
2018	2	36,750,000	28,004,700	2	12,400,000	11,841,255
2019	2	36,750,000	20,089,400	2	12,400,000	11,899,066
2020	2	36,750,000	15,742,800	2	12,400,000	11,455,411
2021	2	36,750,000	12,400,900	2	12,400,000	12,050,248
2022	2	36,750,000	6,624,200	2	12,400,000	11,900,000
2023	2	36,750,000	13,935,400	2	12,400,000	12,321,301

Note: Operator 0 = none, 1 = ADF&G, 2 = Prince William Sound Aquaculture Corporation.

Note: Wally Noerenberg had capacity in 1986–1998 and had eyed eggs in 1992–1998.

Appendix K15.–Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.

Year	Solomon Gulch			Wally Noerenberg		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	0	N/A	0	0	N/A	0
1976	0	N/A	0	0	N/A	0
1977	0	N/A	0	0	N/A	0
1978	0	N/A	0	0	N/A	0
1979	0	N/A	0	0	N/A	0
1980	0	N/A	0	0	N/A	0
1981	1	400,000	0	0	N/A	0
1982	1	300,000	100,000	0	N/A	0
1983	1	300,000	112,000	2	1,000,000	0
1984	1	300,000	296,923	2	1,000,000	130,000
1985	1	600,000	88,950	2	1,000,000	271,218
1986	1	1,000,000	1,213,183	2	1,000,000	992,010
1987	1	2,000,000	1,481,591	2	1,000,000	2,625,199
1988	1	2,000,000	1,516,200	2	4,000,000	2,548,466
1989	1	2,000,000	2,260,023	2	4,000,000	2,361,123
1990	1	2,000,000	2,147,022	2	4,000,000	2,919,034
1991	1	2,000,000	1,929,635	2	4,000,000	1,667,120
1992	1	2,000,000	1,832,000	2	4,000,000	2,254,387
1993	1	2,000,000	1,978,000	2	4,000,000	2,345,810
1994	1	2,000,000	2,190,030	2	4,000,000	2,614,878
1995	1	2,000,000	2,133,000	2	4,000,000	521,143
1996	1	2,000,000	2,240,000	2	4,000,000	559,318
1997	1	2,000,000	2,189,510	2	4,000,000	1,342,643
1998	1	2,000,000	2,008,609	2	4,000,000	424,076
1999	1	2,000,000	2,220,672	2	4,000,000	267,645
2000	1	2,000,000	2,359,553	2	4,000,000	1,112,553
2001	1	2,000,000	2,268,554	2	4,000,000	1,148,008
2002	1	2,000,000	2,264,381	2	4,000,000	1,120,247
2003	1	2,000,000	2,302,660	2	4,000,000	1,121,327
2004	1	2,000,000	2,081,498	2	4,000,000	1,167,186
2005	1	2,000,000	2,287,636	2	4,000,000	2,276,692
2006	1	2,000,000	2,293,656	2	4,000,000	3,010,000
2007	1	2,000,000	2,351,018	2	4,000,000	236,000
2008	1	2,000,000	2,148,491	2	4,000,000	3,840,000
2009	1	2,000,000	2,187,463 ^a	2	4,000,000	3,890,000
2010	1	2,000,000	1,941,696	2	4,000,000	1,090,000
2011	1	2,000,000	1,805,527	2	4,000,000	3,630,000
2012	1	2,000,000	1,937,307	2	4,000,000	940,000
2013	1	2,000,000	1,945,760	2	4,000,000	479,000
2014	1	2,000,000	2,000,000	2	4,000,000	4,000,000
2015	1	2,000,000	1,936,745	2	4,000,000	1,530,000
2016	1	2,000,000	1,975,851	2	4,000,000	3,040,000
2017	1	2,000,000	1,841,503	2	4,000,000	2,420,000
2018	1	2,000,000	1,932,223	2	4,000,000	3,800,000
2019	1	2,000,000	1,783,661	2	4,000,000	3,798,000
2020	1	2,000,000	2,025,078	2	4,000,000	3,513,000
2021	1	2,000,000	1,889,874	2	4,000,000	3,528,200
2022	1	2,000,000	1,998,236	2	4,000,000	1,341,000
2023	1	2,000,000	N/A ^b	2	4,000,000	N/A ^b

-continued-

Appendix K15.–Page 2 of 2.

Note: Operator 0 = None, 1 = Valdez Fisheries Development Association, 2 = Prince William Sound Aquaculture Corporation.

^a Permitting requirements reviewed with Valdez Fisheries Development Association.

^b Estimated number of eyed eggs unknown at time of reporting.

Appendix K16.—Hatchery operator (Op.), PNP Hatchery pink salmon permitted green egg capacity (Cap.), and number of pink salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.

Year	Armin F. Koernig			Cannery Creek			Solomon Gulch			Wally Noerenberg		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	1	10,000,000	3,789,814	0	N/A	0	0	N/A	0	0	N/A	0
1976	1	15,000,000	10,500,000	0	N/A	0	0	N/A	0	0	N/A	0
1977	1	25,000,000	17,788,000	0	N/A	0	0	N/A	0	0	N/A	0
1978	1	43,000,000	25,180,229	0	N/A	2,679,000	0	N/A	0	0	N/A	0
1979	1	43,000,000	22,749,500	0	N/A	2,598,496	0	N/A	0	0	N/A	0
1980	1	95,500,000	89,232,000	0	N/A	21,745,000	0	N/A	0	0	N/A	0
1981	1	150,000,000	102,472,000	2	N/A	13,571,000	3	50,000,000	8,693,501	0	N/A	0
1982	1	150,000,000	91,784,000	2	N/A	22,461,000	3	50,000,000	8,060,000	0	N/A	0
1983	1	150,000,000	85,419,883	2	N/A	32,600,000	3	50,000,000	9,700,000	1	211,000,000	0
1984	1	150,000,000	110,011,278	2	N/A	37,200,000	3	70,000,000	61,784,778	1	211,000,000	0
1985	1	150,000,000	117,662,672	2	N/A	58,600,000	3	90,000,000	82,300,000	1	211,000,000	51,811,885
1986	1	150,000,000	121,712,989	2	N/A	40,900,000	3	110,000,000	61,580,777	1	211,000,000	76,814,383
1987	1	150,000,000	121,422,212	2	N/A	100,000,000	3	136,000,000	151,090,000	1	211,000,000	219,954,947
1988	1	150,000,000	168,088,099	1	147,000,000	65,049,020	3	156,000,000	144,830,000	1	211,000,000	174,903,743
1989	1	150,000,000	123,050,915	1	147,000,000	217,315,465	3	156,000,000	134,378,918	1	261,000,000	263,175,907
1990	1	150,000,000	124,433,782	1	147,000,000	145,993,000	3	156,000,000	141,559,231	1	241,000,000	233,401,471
1991	1	150,000,000	122,892,000	1	147,000,000	147,208,553	3	230,000,000	189,541,519	1	211,000,000	169,875,507
1992	1	190,000,000	125,005,196	1	147,000,000	150,789,426	3	230,000,000	201,216,091	1	211,000,000	178,683,796
1993	1	190,000,000	122,482,915	1	147,000,000	97,547,485	3	230,000,000	221,229,921	1	211,000,000	174,721,137
1994	1	190,000,000	120,514,821	1	147,000,000	142,594,611	3	230,000,000	210,131,835	1	211,000,000	181,916,341
1995	1	190,000,000	126,254,629	1	147,000,000	147,831,036	3	230,000,000	230,186,618	1	211,000,000	185,170,221
1996	1	190,000,000	56,665,951	1	147,000,000	144,675,901	3	230,000,000	197,468,556	1	211,000,000	109,972,573
1997	1	190,000,000	115,409,431	1	147,000,000	145,410,183	3	230,000,000	214,166,000	1	211,000,000	107,642,674
1998	1	190,000,000	148,323,538	1	147,000,000	146,874,684	3	230,000,000	215,048,000	1	211,000,000	127,355,213
1999	1	160,000,000	152,896,804	1	152,000,000	145,136,874	3	230,000,000	223,252,698	1	150,000,000	125,887,075
2000	1	160,000,000	154,166,252	1	152,000,000	145,991,554	3	230,000,000	204,521,000	1	150,000,000	128,428,574
2001	1	160,000,000	163,268,416	1	152,000,000	145,817,750	3	230,000,000	214,054,220	1	150,000,000	111,310,426
2002	1	160,000,000	153,370,216	1	152,000,000	145,927,569	3	230,000,000	216,859,358	1	150,000,000	125,219,332
2003	1	190,000,000	182,492,548	1	152,000,000	145,890,266	3	230,000,000	225,149,984	1	120,000,000	114,746,695
2004	1	190,000,000	138,446,990	1	152,000,000	135,001,652	3	230,000,000	222,834,543	1	93,000,000	88,132,686

-continued-

Appendix K16.–Page 2 of 2.

Year	Armin F. Koernig			Cannery Creek			Solomon Gulch			Wally Noerenberg		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
2005	1	190,000,000	185,260,992	1	152,000,000	143,252,793	3	230,000,000	217,022,991	1	93,000,000	88,754,093
2006	1	190,000,000	187,783,024	1	152,000,000	145,801,921	3	230,000,000	220,435,652	1	93,000,000	80,761,044
2007	1	162,000,000	150,000,000	1	152,000,000	139,000,000	3	230,000,000	220,801,888	1	148,000,000	141,000,000
2008	1	162,000,000	151,000,000	1	152,000,000	146,000,000	3	230,000,000	226,700,540	1	148,000,000	134,000,000
2009	1	162,000,000	155,000,000	1	152,000,000	147,000,000	3	230,000,000	225,027,719	1	148,000,000	142,000,000
2010	1	162,000,000	154,000,000	1	152,000,000	140,000,000	3	230,000,000	225,270,082	1	148,000,000	142,000,000
2011	1	162,000,000	156,000,000	1	187,000,000	179,000,000	3	230,000,000	219,705,140	1	148,000,000	142,000,000
2012	1	162,000,000	158,000,000	1	187,000,000	97,600,000	3	230,000,000	219,430,251	1	148,000,000	139,000,000
2013	1	162,000,000	160,000,000	1	187,000,000	177,000,000	3	230,000,000	220,724,007	1	148,000,000	138,000,000
2014	1	162,000,000	145,000,000	1	187,000,000	178,000,000	3	230,000,000	223,621,346	1	148,000,000	137,000,000
2015	1	162,000,000	145,000,000	1	187,000,000	164,000,000	3	230,000,000	226,650,668	1	148,000,000	136,000,000
2016	1	162,000,000	145,000,000	1	187,000,000	154,000,000	3	230,000,000	241,822,121	1	148,000,000	142,000,000
2017	1	190,000,000	182,000,000	1	187,000,000	171,000,000	3	250,000,000	242,192,145	1	148,000,000	141,000,000
2018	1	190,000,000	168,000,000	1	187,000,000	146,000,000	3	270,000,000	257,113,368	1	148,000,000	141,510,000
2019	1	190,000,000	146,500,000	1	187,000,000	111,700,000	3	270,000,000	257,958,038	1	148,000,000	139,900,000
2020	1	190,000,000	138,800,000	1	187,000,000	123,200,000	3	270,000,000	259,556,652	1	148,000,000	93,700,000
2021	1	190,000,000	179,400,000	1	187,000,000	176,700,000	3	270,000,000	256,038,980	1	148,000,000	139,272,000
2022	1	190,000,000	182,000,000	1	187,000,000	178,400,000	3	270,000,000	276,833,372	1	148,000,000	141,399,000
2023	1	190,000,000	180,900,000	1	187,000,000	178,100,000	3	270,000,000	251,804,255	1	148,000,000	142,094,000

Note: Perry Island had capacity from 1975–1987 and had eyed eggs in 5 of permitted years. Main Bay reared eggs in 1976–1981 and 1983.

Note: Operator 0 = None, 1 = Prince William Sound Aquaculture Association, 2 = ADF&G, 3 = Valdez Fisheries Development Association.

Appendix K17.–Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap.), and number of chum salmon eyed eggs at Prince William Sound-area hatcheries, 1975–2023.

Year	A. F. Koernig			Wally Noerenberg		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	1	200,000	0	0	N/A	0
1976	1	5,000,000	17112	0	N/A	0
1977	1	5,000,000	1,356,000	0	N/A	0
1978	1	5,000,000	256,000	0	N/A	0
1979	1	5,000,000	407,800	0	N/A	0
1980	1	5,000,000	943,000	0	N/A	0
1981	1	13,000,000	8,180,000	0	N/A	0
1982	1	13,000,000	9,440,470	0	N/A	0
1983	1	13,000,000	8,053,023	1	111,000,000	0
1984	1	13,000,000	11,521,868	1	111,000,000	13,290,551
1985	1	13,000,000	2,056,719	1	111,000,000	20,795,141
1986	1	13,000,000	13,655,275	1	111,000,000	38,411,705
1987	1	13,000,000	0	1	111,000,000	71,823,254
1988	1	13,000,000	0	1	111,000,000	94,626,882
1989	1	13,000,000	0	1	111,000,000	49,848,494
1990	1	13,000,000	0	1	111,000,000	79,009,177
1991	1	13,000,000	0	1	111,000,000	104,323,762
1992	1	13,000,000	0	1	111,000,000	107,931,529
1993	1	13,000,000	0	1	111,000,000	104,314,716
1994	1	13,000,000	0	1	111,000,000	103,052,012
1995	1	13,000,000	0	1	111,000,000	107,136,410
1996	1	13,000,000	9,540,329	1	111,000,000	92,017,594
1997	1	13,000,000	10,589,983	1	111,000,000	106,431,796
1998	1	13,000,000	0	1	111,000,000	105,953,283
1999	1	2,000,000	0	1	111,000,000	106,126,148
2000	1	0	0	1	111,000,000	78,104,265
2001	1	0	0	1	111,000,000	106,551,832
2002	1	0	0	1	111,000,000	105,142,256
2003	1	0	0	1	148,000,000	137,672,661
2004	1	0	0	1	148,000,000	135,435,755
2005	1	0	0	1	165,000,000	154,844,847
2006	1	0	0	1	165,000,000	136,907,054
2007	1	17,000,000	16,400,000	1	131,000,000	123,000,000
2008	1	17,000,000	15,700,000	1	131,000,000	122,000,000
2009	1	17,000,000	16,400,000	1	131,000,000	123,000,000
2010	1	34,000,000	34,000,000	1	131,000,000	122,000,000
2011	1	34,000,000	31,200,000	1	131,000,000	121,000,000
2012	1	34,000,000	33,900,000	1	131,000,000	121,000,000
2013	1	34,000,000	33,200,000	1	131,000,000	127,000,000
2014	1	34,000,000	31,000,000	1	131,000,000	89,400,000
2015	1	34,000,000	30,300,000	1	131,000,000	120,000,000
2016	1	34,000,000	31,100,000	1	131,000,000	112,000,000
2017	1	34,000,000	20,100,000	1	131,000,000	120,000,000
2018	1	34,000,000	20,230,000	1	131,000,000	108,800,000
2019	1	34,000,000	20,100,000	1	131,000,000	112,100,000
2020	1	34,000,000	20,000,000	1	131,000,000	125,360,000
2021	1	34,000,000	20,000,000	1	131,000,000	120,100,000
2022	1	34,000,000	20,130,000	1	131,000,000	121,200,000
2023	1	34,000,000	19,990,000	1	131,000,000	119,900,000

-continued-

Appendix K17.–Page 2 of 2.

Note: Cannery Creek had capacity from 1978–1988 and had eyed eggs in most years during 1979–1988. Main Bay reared eggs in 1982–1987. Perry Island had capacity in 1975–1987. Solomon Gulch had capacity from 1981–1998 and reared eggs in 1981–1994.

Note: Operator 0 = None, 1 = Prince William Sound Aquaculture Association.

Appendix K18.–Hatchery operator (Op.), PNP Hatchery permitted Chinook salmon green egg capacity (Cap.), and number of Chinook salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.

Year	Pillar Creek		
	Op.	Cap.	Eyed eggs
1975	1	N/A	0
1976	1	N/A	0
1977	1	N/A	0
1978	1	N/A	0
1979	1	N/A	0
1980	1	N/A	0
1981	1	N/A	0
1982	1	N/A	0
1983	1	N/A	0
1984	1	N/A	0
1985	1	N/A	0
1986	1	N/A	0
1987	1	N/A	0
1988	2	N/A	0
1989	2	N/A	0
1990	2	N/A	0
1991	2	N/A	0
1992	2	N/A	0
1993	2	N/A	0
1994	2	N/A	0
1995	2	N/A	0
1996	2	N/A	0
1997	2	N/A	0
1998	2	0	0
1999	2	0	0
2000	2	300,000	81,772
2001	2	300,000	42,181
2002	2	300,000	47,611
2003	2	300,000	118,675
2004	2	300,000	39,504
2005	2	300,000	178,201
2006	2	300,000	308,240
2007	2	300,000	201,272
2008	2	300,000	250,896
2009	2	450,000	63,733
2010	2	450,000	146,984
2011	2	450,000	160,371
2012	2	450,000	312,461
2013	2	450,000	338,687
2014	2	450,000	36,902
2015	2	450,000	98,022
2016	2	450,000	147,381
2017	2	450,000	68,097
2018	2	450,000	85,767
2019	2	450,000	36,451
2020	2	450,000	11,243
2021	2	450,000	57,277
2022	2	450,000	6,954
2023	2	450,000	86,103

Note: Operator 1 = ADF&G, 2 = Kodiak Regional Aquaculture Association.

Appendix K19.–Hatchery operator (Op.), PNP Hatchery permitted sockeye salmon green egg capacity (Cap.), and number of sockeye salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.

Year	Kitoi Bay			Pillar Creek		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	1	N/A	0	0	N/A	0
1976	1	N/A	0	0	N/A	0
1977	1	N/A	343,000	0	N/A	0
1978	1	N/A	2,509,000	0	N/A	0
1979	1	N/A	4,392,546	0	N/A	0
1980	1	N/A	0	0	N/A	0
1981	1	N/A	0	0	N/A	0
1982	1	N/A	0	0	N/A	0
1983	1	N/A	0	0	N/A	0
1984	1	N/A	0	0	N/A	0
1985	1	N/A	0	0	N/A	0
1986	1	N/A	0	0	N/A	0
1987	1	N/A	0	0	N/A	0
1988	2	Not stated	158,000	1	N/A	504,000
1989	2	Not stated	4,737,000	1	N/A	0
1990	2	Not stated	1,810,000	1	N/A	0
1991	2	Not stated	2,323,472	1	N/A	6,200,000
1992	2	Not stated	3,281,000	1	N/A	12,765,000
1993	2	Not stated	1,085,000	2	N/A	10,469,405
1994	2	Not stated	1,138,077	2	N/A	6,573,777
1995	2	Not stated	726,338	2	N/A	8,053,022
1996	2	Not stated	1,580,000	2	N/A	10,998,000
1997	2	Not stated	258,857	2	N/A	6,477,913
1998	2	300,000	205,000	2	20,000,000	5,906,479
1999	2	300,000	313,830	2	20,000,000	6,966,397
2000	2	300,000	302,000	2	20,000,000	3,987,303
2001	2	300,000	306,903	2	20,000,000	1,375,159
2002	2	300,000	0	2	20,000,000	2,065,407
2003	2	300,000	312,292	2	20,000,000	4,099,590
2004	2	300,000	514,804	2	20,000,000	3,710,201
2005	2	600,000	627,460	2	20,000,000	6,961,897
2006	2	600,000	632,943	2	20,000,000	4,888,489
2007	2	600,000	553,451	2	20,000,000	2,573,163
2008	2	600,000	529,335	2	20,000,000	3,006,937
2009	2	600,000	572,484	2	20,000,000	4,221,257
2010	2	600,000	530,562	2	20,000,000	3,775,707
2011	2	600,000	570,000	2	20,000,000	3,859,383
2012	2	600,000	753,613	2	20,000,000	4,020,470
2013	2	850,000	754,081	2	20,000,000	4,198,601
2014	2	850,000	772,221	2	20,000,000	3,334,459
2015	2	850,000	850,280	2	20,000,000	3,305,931
2016	2	850,000	765,718	2	20,000,000	3,714,841
2017	2	850,000	783,561	2	20,000,000	4,895,239
2018	2	850,000	618,283	2	20,000,000	3,698,751
2019	2	850,000	0	2	20,000,000	1,699,404
2020	2	850,000	451,280	2	20,000,000	3,068,312
2021	2	850,000	665,414	2	20,000,000	3,222,281
2022	2	850,000	707,842	2	20,000,000	3,691,495
2023	2	850,000	671,337	2	20,000,000	3,726,297

-continued-

Appendix K19.–Page 2 of 2.

Note: Karluk reared eggs in 1978–1986.

Note: Operator 0 = None, 1 = ADF&G, 2 = Kodiak Regional Aquaculture Association.

Appendix K20.–Hatchery operator (Op.), PNP Hatchery permitted coho salmon green egg capacity (Cap.), and number of coho salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.

Year	Kitoi Bay			Pillar Creek		
	Op.	Cap.	Eyed eggs	Op.	Cap.	Eyed eggs
1975	1	N/A	0	0	N/A	0
1976	1	N/A	0	0	N/A	0
1977	1	N/A	0	0	N/A	0
1978	1	N/A	0	0	N/A	0
1979	1	N/A	0	0	N/A	0
1980	1	N/A	0	0	N/A	0
1981	1	N/A	0	0	N/A	0
1982	1	N/A	80,000	0	N/A	0
1983	1	N/A	321,000	0	N/A	0
1984	1	N/A	241,000	0	N/A	0
1985	1	N/A	229,000	0	N/A	0
1986	2	N/A	378,000	0	N/A	0
1987	2	N/A	582,000	0	N/A	0
1988	2	2,300,000	1,193,000	0	N/A	0
1989	2	2,300,000	88,779	0	N/A	0
1990	2	2,300,000	1,021,000	1	N/A	0
1991	2	2,300,000	1,800,000	1	N/A	56,000
1992	2	2,300,000	796,000	1	N/A	10,500
1993	2	2,300,000	648,000	2	N/A	160,000
1994	2	2,300,000	2,031,899	2	N/A	101,000
1995	2	2,300,000	1,248,000	2	N/A	63,000
1996	2	2,300,000	2,176,000	2	N/A	165,000
1997	2	2,300,000	2,051,000	2	N/A	168,000
1998	2	2,300,000	2,484,000	2	500,000	158,500
1999	2	2,300,000	1,933,000	2	500,000	83,000
2000	2	2,300,000	2,037,476	2	500,000	112,544
2001	2	2,300,000	2,140,333	2	500,000	146,225
2002	2	2,300,000	2,071,127	2	500,000	108,029
2003	2	2,300,000	1,950,000	2	500,000	133,575
2004	2	2,300,000	1,936,248	2	500,000	90,779
2005	2	2,300,000	1,950,000	2	500,000	101,136
2006	2	2,300,000	1,950,000	2	500,000	121,000
2007	2	2,300,000	1,949,955	2	500,000	97,335
2008	2	2,300,000	1,952,568	2	500,000	91,264
2009	2	2,300,000	1,950,570	2	500,000	288,921
2010	2	2,300,000	1,984,995	2	500,000	252,174
2011	2	2,300,000	2,019,662	2	500,000	234,259
2012	2	2,300,000	1,990,014	2	500,000	106,920
2013	2	2,300,000	1,816,385	2	500,000	124,677
2014	2	2,300,000	1,305,001	2	500,000	311,310
2015	2	2,300,000	1,112,806	2	500,000	261,010
2016	2	2,300,000	403,561	2	500,000	101,264
2017	2	2,300,000	1,861,534	2	500,000	262,500
2018	2	2,300,000	1,606,897	2	500,000	262,209
2019	2	2,300,000	2,048,758	2	500,000	265,209
2020	2	2,300,000	1,839,193	2	500,000	255,093
2021	2	2,300,000	557,470	2	500,000	247,220
2022	2	2,300,000	2,006,479	2	500,000	277,500
2023	2	2,300,000	N/A ^a	2	500,000	N/A ^a

Note: Operator 0 = None, 1 = ADF&G, 2 = Kodiak Regional Aquaculture Association.

^a Estimated number of eyed eggs unknown at time of reporting.

Appendix K21.–Hatchery operator (Op.), PNP Hatchery permitted pink salmon green egg capacity (Cap.), and number of pink salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.

Year	Kitoi Bay		
	Op.	Cap.	Eyed eggs
1975	1	N/A	4,539,000
1976	1	N/A	7,158,000
1977	1	N/A	26,791,000
1978	1	N/A	19,205,396
1979	1	N/A	25,010,000
1980	1	N/A	28,499,000
1981	1	N/A	57,414,000
1982	1	N/A	78,279,000
1983	1	N/A	94,500,000
1984	1	N/A	77,900,000
1985	1	N/A	104,000,000
1986	1	N/A	98,156,000
1987	1	N/A	105,828,811
1988	2	215,000,000	82,824,135
1989	2	215,000,000	95,875,366
1990	2	215,000,000	140,220,179
1991	2	215,000,000	153,039,102
1992	2	215,000,000	181,085,981
1993	2	215,000,000	188,879,859
1994	2	215,000,000	155,852,895
1995	2	215,000,000	163,659,347
1996	2	215,000,000	118,957,128
1997	2	215,000,000	168,000,000
1998	2	215,000,000	164,569,972
1999	2	215,000,000	160,389,849
2000	2	215,000,000	155,472,050
2001	2	215,000,000	163,832,447
2002	2	215,000,000	163,421,774
2003	2	215,000,000	163,418,812
2004	2	215,000,000	156,528,885
2005	2	215,000,000	127,155,167
2006	2	215,000,000	158,249,417
2007	2	215,000,000	159,098,808
2008	2	215,000,000	166,062,646
2009	2	215,000,000	163,347,439
2010	2	215,000,000	161,611,968
2011	2	215,000,000	165,983,532
2012	2	215,000,000	113,353,679
2013	2	215,000,000	203,032,786
2014	2	215,000,000	194,027,478
2015	2	215,000,000	195,902,866
2016	2	215,000,000	76,915,355
2017	2	215,000,000	202,852,954
2018	2	215,000,000	168,986,718
2019	2	215,000,000	191,526,431
2020	2	215,000,000	135,426,623
2021	2	215,000,000	204,177,326
2022	2	215,000,000	200,016,365
2023	2	215,000,000	205,967,724

Note: Operator 0 = None, 1 = ADF&G, 2 = Kodiak Regional Aquaculture Association.

Appendix K22.–Hatchery operator (Op.), PNP Hatchery permitted chum salmon green egg capacity (Cap.), and number of chum salmon eyed eggs at Kodiak-area hatcheries, 1975–2023.

Year	Kitoi Bay		
	Op.	Cap.	Eyed eggs
1975	1	N/A	0
1976	1	N/A	0
1977	1	N/A	0
1978	1	N/A	0
1979	1	N/A	47,500
1980	1	N/A	89,000
1981	1	N/A	427,399
1982	1	N/A	118,000
1983	1	N/A	739,000
1984	1	N/A	892,000
1985	1	N/A	446,000
1986	1	N/A	750,000
1987	1	N/A	5,280,000
1988	1	N/A	3,592,000
1989	1	N/A	1,600,000
1990	1	N/A	17,101,000
1991	2	N/A	23,313,825
1992	2	N/A	11,293,259
1993	2	N/A	7,216,301
1994	2	N/A	12,306,000
1995	2	N/A	23,532,973
1996	2	N/A	24,495,124
1997	2	N/A	14,724,100
1998	2	25,000,000	7,465,388
1999	2	25,000,000	24,048,413
2000	2	25,000,000	24,048,663
2001	2	25,000,000	24,067,382
2002	2	25,000,000	23,270,387
2003	2	25,000,000	24,049,960
2004	2	25,000,000	23,618,354
2005	2	25,000,000	19,146,500
2006	2	25,000,000	23,796,209
2007	2	25,000,000	23,910,178
2008	2	25,000,000	23,893,864
2009	2	28,000,000	23,049,338
2010	2	28,000,000	23,924,448
2011	2	28,000,000	23,901,675
2012	2	28,000,000	20,150,044
2013	2	28,000,000	24,795,879
2014	2	36,000,000	32,676,246
2015	2	36,000,000	31,494,215
2016	2	36,000,000	17,268,719
2017	2	36,000,000	27,886,710
2018	2	36,000,000	32,477,161
2019	2	36,000,000	21,718,094
2020	2	36,000,000	35,426,623
2021	2	36,000,000	33,408,266
2022	2	36,000,000	31,057,147
2023	2	36,000,000	22,463,673

Note: Operator 0 = None, 1 = ADF&G, 2 = Kodiak Regional Aquaculture Association.

**APPENDIX L: SUMMARY OF ANADROMOUS SALMON
EGG TAKES, RELEASE, AND RETURNS FROM ALASKA
HATCHERIES, 1972-2023.**

Appendix L1.—Summary of anadromous salmon production (all species) from Alaska hatcheries and fisheries enhancement projects, 1972–2023.

Year	Egg take ^a	Releases	Total return ^b
1972	3,283,000	1,645,614	0
1973	1,882,000	1,730,061	0
1974	5,462,800	2,756,434	0
1975	18,728,889	9,577,511	5,900
1976	23,827,682	10,842,115	11,000
1977	48,558,582	36,745,604	178,336
1978	85,280,891	72,433,464	372,422
1979	115,881,719	84,326,636	1,601,150
1980	258,952,466	93,592,588	3,062,612
1981	383,731,554	234,008,814	4,911,011
1982	450,819,349	324,683,429	6,911,919
1983	554,816,834	418,995,960	6,597,159
1984	694,144,672	508,604,595	8,258,265
1985	858,905,398	635,450,856	16,483,335
1986	915,218,731	760,307,391	12,309,802
1987	1,239,883,817	840,680,029	25,140,136
1988	1,239,984,325	1,161,840,764	17,749,048
1989	1,222,139,870	1,131,249,477	35,166,004
1990	1,397,760,220	1,174,401,233	48,701,013
1991	1,442,315,880	1,342,264,965	49,139,761
1992	1,613,623,886	1,338,245,584	22,969,450
1993	1,609,046,394	1,474,563,110	32,573,299
1994	1,632,379,048	1,300,870,017	55,635,059
1995	1,767,586,130	1,500,152,608	37,291,407
1996	1,586,626,239	1,630,547,863	49,639,102
1997	1,578,697,367	1,356,368,297	51,090,802
1998	1,580,766,270	1,447,782,270	56,086,396
1999	1,646,743,738	1,433,133,974	72,737,445
2000	1,569,795,213	1,476,908,850	63,056,932
2001	1,596,866,414	1,476,885,503	61,477,124
2002	1,700,802,564	1,484,550,828	49,324,365
2003	1,722,808,995	1,522,025,994	79,965,866
2004	1,554,264,965	1,645,396,282	45,283,781
2005	1,526,825,571	1,460,289,615	81,162,994
2006	1,626,944,755	1,434,703,884	46,509,267
2007	1,573,075,701	1,561,650,347	80,305,991
2008	1,558,217,953	1,487,092,082	60,462,675
2009	1,726,310,557	1,461,454,839	45,007,666
2010	1,597,765,749	1,560,172,165	90,822,779

-continued-

Appendix L1.–Page 2 of 2.

Year	Egg take ^a	Releases	Total return ^b
2011	1,743,772,750	1,538,220,572	47,849,893
2012	1,628,096,244	1,671,386,781	47,253,212
2013	1,874,308,373	1,562,007,801	111,403,733
2014	1,668,551,681	1,775,830,313	61,960,463
2015	1,723,948,165	1,661,404,087	97,317,421
2016	1,704,655,416	1,675,390,580	27,287,126
2017	1,985,413,809	1,591,398,726	51,253,185
2018	1,914,443,386	1,856,404,854	42,323,936
2019	1,871,820,507	1,708,008,278	53,920,379
2020	1,820,923,298	1,736,184,639	34,041,402
2021	1,968,843,553	1,712,935,830	69,046,905
2022	2,004,203,843	1,888,558,199	43,399,617
2023	1,959,101,931	1,859,563,434	86,942,789
Total	65,598,809,144	59,136,225,746	2,092,001,334

^a Reflects hatchery-reported and otherwise estimated or known egg take. Egg take is not known at all hatcheries, species, and years, particularly for state and federally operated hatcheries.

^b Total return is an underestimate because not all mixed-stock fisheries are sampled, for example.

Appendix L2.—Summary of anadromous Chinook salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.

Year	Egg take ^a	Releases	Total return ^b
1972	1,510,000	150,914	0
1973	0	185,622	0
1974	137,000	470,281	0
1975	111,000	154,806	0
1976	907,022	248,283	0
1977	856,936	1,036,114	0
1978	1,489,668	886,284	570
1979	883,184	1,045,374	3,215
1980	1,378,282	754,020	6,571
1981	2,073,317	717,916	5,121
1982	2,853,214	986,955	11,958
1983	4,614,584	1,663,800	13,247
1984	6,017,846	3,926,598	20,832
1985	13,226,692	4,426,754	26,896
1986	10,881,618	9,532,787	40,317
1987	12,239,109	13,199,099	93,537
1988	14,621,755	8,225,873	74,808
1989	8,740,704	8,771,270	78,330
1990	13,203,958	12,013,958	118,143
1991	14,543,094	8,506,178	174,710
1992	11,112,281	10,708,775	132,230
1993	11,815,295	11,399,415	112,134
1994	8,712,679	9,631,217	127,256
1995	11,492,050	7,184,888	169,470
1996	10,260,581	7,060,433	165,948
1997	9,563,163	7,239,207	150,258
1998	11,327,688	7,154,355	104,278
1999	11,621,580	7,913,342	113,985
2000	9,890,671	9,126,594	174,090
2001	11,094,433	8,831,521	188,293
2002	17,638,816	8,324,905	157,642
2003	12,091,854	8,995,498	159,431
2004	13,019,590	9,537,958	206,669
2005	13,480,968	9,431,886	139,087
2006	14,857,953	10,165,921	107,706
2007	15,517,364	10,510,005	152,312
2008	15,998,751	11,368,056	155,473
2009	14,973,192	11,598,277	119,641
2010	12,172,259	11,095,198	106,732

-continued-

Appendix L2.–Page 2 of 2.

Year	Egg take ^a	Releases	Total return ^b
2011	12,270,242	8,419,013	130,015
2012	13,089,316	9,534,039	83,255
2013	13,195,067	9,022,304	124,160
2014	12,636,613	9,256,849	93,189
2015	12,943,563	8,856,950	113,959
2016	10,763,853	10,366,969	71,937
2017	12,281,098	9,569,503	63,612
2018	12,811,577	9,490,003	88,310
2019	14,137,192	9,842,783	88,860
2020	16,499,488	10,977,945	72,684
2021	12,213,154	9,900,600	81,544
2022	14,085,388	10,885,991	84,608
2023	13,683,995	9,603,745	77,409
Total	517,540,697	379,907,031	4,584,432

^a Reflects hatchery-reported and otherwise estimated or known egg take. Egg take is not known at all hatcheries, species, and years, particularly for state and federally operated hatcheries.

^b Total return is an underestimate because not all mixed-stock fisheries are sampled, for example.

Appendix L3.—Summary of sockeye salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.

Year	Egg take ^a	Releases	Total return ^b
1972	0	17,000	0
1973	0	305,005	0
1974	0	179,311	0
1975	0	902,565	0
1976	0	705,869	0
1977	0	13,058,632	318
1978	8,007,000	15,180,025	13,193
1979	25,654,546	16,061,543	317,807
1980	26,515,000	13,412,307	699,554
1981	34,907,000	25,941,893	401,389
1982	51,021,889	37,920,135	56,266
1983	44,084,000	40,249,011	210,127
1984	48,158,000	42,953,423	382,242
1985	66,301,000	49,353,656	754,380
1986	63,130,000	57,190,040	1,287,807
1987	37,002,000	59,463,242	977,762
1988	96,634,075	68,542,488	1,624,306
1989	24,821,369	76,893,687	2,024,300
1990	25,722,111	72,502,300	4,146,645
1991	40,088,131	70,393,758	5,398,200
1992	82,664,284	74,483,129	4,170,205
1993	107,015,486	60,836,956	5,109,118
1994	97,111,667	75,667,744	4,057,350
1995	63,989,870	81,490,642	1,505,412
1996	117,658,817	75,392,667	2,926,086
1997	89,326,744	76,682,666	3,308,915
1998	88,723,663	70,623,975	2,487,721
1999	85,064,290	66,328,555	3,607,406
2000	49,435,477	60,083,734	2,087,281
2001	49,089,027	39,188,775	3,348,460
2002	83,346,134	66,639,186	3,645,546
2003	50,944,435	63,487,638	4,828,272
2004	46,058,475	72,258,202	3,561,856
2005	40,535,525	38,347,889	2,815,204
2006	52,546,839	52,923,778	2,624,599
2007	46,451,423	63,383,146	2,362,693
2008	75,427,751	60,263,852	1,788,033
2009	76,770,879	56,800,686	1,794,100
2010	44,895,269	56,062,458	2,548,216

-continued-

Appendix L3.—Page 2 of 2.

Year	Egg take ^a	Releases	Total return ^b
2011	50,057,083	54,061,566	3,049,150
2012	28,252,444	61,085,003	2,653,840
2013	34,509,737	57,361,349	2,357,571
2014	40,940,897	60,272,890	2,725,132
2015	37,833,812	58,616,980	2,631,572
2016	41,019,929	48,666,659	1,821,792
2017	63,143,600	50,110,451	1,601,140
2018	62,765,989	47,762,739	2,013,083
2019	37,853,689	42,621,766	1,476,688
2020	35,037,898	44,907,932	1,263,360
2021	28,507,562	43,408,478	1,495,645
2022	39,261,393	42,703,046	1,490,515
2023	34,315,853	35,281,283	1,640,909
Total	2,472,602,062	2,519,031,710	103,091,166

^a Reflects hatchery-reported and otherwise estimated or known egg take. Egg take is not known at all hatcheries, species, and years, particularly for state and federally operated hatcheries.

^b Total return is an underestimate because not all mixed-stock fisheries are sampled, for example.

Appendix L4.—Summary of coho salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.

Year	Egg take ^a	Releases	Total return ^b
1972	1,773,000	1,477,700	0
1973	1,882,000	746,304	0
1974	1,715,800	1,641,473	0
1975	3,867,369	2,485,551	100
1976	4,658,000	2,316,652	0
1977	4,234,451	3,677,152	12,500
1978	4,506,244	2,460,876	100
1979	3,687,074	1,824,919	48,555
1980	3,797,680	2,115,345	21,210
1981	6,898,054	3,005,567	55,000
1982	14,226,713	3,620,687	108,230
1983	13,532,636	8,834,820	96,278
1984	17,030,847	10,609,774	180,023
1985	16,742,874	14,868,588	309,647
1986	18,635,789	16,443,619	646,239
1987	15,550,748	16,608,964	435,933
1988	23,235,158	29,305,344	255,536
1989	12,791,927	23,704,491	488,772
1990	15,943,005	17,819,682	959,831
1991	19,154,779	18,837,952	1,253,609
1992	18,933,155	18,287,570	1,372,676
1993	22,370,930	16,343,130	914,191
1994	21,943,640	16,051,125	1,313,047
1995	24,958,930	18,482,906	1,313,100
1996	28,670,023	20,587,163	1,360,955
1997	26,757,754	21,427,394	1,086,702
1998	17,515,541	18,345,058	1,392,620
1999	20,173,863	20,193,190	1,542,490
2000	26,857,255	19,087,404	1,657,190
2001	25,802,986	19,230,722	1,486,025
2002	30,528,863	20,401,978	2,118,661
2003	31,698,519	20,884,281	1,495,417
2004	26,614,619	22,854,460	1,207,994
2005	30,324,630	21,311,250	1,447,322
2006	29,432,535	21,737,923	1,361,048
2007	28,648,242	25,449,049	1,129,846
2008	37,439,003	25,075,720	1,453,096
2009	33,116,423	23,487,915	1,148,226
2010	28,735,424	28,379,402	1,363,412

-continued-

Appendix L4.–Page 2 of 2.

Year	Egg take ^a	Releases	Total return ^b
2011	35,772,109	29,427,253	1,420,443
2012	36,780,745	24,514,220	972,427
2013	31,969,825	29,854,874	1,754,740
2014	40,168,616	27,947,372	2,063,057
2015	33,999,585	27,660,830	1,233,008
2016	35,779,614	32,344,196	792,842
2017	37,247,926	29,658,217	941,506
2018	38,214,035	34,396,318	951,824
2019	53,431,805	31,253,993	1,129,104
2020	45,735,123	37,095,373	800,740
2021	32,417,545	38,465,257	811,650
2022	35,289,067	35,459,805	849,065
2023	10,790,122	32,246,427	971,780
Total	1,181,982,600	990,347,235	45,727,767

^a Reflects hatchery-reported and otherwise estimated or known egg take. Egg take is not known at all hatcheries, species, and years, particularly for state and federally operated hatcheries.

^b Total return is an underestimate because not all mixed-stock fisheries are sampled, for example.

Appendix L5.—Summary of pink salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.

Year	Egg take ^a	Releases	Total return ^b
1972	0	0	0
1973	0	493,130	0
1974	2,223,000	457,587	2,223,000
1975	10,006,831	5,067,230	10,006,831
1976	12,422,000	5,195,366	12,422,000
1977	36,810,420	16,291,118	36,810,420
1978	62,997,625	49,759,711	62,997,625
1979	67,842,046	59,153,285	67,842,046
1980	159,858,276	64,050,923	159,858,276
1981	261,761,477	142,646,205	261,761,477
1982	270,679,111	217,606,684	270,679,111
1983	363,795,438	265,344,661	363,795,438
1984	392,094,136	341,024,626	392,094,136
1985	547,368,123	361,419,692	547,368,123
1986	481,761,184	488,587,759	481,761,184
1987	833,196,457	444,133,581	833,196,457
1988	742,112,962	761,290,612	742,112,962
1989	930,297,473	684,657,782	930,297,473
1990	921,998,281	822,408,262	921,998,281
1991	939,518,321	867,415,215	939,518,321
1992	1,025,463,405	804,491,068	1,025,463,405
1993	955,846,595	920,369,875	955,846,595
1994	990,690,280	789,242,222	990,690,280
1995	1,074,586,513	920,477,392	1,074,586,513
1996	847,763,703	999,342,894	847,763,703
1997	944,210,035	773,211,497	944,210,035
1998	979,574,435	872,528,069	979,574,435
1999	967,952,006	877,815,316	967,952,006
2000	982,825,046	879,745,764	982,825,046
2001	986,080,236	942,208,116	986,080,236
2002	1,059,328,821	938,197,008	1,059,328,821
2003	1,006,265,269	962,466,127	1,006,265,269
2004	870,539,309	961,338,197	870,539,309
2005	860,250,881	808,405,758	860,250,881
2006	889,871,545	808,627,948	889,871,545
2007	879,106,023	857,651,362	879,106,023
2008	848,045,530	822,843,991	848,045,530
2009	896,775,421	817,872,188	896,775,421
2010	918,754,316	855,464,467	918,754,316

-continued-

Appendix L5.—Page 2 of 2.

Year	Egg take ^a	Releases	Total return ^b
2011	978,727,767	882,811,477	978,727,767
2012	820,719,361	942,916,563	820,719,361
2013	1,069,181,997	797,088,580	1,069,181,997
2014	896,549,511	1,016,050,804	896,549,511
2015	885,390,739	947,676,425	885,390,739
2016	878,002,663	893,756,448	878,002,663
2017	1,099,062,930	841,114,188	1,099,062,930
2018	1,042,663,540	1,051,798,732	1,042,663,540
2019	929,717,267	934,710,830	929,717,267
2020	917,430,965	874,446,150	917,430,965
2021	1,085,096,509	870,554,004	1,085,096,509
2022	1,068,977,270	1,039,051,555	1,068,977,270
2023	1,056,654,900	1,013,439,978	1,056,654,900
Total	37,748,847,949	34,314,718,422	37,748,847,949

^a Reflects hatchery-reported and otherwise estimated or known egg take. Egg take is not known at all hatcheries, species, and years, particularly for state and federally operated hatcheries.

^b Total return is an underestimate because not all mixed-stock fisheries are sampled, for example.

Appendix L6.—Summary of chum salmon production from Alaska hatcheries and fisheries enhancement projects, 1972–2023.

Year	Egg take ^a	Releases	Total return ^b
1972	0	0	0
1973	0	0	0
1974	1,387,000	7,782	0
1975	4,743,689	967,359	0
1976	5,840,660	2,375,945	0
1977	6,656,775	2,682,588	0
1978	8,280,354	4,146,568	2,806
1979	17,814,869	6,241,515	5,727
1980	67,403,228	13,259,993	16,130
1981	78,091,706	61,697,233	53,482
1982	112,038,422	64,548,968	125,336
1983	128,790,176	102,903,668	300,762
1984	230,843,843	110,090,174	1,809,461
1985	215,266,709	205,382,166	1,243,787
1986	340,810,140	188,553,186	1,878,896
1987	341,895,503	307,275,143	1,887,916
1988	363,380,375	294,476,447	2,492,775
1989	245,488,397	337,222,247	1,346,501
1990	420,892,865	249,657,031	2,029,200
1991	429,011,555	377,111,862	2,368,152
1992	475,450,761	430,275,042	3,094,392
1993	511,998,088	465,613,734	6,549,566
1994	513,920,782	410,277,709	8,988,351
1995	592,558,767	472,516,780	9,533,038
1996	582,273,115	528,164,706	16,352,647
1997	508,839,671	477,807,533	12,588,126
1998	483,624,943	479,130,813	13,406,515
1999	561,931,999	460,883,571	15,655,924
2000	500,786,764	508,865,354	18,716,139
2001	524,799,732	467,426,369	9,165,596
2002	509,959,930	450,987,751	12,567,627
2003	621,808,918	466,192,450	13,709,654
2004	598,032,972	579,407,465	10,938,777
2005	582,233,567	582,792,832	7,558,111
2006	640,235,883	541,248,314	15,714,388
2007	603,352,649	604,656,785	12,353,246
2008	581,306,918	567,540,463	13,654,964
2009	704,674,642	551,695,773	12,669,453
2010	593,208,481	609,170,640	12,954,927

-continued-

Appendix L5.—Page 2 of 2.

Year	Egg take ^a	Releases	Total return ^b
2011	666,945,549	563,501,263	11,626,955
2012	729,254,378	633,336,956	15,544,498
2013	725,451,747	668,680,694	15,376,865
2014	678,256,044	662,302,398	8,009,895
2015	753,780,466	618,592,902	12,539,611
2016	739,089,357	690,256,308	11,349,753
2017	773,678,255	660,946,367	15,054,282
2018	757,988,245	712,957,062	14,116,938
2019	836,680,554	689,578,906	13,126,702
2020	806,219,824	768,757,239	6,774,911
2021	810,608,783	750,607,491	9,581,409
2022	846,590,725	760,457,802	12,416,677
2023	843,657,061	768,992,001	20,010,431
Total	23,677,835,836	20,932,221,348	407,261,299

^a Reflects hatchery-reported and otherwise estimated or known egg take. Egg take is not known at all hatcheries, species, and years, particularly for state and federally operated hatcheries.

^b Total return is an underestimate because not all mixed-stock fisheries are sampled, for example.

**APPENDIX M: STATEWIDE COMMERCIAL HARVEST
SUMMARIES, 1977–2023**

Appendix M1.–Summary of statewide commercial harvest (including cost recovery) of hatchery-produced salmon from Alaska's fisheries enhancement projects as reported by operators, 1977–2023.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1977	0	183	0	125,718	0	125,901
1978	42	720	0	127,188	2,214	130,164
1979	445	300,758	0	532,303	1,514	835,020
1980	4,388	638,408	102	1,406,028	8,557	2,057,483
1981	1,609	362,326	49,258	3,904,308	39,972	4,357,473
1982	3,652	27,590	84,703	6,067,429	73,869	6,257,243
1983	2,075	158,000	82,320	5,274,149	212,871	5,729,415
1984	5,454	236,762	139,124	4,838,680	1,550,559	6,770,579
1985	10,339	447,448	243,382	12,891,224	1,000,279	14,592,672
1986	14,644	872,507	442,285	7,630,445	1,317,833	10,277,714
1987	24,594	613,433	203,990	19,819,167	1,432,853	22,094,037
1988	30,336	1,001,421	143,768	12,099,427	1,824,455	15,099,407
1989	36,770	1,342,578	324,436	28,403,238	946,973	31,053,995
1990	69,942	1,366,792	764,794	39,580,126	1,482,413	43,264,067
1991	79,391	2,289,246	1,058,694	36,240,498	1,828,535	41,496,364
1992	61,985	1,518,875	1,231,079	12,213,636	2,358,376	17,383,951
1993	59,688	2,061,517	772,961	17,821,439	5,892,177	26,607,782
1994	46,271	1,610,445	1,120,161	38,814,084	7,984,962	49,575,923
1995	81,554	1,076,829	1,085,229	22,714,552	8,634,008	33,592,172
1996	92,490	2,333,381	1,097,666	26,178,537	14,154,597	43,856,671
1997	70,688	2,505,559	808,105	30,982,804	11,823,168	46,190,324
1998	40,362	1,882,080	1,087,110	34,564,050	12,629,120	50,202,722
1999	52,467	2,587,967	1,278,359	47,193,297	14,151,687	65,263,777
2000	97,295	1,531,510	1,257,104	38,191,003	17,684,623	58,761,535
2001	114,098	2,518,183	1,336,430	44,616,086	8,359,543	56,944,340
2002	95,041	2,749,745	1,707,789	28,443,301	11,815,552	44,811,428
2003	90,028	3,772,798	1,102,657	55,071,886	12,780,879	72,818,248
2004	126,723	2,679,459	925,231	28,309,396	10,081,119	42,121,928
2005	81,091	2,003,742	1,118,220	64,949,983	6,675,803	74,828,839
2006	58,321	2,138,461	1,074,512	24,773,517	14,621,065	42,665,876
2007	86,964	2,044,914	890,020	62,677,909	11,583,661	77,283,468
2008	100,165	1,515,874	1,200,067	42,075,688	12,927,247	57,819,041
2009	88,167	1,537,602	931,506	27,483,685	11,887,347	41,928,307
2010	74,148	2,061,331	1,115,518	72,484,852	12,052,096	87,787,945
2011	102,897	2,683,149	1,146,754	29,876,986	10,553,999	44,363,785
2012	72,677	2,312,464	770,101	26,699,246	14,375,480	44,229,968
2013	95,916	1,801,171	1,517,608	88,942,840	14,227,394	106,584,929
2014	66,173	2,294,284	1,772,277	47,234,781	6,881,646	58,249,161
2015	79,313	2,338,510	950,071	77,896,371	11,327,248	92,591,513
2016	43,900	1,665,477	757,140	11,526,801	10,451,756	24,445,074
2017	42,045	1,448,104	625,796	30,211,670	14,316,104	46,643,719
2018	54,073	1,752,377	718,611	23,280,676	13,151,690	38,957,427
2019	54,188	1,320,643	891,504	35,360,231	12,002,307	49,628,873
2020	41,721	1,150,972	496,519	22,919,135	5,738,021	30,346,368
2021	50,170	1,272,642	633,214	53,783,540	8,386,160	64,125,726
2022	55,339	1,300,782	656,665	26,605,872	11,080,017	39,698,675
2023	49,028	1,440,974	690,333	60,237,460	17,843,723	80,261,518
Grand total	2,608,667	72,569,993	36,303,173	1,433,075,242	370,155,472	1,914,712,547

Source: ADF&G PNP hatchery database. [URL not publicly available].

Appendix M2.—Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Southeast Alaska fisheries enhancement projects as reported by operators, 1977–2023.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1977	0	0	0	108,173	0	108,173
1978	0	0	0	0	2,214	2,214
1979	445	0	0	33,555	1,514	35,514
1980	4,388	0	0	500	5,627	10,515
1981	1,504	0	48,224	139,000	3,286	192,014
1982	3,352	0	83,128	16,568	64,874	167,922
1983	1,175	0	80,418	181,494	199,623	462,710
1984	5,234	0	138,082	235,694	1,466,670	1,845,680
1985	10,039	0	227,701	911,977	933,167	2,082,884
1986	14,219	18,600	427,244	116,114	1,095,304	1,671,481
1987	23,719	36,000	155,405	1,370,029	1,296,283	2,881,436
1988	28,585	20,400	51,674	124,571	1,290,171	1,515,401
1989	34,810	36,672	93,208	859,426	601,039	1,625,155
1990	68,207	114,167	526,611	1,319,810	785,933	2,814,728
1991	78,387	112,332	901,169	1,774,348	1,190,607	4,056,843
1992	58,359	208,034	1,027,697	3,515,448	2,114,365	6,923,903
1993	55,124	363,605	690,645	688,861	4,672,092	6,470,327
1994	43,876	171,702	930,116	5,787,031	6,965,625	13,898,350
1995	78,449	211,343	876,909	1,530,366	7,645,023	10,342,090
1996	89,123	494,246	848,507	2,009,727	12,041,241	15,482,844
1997	68,934	358,572	619,917	2,447,974	9,931,592	13,426,989
1998	38,565	237,127	873,054	2,235,834	11,559,308	14,943,888
1999	51,355	157,351	1,075,022	4,087,903	11,393,715	16,765,346
2000	96,569	270,520	629,963	438,750	12,689,973	14,125,775
2001	113,512	409,979	1,002,482	2,346,847	5,643,197	9,516,017
2002	94,286	120,186	1,449,192	1,924,064	5,615,259	9,202,987
2003	89,256	196,852	884,916	929,740	8,963,620	11,064,384
2004	124,715	565,425	732,886	1,464,011	8,096,243	10,983,280
2005	80,465	271,566	737,311	1,582,244	4,664,919	7,336,505
2006	57,682	380,323	565,156	528,023	12,940,239	13,940,423
2007	86,497	200,087	598,084	1,218,852	7,803,377	9,906,897
2008	100,165	119,859	781,451	173,914	8,090,814	9,266,203
2009	88,137	140,276	737,684	1,318,308	8,808,558	11,092,963
2010	74,148	91,763	963,854	1,198,717	7,791,660	10,120,142
2011	102,897	180,213	869,686	1,339,987	8,583,049	11,075,832
2012	72,677	227,300	710,674	340,783	10,760,144	12,111,578
2013	95,916	179,181	1,206,772	2,500,909	10,489,177	14,471,955
2014	66,173	216,118	1,360,945	511,684	5,733,451	7,888,371
2015	79,313	164,351	836,003	527,887	9,145,108	10,752,662
2016	43,900	289,541	736,677	358,762	7,457,181	8,886,061
2017	42,041	211,774	570,985	1,287,528	9,743,777	11,856,105
2018	54,071	241,256	575,731	401,665	9,988,561	11,261,284
2019	54,188	141,045	577,395	348,367	7,411,387	8,532,382
2020	41,721	101,051	345,592	1,294,350	4,001,338	5,784,052
2021	50,170	36,904	493,361	495,181	6,039,619	7,115,235
2022	55,339	70,368	605,445	926,087	8,414,688	10,071,927
2023	49,028	104,691	606,219	1,127,201	13,250,539	15,137,678
Grand total	2,570,715	7,470,780	28,253,195	54,078,264	276,854,151	354,089,427

Source: ADF&G PNP hatchery database. [URL not publicly available].

Appendix M3.—Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Prince William Sound fisheries enhancement projects as reported by operators, 1977–2023.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1977	0	183	0	17,545	0	17,728
1978	0	720	0	114,188	0	114,908
1979	0	900	0	498,748	0	499,648
1980	0	350	0	1,405,528	2,930	1,408,808
1981	0	3,600	0	2,138,544	36,686	2,178,830
1982	0	3,600	0	5,679,161	1,569	5,684,330
1983	0	6,600	0	4,385,455	13,108	4,405,163
1984	0	5,318	0	4,037,386	82,991	4,125,695
1985	0	31,955	0	8,067,647	64,137	8,163,739
1986	0	30,404	3,263	6,792,641	199,077	7,025,385
1987	100	47,347	23,640	17,304,638	127,397	17,503,122
1988	231	92,552	66,452	10,533,495	524,894	11,217,624
1989	340	175,643	202,497	20,173,723	341,374	20,893,577
1990	235	73,917	218,455	37,553,433	643,123	38,489,163
1991	184	582,200	129,270	32,870,650	250,408	33,832,712
1992	1,311	644,020	192,062	7,479,216	237,546	8,554,155
1993	2,045	502,536	43,635	4,418,071	1,177,483	6,143,770
1994	1,195	300,248	116,745	29,409,289	939,605	30,767,082
1995	891	369,198	139,430	14,246,639	662,712	15,418,870
1996	588	903,047	166,824	22,751,594	2,076,445	25,898,498
1997	924	1,463,155	62,944	24,686,332	1,878,810	28,092,165
1998	978	768,074	45,585	24,760,828	1,031,706	26,607,171
1999	0	440,326	80,249	37,968,264	2,617,072	41,105,911
2000	0	490,077	478,633	33,040,270	4,690,867	38,699,847
2001	0	972,582	175,083	28,466,847	2,499,721	32,114,233
2002	0	1,163,539	36,232	18,771,143	6,111,569	26,082,483
2003	0	1,571,592	76,843	46,935,174	3,351,054	51,934,663
2004	0	694,501	46,578	20,422,252	1,745,266	22,908,597
2005	0	517,890	227,644	47,620,680	1,919,070	50,285,284
2006	0	1,183,213	340,551	19,835,604	2,034,278	23,393,646
2007	0	1,234,571	166,107	53,461,389	3,559,558	58,421,625
2008	0	856,523	297,900	39,783,382	4,743,408	45,681,213
2009	0	949,481	39,260	17,225,812	2,977,790	21,192,343
2010	0	1,510,501	37,989	68,047,457	4,069,152	73,665,099
2011	0	1,757,043	206,733	26,362,128	1,650,418	29,976,322
2012	0	1,622,566	11,074	23,390,393	3,396,596	28,420,629
2013	0	1,041,824	258,104	74,616,332	3,640,837	79,557,097
2014	0	1,494,284	180,742	40,921,607	1,102,613	43,699,246
2015	0	1,660,967	74,728	70,375,473	2,138,730	74,249,898
2016	0	926,203	8,653	9,930,534	2,924,763	13,790,153
2017	0	723,773	25,888	26,714,899	4,420,141	31,884,701
2018	0	1,040,335	5,751	18,190,368	2,996,641	22,233,095
2019	0	883,032	279,732	29,907,940	4,574,274	35,644,978
2020	0	741,757	22,864	16,079,204	1,712,336	18,556,161
2021	0	752,256	42,814	42,289,886	2,297,807	45,382,763
2022	0	748,685	41,790	21,951,734	2,550,702	25,292,911
2023	0	808,564	19,120	46,987,693	4,353,836	52,169,213
Grand total	9,022	31,791,652	4,591,864	1,158,621,216	88,370,500	1,283,384,254

Source: ADF&G PNP hatchery database. [URL not publicly available].

Appendix M4.—Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Cook Inlet fisheries enhancement projects as reported by operators, 1978–2023.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1978	42	0	0	0	0	42
1979	0	299,858	0	0	0	299,858
1980	0	638,058	102	0	0	638,160
1981	105	358,726	1,034	963,350	0	1,323,215
1982	300	23,990	1,575	181,400	7,426	214,691
1983	900	151,400	1,902	577,200	140	731,542
1984	220	231,444	1,042	230,000	898	463,604
1985	300	415,493	3,681	463,600	1,875	884,949
1986	350	808,503	11,178	380,190	23,152	1,223,373
1987	670	521,349	24,945	84,500	5,313	636,777
1988	1,450	676,669	22,042	836,000	8,423	1,544,584
1989	1,620	330,263	28,731	877,600	4,560	1,242,774
1990	1,500	378,708	14,728	167,400	49,257	611,593
1991	820	483,514	18,546	204,800	25,801	733,481
1992	2,315	388,021	10,580	373,577	2,933	777,426
1993	2,519	497,376	22,681	637,807	38,002	1,198,385
1994	1,200	256,977	26,516	1,563,101	74,725	1,922,519
1995	2,214	324,248	18,655	2,423,894	110,962	2,879,973
1996	2,779	425,709	25,485	442,816	22,711	919,500
1997	830	274,873	16,304	2,637,370	1,745	2,931,122
1998	819	192,548	18,638	1,295,388	106	1,507,499
1999	1,112	1,150,784	7,188	1,080,130	0	2,239,214
2000	726	310,815	15,270	1,052,285	0	1,379,096
2001	586	724,095	7,133	530,265	0	1,262,079
2002	755	840,439	13,106	1,051,320	0	1,905,620
2003	772	1,204,972	5,849	619,079	0	1,830,672
2004	2,008	1,142,202	7,631	2,460,712	0	3,612,553
2005	626	999,050	1,536	2,143,317	0	3,144,529
2006	639	460,023	600	251,781	0	713,043
2007	467	402,332	48	112,801	0	515,648
2008	0	223,062	350	0	0	223,412
2009	30	201,778	0	0	0	201,808
2010	0	148,478	0	0	0	148,478
2011	0	254,223	0	0	0	254,223
2012	0	138,961	0	0	0	138,961
2013	0	118,069	0	66,581	0	184,650
2014	0	209,311	0	25,430	0	234,741
2015	0	209,789	0	2,166,733	0	2,376,522
2016	0	218,624	0	84,002	0	302,626
2017	4	135,709	201	211,822	246	347,982
2018	2	288,499	79	1,487,933	82	1,776,595
2019	0	193,468	3	190,408	163	384,042
2020	0	153,012	143	929,977	192	1,083,324
2021	0	204,658	0	338,472	0	543,130
2022	0	188,068	0	53,639	0	241,707
2023	0	189,908	0	2,030,300	0	2,220,208
Grand total	28,680	17,988,056	327,502	31,226,980	378,712	49,949,930

Source: ADF&G PNP hatchery database. [URL not publicly available].

Appendix M5.—Summary of commercial harvest (including cost recovery) of hatchery-produced salmon from Kodiak fisheries enhancement projects as reported by operators, 1981–2023.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1977	0	0	0	0	0	0
1978	0	0	0	13,000	0	13,000
1979	0	0	0	0	0	0
1980	0	0	0	0	0	0
1981	0	0	0	663,414	0	663,414
1982	0	0	0	190,300	0	190,300
1983	0	0	0	130,000	0	130,000
1984	0	0	0	335,600	0	335,600
1985	0	0	12,000	3,448,000	1,100	3,461,100
1986	75	15,000	600	341,500	300	357,475
1987	105	8,737	0	1,060,000	3,860	1,072,702
1988	70	211,800	3,600	605,361	967	821,798
1989	0	800,000	0	6,492,489	0	7,292,489
1990	0	800,000	5,000	539,483	4,100	1,348,583
1991	0	1,111,200	9,709	1,390,700	361,719	2,873,328
1992	0	278,800	740	845,395	3,532	1,128,467
1993	0	698,000	16,000	12,076,700	4,600	12,795,300
1994	0	881,518	46,784	2,054,663	5,007	2,987,972
1995	0	172,040	50,235	4,513,653	215,311	4,951,239
1996	0	510,379	56,850	974,400	14,200	1,555,829
1997	0	408,959	108,940	1,211,128	11,021	1,740,048
1998	0	684,331	149,833	6,272,000	38,000	7,144,164
1999	0	839,506	115,900	4,057,000	140,900	5,153,306
2000	0	460,098	133,238	3,659,698	303,783	4,556,817
2001	0	411,527	151,732	13,272,127	216,625	14,052,011
2002	0	625,581	209,259	6,696,774	88,724	7,620,338
2003	0	799,382	135,049	6,587,893	466,205	7,988,529
2004	0	277,331	138,136	3,962,421	239,610	4,617,498
2005	0	215,236	151,729	13,603,742	91,814	14,062,521
2006	0	114,902	168,205	4,158,109	177,548	4,618,764
2007	0	207,924	125,781	7,884,867	220,726	8,439,298
2008	0	316,430	120,366	2,118,392	93,025	2,648,213
2009	0	246,067	154,562	8,939,565	100,999	9,441,193
2010	0	310,589	113,675	3,238,678	191,284	3,854,226
2011	0	491,670	70,335	2,174,871	320,532	3,057,408
2012	0	323,637	48,353	2,968,070	218,740	3,558,800
2013	0	462,097	52,732	11,759,018	97,380	12,371,227
2014	0	374,571	230,590	5,776,060	45,582	6,426,803
2015	0	303,403	39,340	4,826,278	43,410	5,212,431
2016	0	231,109	11,810	1,153,503	69,812	1,466,234
2017	0	376,848	28,722	1,997,421	151,940	2,554,931
2018	0	182,287	137,050	3,200,710	166,406	3,686,453
2019	0	103,098	34,374	4,913,516	16,483	5,067,471
2020	0	155,152	127,920	4,615,604	24,155	4,922,831
2021	0	278,824	97,039	10,660,001	48,734	11,084,598
2022	0	293,661	9,430	3,674,412	114,627	4,092,130
2023	0	337,811	64,994	10,092,266	239,348	10,734,419
Grand total	250	15,319,505	3,130,612	189,148,782	4,552,109	212,151,258

Source: ADF&G PNP hatchery database. [URL not publicly available].