

The History of Propagation and Transportation of Chinook Salmon *Oncorhynchus tshawytscha*
Stocks at Hatcheries in Southeast Alaska, 1972–1998.



by

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ABSTRACT

In 1972 the State of Alaska began an intensive effort to establish a hatchery program for chinook salmon in southeastern Alaska at Crystal Lake Hatchery in Petersburg. The state has been joined in its efforts by federal, tribal, and private entities. By 1998, 13 hatcheries had the potential to raise and release 9.4 million chinook salmon smolts. This period of growth in capacity was guided by the Chinook Salmon Plan for Southeast Alaska, developed and implemented by a team of state and federal employees and private hatchery managers. While these decisions were considered clearly and carefully, the record of broodstock location, gamete allocation, production capacity, and transfers between hatcheries is confusing. I present an account of the history of each chinook salmon broodstock reared in hatcheries in southeastern Alaska between 1972 and 1998.

INTRODUCTION

The history of artificial propagation of chinook salmon reaches back at least 100 years. However, chinook salmon production in Southeast Alaska did not begin until the 1920s and a consistent and concerted effort was not made until the early 1970s. This report was undertaken to provide a written account of the early development of the current chinook salmon hatchery program in southeastern Alaska.

History of hatcheries in Alaska

Hatchery production of chinook salmon *Oncorhynchus tshawytscha* in southeastern Alaska began in 1923 at Ketchikan Territorial Hatchery with the release of 973,000 fry into Ketchikan Creek (Roppel 1982). These salmon came from the Columbia River and another unidentified source in Oregon. This program was closed in 1927 and the results are unknown. Following this, four shipments of chinook eggs from Soos Creek, Washington, were planted in Montana Creek and Spring Creek, near Juneau, between 1950 and 1953, but again, no record was made of the results. Between 1955 and 1967 Soos Creek chinook salmon were also reared at Deer Mountain Hatchery in Ketchikan and beginning in 1960 enough salmon returned to continue the program. Lack of suitable spawning and rearing habitat ensured that this salmon run could not persist after the program was closed in 1967. Roppel (1982) provides a more complete description of early efforts to produce chinook salmon (as well as other salmonids) in hatcheries in Alaska from the early 1900s until 1959, when Alaska became a state.

During the past three decades, a more intensive attempt was made to establish a hatchery program for chinook salmon, beginning in 1972 with the transfer of eggs from Chignik River on the Alaska Peninsula and the Carson National Fish Hatchery in Oregon to Crystal Lake Hatchery in Petersburg (Figure 1). Juveniles from these transfers were released at Starrigavan Hatchery in Sitka, and in Mendenhall and Dredge Lakes in Juneau. From 1974 to 1977 many other stocks from distant locations were imported and reared at Crystal Lake Hatchery, but the program was halted in 1976 and 1977 by an outbreak of infectious hematopoietic necrosis virus (IHNV), a disease common to sockeye salmon, *O. nerka*, but previously unseen in chinook salmon.

Potentially harmful effects of these early, long distance transfers to Crystal Lake Hatchery were mitigated by switching to wild adults from Andrew Creek, at the mouth of the Stikine River (Figure 1), as a brood source in 1976. Returning adult chinook salmon were not used as

broodstock at the hatchery until 1980, when salmon from the original Andrew Creek egg take began to return. The egg takes in 1980 and 1981 were known to include some non-Andrew Creek adult salmon, but the 1981 offspring were released as age-0 smolts, which experienced very poor survival.

At this time, other hatcheries were beginning to develop chinook salmon broodstocks from local sources. In 1976 Little Port Walter Hatchery began to raise chinook salmon from the Chickamin and Unuk rivers (Moberly and Kaill 1976; Figure 1). Deer Mountain Hatchery in Ketchikan began to develop its own broodstock in 1977 with chinook salmon from the Unuk River, and Snettisham Hatchery started with broodstocks from the Situk River, near Yakutat, and Andrew Creek. Five years later, eight hatcheries raised chinook salmon from 11 broodstocks. About 1.5 million smolts were released from these broodstocks in 1982. In 1998, 13 hatcheries had the capacity to raise and release 9.4 million chinook salmon smolts. A review of the development of chinook salmon hatchery production since statehood appears in Heard et al. (1995). Detailed information on the conditions and decisions involved can be found in the Chinook Salmon Plan for Southeast Alaska and its yearly annexes (Holland et al. 1983, 1984; Wertheimer et al. 1985; Holland et al. 1986, 1987; McGee et al. 1988–1998; Denton et al. 1999).

Broodstock management policies

The expansion of hatchery production facilities was driven by declines in chinook salmon abundance attributed to coastwide fishing pressure and environmental degradation (Holland et al. 1983). In 1983 a team of state and federal biologists and private hatchery managers developed the Chinook Salmon Plan for Southeast Alaska as an addendum to the Southeast Regional Comprehensive Plan (Holland et al. 1983). This plan proposed policies on stock transport, management of wild and cultured chinook salmon stocks, habitat protection, and evaluation of progress toward the stated goals.

The Alaska Department of Fish and Game (ADF&G) also convened a Genetic Policy Review Team to develop a genetic policy for the fishery resources of the state (Davis et al. 1985). This policy explicitly prohibited further transport of gametes into Alaska or between major regions of Alaska, and intraregional transport was strictly controlled. Furthermore, the policy statement contained guidelines for decision making that emphasized the protection of wild stocks and the maintenance of genetic diversity. For example, the stock transport policy was designed to “ensure protection of natural stocks, the genetic integrity of natural stocks, adequate genetic diversity within enhanced stocks, and maximal utilization of resources available for chinook salmon propagation.” It was wise to give attention to the possible effects, genetic and otherwise, of a large-scale hatchery production program. A number of papers have described observed and potential dangers of artificial propagation of salmonids (i.e., Allendorf and Phelps 1981; Hindar et al. 1991; Waples 1991; Hilborn 1992; Schramm and Piper 1995).

Since the Chinook Salmon Plan was enacted, decisions about broodstock location, gamete allocation, and production have been made under the guidelines in the genetic policy by all the parties involved in chinook salmon cultivation. A major concern in these decisions was the development of individual broodstocks for each hatchery. Potential production capacity quickly outstripped the availability of gametes and decisions were made to prioritize the allocation of gametes to individual hatcheries. Because of the economic burden of maintaining unused

breeding facilities and the long time between the egg harvest and the adult returns (4-7 years), development of a broodstock often involved transfer of eggs from several hatchery sources where excess eggs were available. Furthermore, surplus capacity was sometimes used to rear eggs from another facility, which may not have used the same broodstock. While all transfers were reviewed and approved in advance through the fish transport permitting process, these practices led to a history of transfers between southeastern Alaska chinook salmon hatcheries which is poorly recorded, resulting in an uncertain pedigree for many broodstocks. It is important for future decisions concerning hatchery production of chinook salmon to be based on the best possible knowledge of this period of development.

DATA SOURCES AND METHODS

Requirements for the reporting of operational activities varies among the types of hatcheries operating in the State of Alaska (state, federal, private non-profit, etc.), and in some cases, reporting is not mandatory. This precludes a single source of information covering all hatchery activities in southeastern Alaska. Sources used to compile these histories include, but are not limited to, the annual annexes to the Chinook Salmon Plan for Southeast Alaska (1983-1999), ADF&G records of transfers and releases of chinook salmon, annual reports from the Fisheries Research and Enhancement Division of ADF&G, Schedule A of the annual report that private non-profit hatcheries make to the state, and broodstock records from individual hatcheries.

This an account of the history of each chinook salmon broodstock reared in a hatchery in southeastern Alaska between 1972 and 1998. The numbers reported are believed to be the most accurate information. When the numbers from different sources do not agree a decision was required concerning which number to report. In many cases the difference was caused by rounding, reporting a prediction, or error in abundance estimation. When numbers could not be reconciled easily, the number that is considered the most reasonable is reported and alternate numbers and sources are indicated in a footnote.

The information in the tables is organized in consecutive order beginning with the first year of operation at the top proceeding to the last year of record at the bottom. Within a brood year record, onsite information is listed first, followed by egg takes and smolt releases that occurred offsite. From left to right, the source of the broodstock is followed by data on the egg take, then the smolt release. When eggs from multiple sources are used in a hatchery during the same year, an effort has been made to organize the data so that releases can be traced to their ultimate source by listing the releases associated with a source before listing the next source and its associated releases.

OBSERVATIONS AND CONCLUSIONS

1. The number of hatchery production facilities for chinook salmon in southeastern Alaska dramatically increased from a single facility in 1972 to 14 facilities in 1985. Between 1985 and 1990 three additional facilities began chinook salmon production, but no new hatcheries were added after 1990. In 1998, four facilities were no longer involved with chinook salmon production and Port Armstrong Hatchery had suspended its chinook salmon program pending the development of the King Salmon River broodstock.

2. With the exception of early attempts to use extra-regional broodstocks at Crystal Lake Hatchery, all gametes used at hatcheries in Southeast Alaska have come from within the region. Attempts were made to develop broodstocks from eight sources: Andrew Creek, Chickamin River, Farragut River, Harding River, King Salmon River, Situk River, Tahini River, and Unuk River. In 1998 most of the chinook salmon production came from three broodstocks (Andrew Creek, Chickamin River, and Unuk River), two broodstocks were produced at reduced levels (King Salmon River and Tahini River), and production of three broodstocks had ceased (Farragut River, Harding River and Situk River).
3. While this report is the most complete description of hatchery production of chinook salmon in southeastern Alaska currently available, considerable data are missing. For example, the most commonly missing information is the number of males used to fertilize the eggs during the egg takes. This information is valuable for assessing the potential effects of hatchery practices as well as calculating population parameters such as effective broodstock size. Clearly, a continuing effort should be made to locate and include these data.

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Table 1. Hatcheries that produced chinook salmon in southeastern Alaska, 1972–1998.

Hatchery		Operating Institution	Production Dates
Beaver Falls	BFH	Southern Southeast Region Aquaculture Association	1982 – 1990
Bell Island	BeIH	American Aquaculture Corporation	1990 – 1992
Burnett Inlet	BuIH	Alaska Aquaculture Corporation	1987 – 1991
Burro Creek	BCH	Burro Creek Farms	1990 – 1998
Crystal Lake	CLH	State of Alaska	1972 – 1998
Deer Mountain	DMH	State of Alaska Ketchikan Tribal Hatchery Corporation	1977 – 1994 1994 – 1998
Gastineau	GH	Douglas Island Pink and Chum, Incorporated	1984 – 1998
Hidden Falls	HFH	State of Alaska Northern Southeast Region Aquaculture Association	1981 – 1988 1988 – 1998
Little Port Walter	LPW	National Marine Fisheries Service – Auke Bay Laboratory	1976 – 1998
Medvejie Creek	MCH	Northern Southeast Region Aquaculture Association	1982 – 1998
Neets Bay	NBH	Southern Southeast Region Aquaculture Association	1981 – 1998
Port Armstrong	PAH	Armstrong-Keta, Incorporated	1985 – 1991
Pullen Creek	PCH	Skagway School District	1985 – 1998
Sheldon Jackson	SJH	Sheldon Jackson College	1984 – 1998
Snettisham	SH	State of Alaska	1977 – 1993
Tamgas Creek	TCH	Metlakatla Indian Community	1982 – 1998
Whitman Lake	WLH	Southern Southeast Region Aquaculture Association	1977 – 1998

Table 2. Beaver Falls Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1982-1990.

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
82	Unuk River (DMH)			74.8 ²		62.3		George Inlet ³
83	Unuk River (DMH)			182.8		109.3		Brennan Lake
84								
85								
86								
87								
88								
89	Chickamin River ⁴					27.0		Carroll Inlet
90	Unuk River (NBH)			39.0		30.0		Neets Bay Hatchery

Operation Suspended - no record of recovery of returning adults

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: DMH – Deer Mountain Hatchery and NBH – Neets Bay Hatchery.
- 2 Transferred as fry from Deer Mountain Hatchery.
- 3 ADF&G (1985) shows 60.2 released into George Inlet. Reported numbers are from hatchery records.
- 4 The source is listed as "Herr", possibly from Herring Bay. If so, these are from Whitman Lake Hatchery.

Table 3. Bell Island Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1990-1992.

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
90	Unuk River (DMH) ¹						5.3	Bell Island Hatchery
91	Unuk River (DMH)						5.7	Bell Island Hatchery
92	Unuk River (DMH)						5.3	Bell Island Hatchery

Operation Suspended - no record of recovery of returning adults

- 1 These originated at Deer Mountain Hatchery (DMH).

Table 4. Burnett Inlet Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1987-1991.

4a. Progenitor stock: Andrew Creek

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
87	Andrew Creek (CLH) ¹			283.6			170.0	Burnett Inlet
88	Andrew Creek (CLH)	60	25	371.2			193.0	Burnett Inlet
89	Andrew Creek (Ohmer Creek) ²	48	54	218.6			70.0	Burnett Inlet
90	Andrew Creek (CLH)	51	34	250.0			25.2	Burnett Inlet

Operation Suspended - no record of recovery of returning adults

- 1 These originated at Crystal Lake Hatchery (CLH).
- 2 Three families destroyed because of positive bacterial kidney disease (BKD) test.

4b. Progenitor stock: Harding River

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
89	Harding River (wild)	18	18	69.6			30.2	Burnett Inlet ¹
90	Harding River (wild)	12	12	34.8			28.9	Burnett Inlet
91	Harding River (wild)	8	8	57.6	57.6			Crystal Lake Hatchery

Operation Suspended - no record of recovery of returning adults

- 1 The stocking records for Burnett Inlet show that these were released at Burro Creek, but the stocking records for Burro Creek do not reflect this transfer. The 1990 Annex infers that they were released at Burnett Inlet.

Table 5. Burro Creek Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1990-1998.

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
90	Tahini River (HFH)			10.0 ²			7.1	Burro Creek
91	Tahini River (HFH)			23.9			8.6	Burro Creek
92	Tahini River (HFH)			18.0 ³			8.7	Burro Creek
93	Tahini River (HFH)		1	5.5			1.9	Burro Creek
94	Tahini River returns	10	20	54.3 ⁴			34.9	Burro Creek
95	Tahini River returns		2	13.0			12.8	Burro Creek ⁵
	Tahini River (PCH)		2	8.0				
96	Tahini River returns	10		50.0			16.0	Burro Creek
97	Tahini River returns	10		50.0		25.0	16.4	Burro Creek
98	Tahini River returns		23	100.0			85.0	Burro Creek

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: HFH – Hidden Falls Hatchery and PCH – Pullen Creek Hatchery.
- 2 These were transferred as fry.
- 3 These numbers come from the Hidden Falls Hatchery records. ADF&G stocking records show 24.5 eggs transferred from Hidden Falls Hatchery.
- 4 Two families culled because of positive bacterial kidney disease (BKD) tests.
- 5 This is a combined release from both sources.

Table 6. Crystal Lake Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1972-1998.

6a. Progenitor stock: Andrew Creek

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
76	Andrew Creek (wild)			203.0		166.0		Crystal Creek
77	Andrew Creek (wild)			212.0		56.1		Crystal Creek
					25.0			Snettisham Hatchery
78	Andrew Creek (wild)			34.9		14.6		Crystal Creek ¹
79	Andrew Creek (wild)			149.7		13.7	45.3	Crystal Creek ²
80	Andrew Creek (wild)			234.6			118.2	Crystal Creek
	Andrew Creek returns			233.7			75.5	Crystal Creek
	Mixed origin			236.6			80.2	Crystal Creek
81	Andrew Creek returns			1207.0			137.9	Crystal Creek
					302.6			Snettisham Hatchery
	Mixed origin			207.0		59.1		Crystal Creek
82	Andrew Creek (wild)			772.2			416.0	Crystal Creek
					182.8			Snettisham Hatchery
	Andrew Creek returns			451.1			150.0	Crystal Creek
							100.0	Ohmer Creek
83	Andrew Creek returns	17		89.9			135.0	Crystal Creek
	Andrew Creek (wild)			137.6				
84	Andrew Creek returns	496		2650.0			351.0	Crystal Creek
							165.0	Earl West Cove
							201.0	Ohmer Creek
					1000.0			Snettisham Hatchery
					163.5			Medvejie Hatchery ³
					50.0			Hidden Falls Hatchery
					72.5			Sheldon Jackson Hatchery
85	Andrew Creek returns	1361		7767.6			432.5	Crystal Creek
							251.9	Earl West Cove
					5050.0			Snettisham Hatchery
					291.6			Medvejie Hatchery
					279.0			Hidden Falls Hatchery
					52.7			Sheldon Jackson Hatchery ⁴
86	Andrew Creek returns	664		3531.0			550.0	Crystal Creek
							482.7	Earl West Cove
					1160.0			Snettisham Hatchery
					223.9			Medvejie Hatchery ⁵
					146.2			Hidden Falls Hatchery
					48.7			Sheldon Jackson Hatchery
87	Andrew Creek returns	1269		6790.0			479.4	Crystal Creek

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
							228.6	Ohmer Creek
							751.9	Earl West Cove ⁶
					2760.0			Snettisham Hatchery
					283.6			Burnett Inlet Hatchery
					1041.5			Medvejie Hatchery
					176.3			Hidden Falls Hatchery
					115.1			Sheldon Jackson Hatchery
88	Andrew Creek returns			7018.0			542.3	Crystal Creek
							342.5	Ohmer Creek
							486.5	Earl West Cove
					3692.2			Snettisham Hatchery
					371.2			Burnett Inlet Hatchery
					772.0			Medvejie Hatchery ⁷
					138.3			Hidden Falls Hatchery
					125.3			Sheldon Jackson Hatchery
89	Andrew Creek returns	286		1656.0			434.1	Crystal Creek
							399.6	Earl West Cove
							11.0	Gastineau Hatchery
							9.0	Sheldon Jackson Hatchery
90	Andrew Creek returns	898		5030.3			520.4	Crystal Creek
							368.1	Earl West Cove
					1903.0			Snettisham Hatchery
					250.0			Burnett Inlet Hatchery ⁸
					35.0			Gastineau Hatchery
					1121.6			Hidden Falls Hatchery
91	Andrew Creek returns	745		3922.5			463.0	Crystal Creek
							436.3	Earl West Cove
					2138.7			Snettisham Hatchery ⁹
					83.1			Gastineau Hatchery
92	Andrew Creek returns	382		2023.9			443.4	Crystal Creek
							320.4	Earl West Cove
					687.7			Snettisham Hatchery
					128.9			Gastineau Hatchery
93	Andrew Creek returns	406		2030.0			451.9	Crystal Creek
							203.6	Earl West Cove
					850.0			Snettisham Hatchery
94	Andrew Creek returns	380		1940.0			501.3	Crystal Creek
							242.6	Earl West Cove
					378.4			Medvejie Hatchery ¹⁰
95	Andrew Creek returns	316		1711.0			539.6	Crystal Creek
							426.7	Earl West Cove
							338.8	Neets Bay Hatchery ¹¹

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
96	Andrew Creek returns	283		1407.7			610.1	Crystal Creek
							386.4	Earl West Cove
97	Andrew Creek returns	340		1883.3			670.9	Crystal Creek
							364.4	Earl West Cove
98	Andrew Creek returns	410		2233.3	1883.3		600.0	Crystal Creek
							400.0	Earl West Cove
					381.6		Gastineau Hatchery	

- 1 ADF&G (1985) report shows 16.2 0-yr and 16.6 1-yr smolts released.
- 2 ADF&G (1985) report shows 42.2 1-yr smolts released.
- 3 This number is from Medvejie Hatchery records, the 1985 Annex shows 216.0 eggs transferred.
- 4 This number is from Sheldon Jackson Hatchery records, the 1986 Annex shows 57.0 eggs transferred.
- 5 This number is from Medvejie Hatchery records, the 1987 Annex shows 265.0 eggs transferred.
- 6 This is possibly an undercount.
- 7 This number is from Medvejie Hatchery records, the 1989 Annex shows 827.0 eggs transferred.
- 8 This number is from Burnett Inlet Hatchery records, the 1991 Annex shows 170.0 eggs transferred.
- 9 This number is from the 1992 Annex, the stocking records only report 309.2 eggs transferred.
- 10 This number is from Medvejie Creek Hatchery records, the 1995 Annex shows 513.0 eggs transferred.
- 11 This transfer is listed in the 1996 Annex as being from Earl West Cove.

6b. Progenitor stocks: Chignik River, Carson River, Crooked Creek, Chickamin River, Ship Creek, Nakina River, King Salmon River, Tahini River, Farragut River, Harding River, and Unuk River

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
72	Chignik River (FRH)			5.1		1.1		Crystal Creek
	Carson River (CRNFH)			1510.0 ²			134.5	Crystal Creek
						103.6	1.0	Starrigavan Island
						156.2	151.8	Mendenhall/Dredge Lakes
73								
74	Crooked Creek (FLH)			34.0		21.7		Crystal Creek
	Ship Creek (FLH)			145.5		62.1		Crystal Creek ³
						2.6		Starrigavan Island
75	Chickamin River			42.0 ²		8.5		Crystal Creek
	Nakina River			177.2		4.1		Crystal Creek
76	Carson River (Blind Slough) ⁴			210.0		0.0		⁵
	Carson River (Mendenhall) ⁶			147.0		0.0		⁵
	King Salmon River			10.3		3.1		Crystal Creek
	Crooked Creek (FLH)			339.0	269.4			Starrigavan Island
	Ship Creek (FLH)			120.1 ²	100.3			Fish Creek Hatchery
77	Carson River (Mendenhall)			560.0		0.0		⁵
	Carson River (Blind Slough)			500.0		0.0		⁵
78								
79								
80								
81								
82								
83	Tahini River (wild)			54.1		3.6		Ohmer Creek
						7.3		Gen Gen Lake
	Farragut River (wild)	9		50.1		22.8		Farragut River
	Farragut/Tahini mix						135.0	Crystal Creek
					0.8		Ohmer Creek	
					1.7		Gen Gen Lake	
84	Farragut River (wild)	8		53.4			46.0	Farragut River / Lake
	Tahini River (wild)			53.4			43.0	Tahini River
85	Farragut River (wild)	8		50.1			12.0	Farragut Lake
	Tahini River (wild)			59.7			46.7	Tahini River
						5.4		Pullen Creek Hatchery
86	Harding River (wild)	10		48.0			30.5	Harding River
87								
88								
89	Harding River (wild)			35.0			31.2	Harding River
90								

Brood Year	Source ¹	Egg take		Disposition (in thousands)				
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
91	Harding River (wild)	10		57.7			41.8	Harding River
	Farragut River (wild)	20		109.3			70.0	Farragut River ⁷
92	Harding River (wild)	12		78.0			0.0	Harding River
	Farragut River (wild)	26		152.0			95.8	Farragut Lake
93	Farragut River (wild)	25		148.0			125.1	Farragut Lake
94								
95	Unuk River (LPW)			1040.0			412.2	Neets Bay Hatchery
96	Chickamin River (WLH)			511.0			404.3	Neets Bay Hatchery
97	Chickamin River (WLH)			507.4			347.3	Neets Bay Hatchery

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: FRH – Fort Richardson Hatchery, CRNFH – Carson River National Fish Hatchery, FLH – Fire Lake Hatchery, LPW – Little Port Walter, and WLH – Whitman Lake Hatchery.
- 2 These were eyed eggs.
- 3 ADF&G (1985) report shows 40.4 age-0 released.
- 4 These were taken from adults returning to Blind Slough at the mouth of Crystal Creek.
- 5 These eggs and all returning adults from Carson River were destroyed due to the presence of infectious hematopoietic necrosis virus (IHNV).
- 6 These were taken from the returns to Mendenhall and Dredge lakes.
- 7 Harding River supplementation halted due to a natural disaster rendering the Harding River impassible to chinook salmon.

Table 7. Deer Mountain Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1977-1998.

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
77	Cripple Creek (wild) ¹	18	15	105.0			18.1	Ketchikan Creek ²
78	Cripple Creek (wild)						72.1	Ketchikan Creek
79	Cripple Creek (wild)						65.7	Ketchikan Creek
80	Cripple Creek (wild)						118.8	Ketchikan Creek
81	Cripple Creek			106.6			127.9	Ketchikan Creek
	Unuk River (LPW)			143.9			18.7	Thomas Basin ²
82	Cripple Creek			51.8		62.4		George Inlet ^{3, 4}
	Ketchikan Creek			281.4			20.6	Thomas Basin ^{3, 5}
83	Unuk River returns	373		2082.0		304.9		Thomas Basin
						109.3		Brennan Lake ⁶
					632.5			Tamgas Creek Hatchery
					633.7			Neets Bay Hatchery
84	Unuk River returns	255		1227.0			46.4	Ketchikan Creek
						227.0		Thomas Basin
						225.7		Brennan Lake ⁷
						27.9		Bold Island Lake
					319.0			Tamgas Creek Hatchery ⁸
85	Unuk River returns	192		917.0			42.0	Ketchikan Creek
						284.0		Thomas Basin
						71.0		Crab Bay
						68.0		Thorne Bay
86	Unuk River returns	201		1026.0			70.0	Ketchikan Creek
							51.0	Big Salt Lake
						83.0		Thorne Bay
						48.0		Crab Bay
						171.0		Murphy's Landing ³
87	Unuk River returns			158.0			166.8	Ketchikan Creek
	Unuk River (LPW)			164.0			24.3	Thorne Bay ³
88	Unuk River (LPW)			398.8			85.6	Ketchikan Creek
							30.6	Thomas Basin
							35.5	Thorne Bay
89	Unuk River returns	83		306.0			79.1	Ketchikan Creek
							25.0	Big Salt Lake
							19.2	Thomas Basin
							24.4	Thorne Bay
							5.9	Bell Island Hatchery
90	Unuk River returns	80		396.4			127.8	Ketchikan Creek
							5.3	Bell Island Hatchery
					140.4			Snettisham Hatchery

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
91	Unuk River returns	70		305.0			71.3	Ketchikan Creek
							5.7	Bell Island Hatchery
92	Unuk River returns	57		327.0			85.1	Ketchikan Creek
							5.3	Bell Island Hatchery
93	Unuk River returns	46		220.5			98.7	Ketchikan Creek
94	Unuk River returns	20		100.0			19.4	Ketchikan Creek
	Unuk River (LPW)			109.5			63.4	Ketchikan Creek
95	Unuk River returns	38		225.0			97.9	Ketchikan Creek
96	Unuk River returns	35		201.3			101.8	Ketchikan Creek
97	Unuk River returns	21		137.7			51.4	Ketchikan Creek
98	Unuk River returns	35		160.0			90.0	Ketchikan Creek

- 1 Cripple Creek is the site on the Unuk River where these adults were captured.
- 2 Ketchikan Creek releases are released in freshwater. Thomas Basin releases are released from net pens in the saltwater at the mouth of Ketchikan Creek.
- 3 This was a combined release from both sources.
- 4 ADF&G (1985) shows that 74.8 fry were transferred and raised to release size at Beaver Falls, of which, 60.2 were released.
- 5 The remaining fry destroyed due to presence of bacterial kidney disease (BKD).
- 6 ADF&G (1985) shows that 182.8 green eggs were transferred and raised to release size at Beaver Falls.
- 7 Fry were transferred and raised to release size at Beaver Falls.
- 8 This number is from the Tamgas Creek Hatchery records, 1985 Annex shows a transfer of 493.0 eggs.

Table 8. Gastineau Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1984-1998.

8a. Progenitor stock: Andrew Creek

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
84	Andrew Creek (CLH) ¹						30.3	Sheep Creek ²
85	Andrew Creek (CLH) ¹						31.1	Sheep Creek
86	Andrew Creek (CLH) ¹						31.6	Sheep Creek
87	Andrew Creek (CLH) ¹						11.0	Gastineau Hatchery
88	Andrew Creek (CLH) ¹						120.0	Sheep Creek
							101.5	Gastineau Hatchery
89	Andrew Creek returns ⁴ Andrew Creek (CLH)	8		39.9			43.6	Gastineau Hatchery ⁵
				11.0				233.7
90	Andrew Creek returns ⁴ Andrew Creek (CLH)	28		165.1			191.8	Gastineau Hatchery ⁵
				43.2 ⁶				
91	Andrew Creek returns Andrew Creek (CLH)	30		171.8			207.5	Gastineau Hatchery ⁵
				83.1			3.4	Twin Lakes ⁷
92	Andrew Creek returns Andrew Creek (HFH) ⁸ Andrew Creek (CLH)	21		133.9			241.3	Gastineau Hatchery ⁵
				71.9 ⁹			6.2	Twin Lakes ⁷
				128.9				
93	Andrew Creek returns ¹⁰	46		255.6			196.5	Fish Creek (Juneau)
							193.5	Auke Creek
							8.7	Twin Lakes ¹¹
94	Andrew Creek returns	220		1075.2	464.4			Medvejie Creek Hatchery ¹²
95	Andrew Creek returns	226		1255.0	611.9			
							892.0	¹³
96	Andrew Creek returns	130		628.4			97.9	Gastineau Hatchery
							174.2	Auke Creek
							179.1	Fish Creek (Juneau)
							14.2	Twin Lakes ¹⁴
					131.0	¹³		
97	Andrew Creek returns	135		679.9			221.4	Gastineau Hatchery
							173.2	Auke Creek
							183.7	Fish Creek
							13.2	Twin Lakes
98	Andrew Creek returns Andrew Creek (CLH)	64		316.2			208.6	Gastineau Hatchery
				381.6			56.9	Auke Creek ¹⁵
						180.0	Fish Creek ¹⁵	

- 1 Eggs from Crystal Lake Hatchery (CLH), reared at Snettisham Hatchery then penned and released at Sheep Creek Hatchery.
- 2 Sheep Creek Hatchery is the original production facility for Douglas Island Pink and Chum, Inc., which owns and operates Gastineau Hatchery.
- 3 ADF&G stocking records show two releases: 122.2 as age-1 in 1990 and 100.5 as age-2 in 1991.
- 4 These are returns to Gastineau Hatchery from releases at Sheep Creek.
- 5 Release is from combined sources.
- 6 Crystal Lake Hatchery records show a transfer of 35.0 eyed-eggs.
- 7 No indication of from which donor stock these originated.
- 8 Recorded in Hidden Falls Hatchery (HFH) records, but not found in the 1993 annex or the stocking records.
- 9 These were transferred as fry. Hidden Falls Hatchery records show a transfer of 67.4 fry.
- 10 The source of the broodstock is unclear. The 1994 Annex shows no Andrew Creek egg take at Gastineau Hatchery in 1993 and the stocking records only show the release of Andrew Creek fish but not their origin. Hatchery records show that 46 females were spawned for a total of 255.6 eggs, but this does not explain the total number of smolts released. The extra releases could possibly be from Hidden Falls Hatchery (there is an FTP for a transfer from Hidden Falls Hatchery to Gastineau Hatchery in 1993) or from Snettisham Hatchery, which received 850.0 Andrew Creek eggs and released only 283.0 smolts.
- 11 ADF&G stocking records show two releases: 4.7 as age-1 in 1995 and 4.7 as age-2 in 1996.
- 12 These numbers are from Gastineau Hatchery records; Medvejie Creek Hatchery records show a transfer of 390.4 eggs from 27 females and 27 males.
- 13 These eggs were culled as not necessary; not released.
- 14 ADF&G stocking records show two releases: 4.0 as age-1 in 1998 and 10.2 as age-2 in 1999.
- 15 These releases were from the Crystal Lake Hatchery transfer.

8b. Progenitor stocks: King Salmon River, Tahini River and Big Boulder Creek¹

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
91	Big Boulder Creek (wild)	11		48.7			44.8	Big Boulder Creek
	Tahini River (wild)	10		73.4			60.6	Tahini River
92	Big Boulder Creek (wild)			26.7			23.4	Big Boulder Creek
93	Big Boulder Creek (wild)			30.5			28.1	Big Boulder Creek
	King Salmon River (LPW) ²			208.5 ³			158.7	Gastineau Hatchery
94	King Salmon River (LPW)			429.0			28.5	Sheep Creek
							64.5	Gastineau Hatchery
							35.4	Sheep Creek
							109.1	Fish Creek (Juneau)
95	King Salmon River (LPW)			284.7			106.3	Auke Creek
							171.9	Gastineau Hatchery
							44.7	Sheep Creek
							4.0	Fish Creek (Juneau)
							4.0	Auke Creek
96	King Salmon River (LPW)	26		135.9 ³			12.1	Twin Lakes ⁴
							114.3	Gastineau Hatchery

King Salmon River line discontinued - no more eggs taken

- 1 Broodstocks and their respective offspring were not mixed.
- 2 These originated at Little Port Walter Hatchery (LPW).
- 3 The number of eggs reported as transferred by Little Port Walter Hatchery is slightly different.
- 4 ADF&G stocking records show two releases: 1.5 as age-1 in 1997 and 10.6 as age-2 in 1998.

Table 9. Hidden Falls Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1981-1998.

9a. Progenitor stock: Andrew Creek

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
81	Andrew Creek (wild)						80.5	Kasnyku Bay
82	Andrew Creek (wild)						70.0	Kasnyku Bay
83	Andrew Creek (wild) ²			86.3			50.2	Kasnyku Bay
84	Andrew Creek (CLH)			50.0			45.6	Kasnyku Bay
85	Andrew Creek (CLH)			279.0			46.1	Kasnyku Bay
							130.0	Eliza Lake
							51.0	Indian River
86	Andrew Creek returns	1		5.2			5.0	Kasnyku Bay
	Andrew Creek (CLH)			146.2			96.5	Kasnyku Bay
87	Andrew Creek returns			224.6			188.3	Kasnyku Bay ³
	Andrew Creek (CLH)			176.3			101.4	Kasnyku Bay
88	Andrew Creek returns	51	51	274.0			213.7	Kasnyku Bay
	Andrew Creek (CLH)	22	17	138.3			97.1	Kasnyku Bay
89	Andrew Creek returns	63	63	311.2 ⁴			169.4	Kasnyku Bay
90	Andrew Creek returns	40	150	206.6 ⁵			118.0	Kasnyku Bay
	Andrew Creek (CLH)	223	223	1122 ⁶			247.0	Kasnyku Bay
	Andrew Creek (MCH)	260	312	1489.0 ⁷			1189.0	Kasnyku Bay
91	Andrew Creek returns	140	151	623.1 ⁸			435.1	Kasnyku Bay
	Andrew Creek (MCH)	292	292	1785			1319.4	Kasnyku Bay
92	Andrew Creek (MCH)	49	49	272.7		245.7		Kasnyku Bay ⁹
	Andrew Creek returns	294	294	1540		25.2	1053.0	Kasnyku Bay ⁹
					67.4			Gastineau Hatchery
						122.1		Indian River
93	Andrew Creek returns	326	326	1681.2 ¹⁰			923.5	Kasnyku Bay
94	Andrew Creek returns	309	309	1608.7			888.5	Kasnyku Bay
					177.0			Medvejie Hatchery ¹¹
95	Andrew Creek returns	651	667	1471 ¹²			944.5	Kasnyku Bay
				1384.5 ¹²	1384.5			Medvejie Hatchery
96	Andrew Creek returns	690	746	1411 ¹³			1071.9	Kasnyku Bay
				1170.0 ¹³	1170.0			Medvejie Hatchery
97	Andrew Creek returns	360		1999.8			1104.4	Kasnyku Bay
98	Andrew Creek returns	360		1980.0	1400.0		1100.0	Kasnyku Bay

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: CLH – Crystal Lake Hatchery and MCH – Medvejie Creek Hatchery.
- 2 These may have originated at Crystal Lake Hatchery.
- 3 These numbers are from the Hidden Falls Hatchery records; the stocking records show releases of 184.5 and 99.6, respectively.

- 4 A total of 363.0 eggs were taken, 311.2 were used; 9 families were discarded due to bacterial kidney disease (BKD).
- 5 Hidden Falls Hatchery records show these fish were spawned 1:1; the extra 110 males were used to fertilize the Crystal Lake Hatchery eggs.
- 6 A total of 1208.3 eggs were taken, 1121.6 were used; 16 families were discarded due to BKD.
- 7 Medvejie Creek Hatchery collected 1561.0 eggs, 1489.0 eyed-eggs were transferred.
- 8 A total of 778.8 eggs were taken, 623.1 were used; 28 families were discarded due to BKD.
- 9 Age 0 releases were surplus fry released into saltwater.
- 10 A total of 1857.1 eggs were taken, 1681.2 were used; 30 families were discarded due to BKD.
- 11 This transfer is recorded in the Medvejie Creek Hatchery records.
- 12 A combined total of 3202.9 eggs were taken, 2855.8 were used; 71 families were discarded due to BKD.
- 13 A combined total of 3795.0 eggs were taken, 2581.2 were used; 221 families were discarded due to BKD.

9b. Progenitor stocks: Tahini River and Farragut River

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
83	Tahini River (wild)			53.2			46.8	Kasnyku Bay
84	Tahini River (wild)			61.0			46.5	Kasnyku Bay
85	Tahini River (wild)			62.9			51.8	Kasnyku Bay
86	Tahini River (wild)	10		66.6			57.5	Kasnyku Bay
87	Tahini River returns	1		4.0			53.8	Kasnyku Bay
	Tahini River (wild)	9		61.4	5.0			Pullen Creek Hatchery ¹
88	Tahini River returns	9	9	55.4			38.7	Lutak Inlet
					7.0			Pullen Creek Hatchery
89	Tahini River returns	11	9	69.4			14.8	Kasnyku Bay ²
	Farragut River (wild)	12	18	67.7		29.4		Farragut River
90	Tahini River returns	11	11	55.9 ³			30.2	Pullen Creek Hatchery
						10.0		Burro Creek Hatchery
91	Tahini River returns	15	17	93.0 ⁴			56.4	Pullen Creek Hatchery
					23.9			Burro Creek Hatchery
92	Tahini River returns	12	12	73.8 ⁵	7.0		38.8	Pullen Creek Hatchery
					18.0			Burro Creek Hatchery
93	Tahini River returns	1	1	7.2	5.5			Burro Creek Hatchery

Tahini River line discontinued

- 1 The fertilized eggs from a single mated pair of wild adults were sent to Pullen Creek Hatchery.
- 2 Originally intended for Haines / Skagway, but accidentally mixed with Andrew Creek stock.
- 3 A total of 63.8 eggs were taken, 55.9 were used. One family lost to bacterial kidney disease (BKD).
- 4 A total of 99.6 eggs were taken, 93.0 were used. One family lost to BKD.
- 5 A total of 81.6 eggs were taken, 73.8 were used. One family lost to BKD.

Table 10. Little Port Walter Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1976-1998.

10a. Progenitor stock: Chickamin River

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
76	Chickamin River (wild)	7	9	27.8		5.0	13.4	Little Port Walter
77								
78								
79								
80								
81	Chickamin River returns	68	50 ¹				35.3	Little Port Walter
		29	27	177.0	169.0			Whitman Lake Hatchery ²
82	Chickamin River returns	21	14				43.2	Little Port Walter
83								
84								
85								
86	Chickamin River returns	114		684.0		43.6	145.2	Little Port Walter
					384.0			Tamgas Creek Hatchery ³
87	Chickamin River returns	184		1261.0			82.3	Little Port Walter
					1031.0			Whitman Lake Hatchery
88	Chickamin River returns	17		111.0			45.3	Little Port Walter
89								
90	Chickamin River returns	6		33.0			11.4	Little Port Walter
91	Chickamin River returns	132		792.0			252.1	Little Port Walter
92	Chickamin River returns	136		1034.0			75.6	Little Port Walter
					783.0			Neets Bay Hatchery
93	Chickamin River returns	139		764.5			86.0	Little Port Walter
					203.4			Whitman Lake Hatchery
94	Chickamin River returns	76		330.6			48.0	Little Port Walter
					200.7			Whitman Lake Hatchery
95	Chickamin River returns	13		71.5			46.5	Little Port Walter
96	Chickamin River returns	43		236.5			55.2	Little Port Walter
	Chickamin River (wild)	5	14	27.5			16.0	Little Port Walter
97	Chickamin River returns	64		350.0			48.9	Little Port Walter
98	Chickamin River returns	42		252.0			65.9	Little Port Walter

¹ These numbers may include the adults used for Whitman Lake Hatchery.

² These numbers are reported in Whitman Lake Hatchery records.

³ The 1986-brood gametes from Little Port Walter Hatchery Chickamin River-stock mixed with Little Port Walter Hatchery Unuk River-stock gametes at Tamgas Creek Hatchery.

10b. Progenitor stock: Unuk River

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
76	Unuk River (wild)	10	25	38.2			22.4	Little Port Walter
77	Unuk River (wild)	35	11	260.0		55.4	46.4	Little Port Walter
78	Unuk River (wild)	60	60	425.7 ¹		28.7	155.4	Little Port Walter
79	Unuk River (wild)	8	8	33.9			30.6	Little Port Walter
80	Unuk River (wild)	5	5				20.3	Little Port Walter
81	Unuk River (wild)	10	10	38.1 ¹			93.5	Little Port Walter
	Unuk River returns	96	70		183.0			Whitman Lake Hatchery ^{2, 3}
					143.9			Deer Mountain Hatchery ^{2, 4}
82	Unuk River returns	59	60				130.2	Little Port Walter
					125.0			Whitman Lake Hatchery ⁵
					60.0			Tamgas Creek Hatchery
83	Unuk River returns	97	97	609.0			200.0	Little Port Walter
					141.0			Osprey Lake
					100.7			Neets Bay Hatchery
					73.0			Tamgas Creek Hatchery
84	Unuk River returns	535	535	3326.7			235.0	Little Port Walter
					96.0			Osprey Lake
					1410.0			Neets Bay Hatchery
					1402.0			Tamgas Creek Hatchery ⁶
85	Unuk River returns	173	173	950.0		93.1	214.7	Little Port Walter
					396.0			Tamgas Creek Hatchery ⁷
86	Unuk River returns	404	404	2401.0		46.3	141.1	Little Port Walter
					88.0			Port Armstrong Hatchery
					2013.0			Tamgas Creek Hatchery ^{8, 9}
87	Unuk River returns	974	974	5414.0			58.4	Little Port Walter
					4850.0			Tamgas Creek Hatchery ¹⁰
					130.0			Port Armstrong Hatchery
					164.0			Deer Mountain Hatchery
88	Unuk River returns	163	163	843.6			36.0	Little Port Walter
					164.8			Port Armstrong Hatchery
					398.8			Deer Mountain Hatchery
					15.1			Medveje Creek Hatchery ¹¹
89	Unuk River returns	256	256	1408.0			101.3	Little Port Walter
					154.0	55.0		Port Armstrong Hatchery
					412.5			Medveje Creek Hatchery ¹²
90	Unuk River returns	219	219	1023.0			138.6	Little Port Walter
					290.0			Neets Bay Hatchery ¹³
					165.0			Port Armstrong Hatchery ¹⁴
91	Unuk River returns	24	24	146.0			48.7	Little Port Walter
		226	226	1226.0	1226.0			Snettisham Hatchery

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
92	Unuk River returns	55	55	275.0			47.2	Little Port Walter
93	Unuk River returns	36	36	200.0			43.8	Little Port Walter
94	Unuk River returns	129	129	304.0			48.4	Little Port Walter
					109.5			Deer Mountain Hatchery
95	Unuk River returns	282	282	1551.0	200.0		104.5	Little Port Walter
					1100.0			Crystal Lake Hatchery ¹⁵
96	Unuk River returns	36		198.0	15.0		27.4	Little Port Walter
97	Unuk River returns	64		350.0			52.8	Little Port Walter
98	Unuk River returns	27		148.5			33.4	Little Port Walter
	Unuk River (wild)	9	9	49.5			32.0	Little Port Walter

- 1 The estimated number of parent fish from wild egg take based on known numbers of eggs collected.
- 2 Transported eggs were from the returning adults according to Little Port Walter records.
- 3 Whitman Lake Hatchery reported receiving 189.5 eggs from 31 females and 32 males.
- 4 If Note 3 is correct, Deer Mountain Hatchery would have received gametes from 64 females and 39 males.
- 5 This transfer is not recorded in the stocking records or in Whitman Lake Hatchery records.
- 6 Tamgas Creek Hatchery records report a transfer of 1100.0 eggs from 200 females and 100 males.
- 7 Tamgas Creek Hatchery records report a transfer of 792.0 eggs from 144 females and 72 males.
- 8 Tamgas Creek Hatchery records report a transfer of 1831.5 eggs from 333 females and 167 males.
- 9 1986-brood gametes from Little Port Walter Hatchery-Unuk stock mixed with Little Port Walter Hatchery Chickamin River-stock gametes at Tamgas Creek Hatchery.
- 10 Tamgas Creek Hatchery records report a transfer of 4884.0 eggs from 888 females and 444 males.
- 11 This transfer is recorded in the Medvejie Creek Hatchery records; 15.1 eggs from 2 females and 1 male.
- 12 Medvejie Creek Hatchery records report a transfer of 475.8 eggs, all of which were destroyed prior to release.
- 13 Neets Bay Hatchery records report a transfer of 341.0 eggs.
- 14 Port Armstrong Hatchery records and the 1991 Annex do not record this transfer.
- 15 Crystal Lake Hatchery reports receiving 1040.0 eggs; these ended up at Neets Bay Hatchery.

10c. Progenitor stock: King Salmon River

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
88	King Salmon River (wild)	19		119.0			88.7	Little Port Walter
89	King Salmon River (wild)			95.0			83.7	Little Port Walter
90	King Salmon River (wild)	9		64.0			24.8	Little Port Walter
	King Salmon River (SH)	17		110.0			75.0	Little Port Walter ¹
91	King Salmon River (wild)	10		60.0			0.0	
	King Salmon River (SH)	3		12.8			4.1	Little Port Walter
92	King Salmon River (wild)	7		40.6			27.6	Little Port Walter
93	King Salmon River returns	115		632.5			76.1	Little Port Walter
					212.5			Gastineau Hatchery
94	King Salmon River returns	129		570.1			42.7	Little Port Walter
					429.0			Gastineau Hatchery
95	King Salmon River returns	98		539.0	53.0		43.0	Little Port Walter
					284.7			Gastineau Hatchery
96	King Salmon River returns	26		143.0	143.0			Gastineau Hatchery
97	King Salmon River returns	7		35.0			0.0	²
98	King Salmon River returns	44		220.0			0.0	²

King Salmon River line discontinued - No more eggs taken

- 1 Snettisham Hatchery (SH) reports sending 93.0 eggs.
- 2 Eggs discarded as unnecessary.

Table 11. Medvejie Creek Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1982-1998.

11a. Progenitor stock: Andrew Creek

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
82	Andrew Creek (wild)	8	8	46.5			26.6	Bear Cove
83	Andrew Creek (wild)	8	7	36.5			21.9	Bear Cove
84	Andrew Creek (CLH)	33	33	163.5			108.0	Bear Cove
85	Andrew Creek (CLH)	56	33	291.6			227.5	Bear Cove
86	Andrew Creek returns	2	7	4.2			3.5	Bear Cove
	Andrew Creek (CLH)	48	43	223.9			171.1	Bear Cove
87	Andrew Creek returns	69	93	303.2			196.4	Bear Cove ²
	Andrew Creek (CLH)	189	155	1041.5			547.4	Bear Cove
88	Andrew Creek returns	114	81	636.3			453.9	Bear Cove
	Andrew Creek (CLH)	139	70	772.0			457.5	Bear Cove
89	Andrew Creek returns	95	102	611.3			495.4	Bear Cove
	Andrew Creek (Ohmer Creek)	15		56.4 ³			34.4	Bear Cove
90	Andrew Creek returns	260	312	1561.0 ⁴	1489.0			Hidden Falls Hatchery
91	Andrew Creek returns	146	453	882.0			762.2	Bear Cove
		294		1784.8 ⁵	1784.8			Hidden Falls Hatchery
92	Andrew Creek returns	328	353	1208.0 ⁶			1083.4	Bear Cove
		49	49	272.7 ⁷	272.7			Hidden Falls Hatchery
93	Andrew Creek returns	276	278	1308.9 ⁸			1129.7	Bear Cove
94	Andrew Creek returns	135	130	585.5			1004.9	Bear Cove
	Andrew Creek (CLH)			378.4				
	Andrew Creek (HFH)			177.0				
	Andrew Creek (GH)	94	94	390.4				
95	Andrew Creek (HFH)			1384.5			1053.0	Bear Cove
96	Andrew Creek returns	76	76	275.6 ⁹			167.9	Bear Cove
	Andrew Creek (HFH)			1170.0			951.6	Bear Cove
97	Andrew Creek returns	386		1957.3			1596.9	Bear Cove
98	Andrew Creek returns	601		3063.0			2100.0	Bear Cove

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: CLH – Crystal Lake Hatchery, HFH – Hidden Falls Hatchery and GH – Gastineau Hatchery.
- 2 Stocking records show 355.0 and 388.6 respectively. The numbers reported come from hatchery records.
- 3 Records show 0 males used; may have used extra males from returns. Ohmer Creek is associated with Crystal Lake Hatchery, but this transfer is not in their records.
- 4 This number of eggs may not be correct; 440 total females used, breakdown is estimated from mean fecundity data and known numbers of eggs; 1489.0 eyed-eggs transferred.
- 5 There is no information on the number of males.
- 6 A total of 1599.0 eggs were taken, 1208.0 eggs used; 80 families destroyed due to bacterial kidney disease (BKD).
- 7 A total of 1584.0 eggs were taken, 1309.0 eggs used; 48 families destroyed due to BKD.

- 8 A total of 622.4 eggs were taken, 585.5 eggs used; 8 families destroyed due to BKD.
 9 A total of 402.8 eggs were taken, 275.6 eggs used; 24 families destroyed due to BKD.

11b. Progenitor stocks: Unuk River and Chickamin River¹

Brood Year	Source ²	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
88	Unuk River (LPW)	2	1	15.1			9.7	Bear Cove ³
89	Unuk River (LPW)	73	72	475.8 ⁴				
	Chickamin River (WLH)			425.0			337.0	Bear Cove
90	Chickamin River (WLH)			1200.0 ⁵			1144.7	Bear Cove
91								
92								
93								
94	Chickamin River returns	50	48	225.9	225.9			Whitman Lake Hatchery

Unuk River and Chickamin River lines discontinued - No more eggs taken

- 1 These broodstock and their respective offspring were not mixed.
 2 The following abbreviations are used to indicate the hatchery from which the broodstock originated: LPW – Little Port Walter Hatchery and WLH – Whitman Lake Hatchery.
 3 This transfer is not in the Little Port Walter Hatchery records.
 4 These fry were destroyed prior to release.
 5 1200.0 may be incorrect; may be 1561.0.

Table 12. Neets Bay Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1981-1998.

12a. Progenitor stock: Unuk River

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
81	Unuk River (WLH)						135.2	Neets Bay ²
82	Unuk River ³						144.1	Neets Bay
83	Unuk River (LPW)			100.7			100.2	Neets Bay
	Unuk River (DMH)			633.7			283.8	Neets Bay
					61.8			Tamgas Hatchery ⁴
84	Unuk River (WLH)	88		448.5		434.1		Neets Bay
	Unuk River (LPW)			1410.0			930.0	Neets Bay
85	Unuk River returns	18		89.0			3034.2	Neets Bay
	Unuk River (WLH)			4000.0				
86	Unuk River returns	857		5100.0			3438.0	Neets Bay
					1100.0			Tamgas Creek Hatchery
87	Unuk River returns	243		1265.9			897.5	Neets Bay
88	Unuk River returns	424		2590.0			1608.0	Neets Bay
89	Unuk River returns	291		1659.4			388.0	Neets Bay
90	Unuk River returns	181		1100.0			728.5	Neets Bay
					39.0			Beaver Falls Hatchery
	Unuk River (LPW)			341.0			255.0	Neets Bay
91	All returns used for cost recovery							
92								
93								
94								
95	Unuk River (LPW / CLH)						412.2	Neets Bay ⁵

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: WLH – Whitman Lake Hatchery, LPW – Little Port Walter Hatchery and DMH – Deer Mountain Hatchery.
- 2 These were reared at Whitman Lake Hatchery and released at Neets Bay.
- 3 The source of these is uncertain. Stocking records show an abbreviation of "Else". Possibly from transfer of 125.0 eggs to Whitman Lake Hatchery recorded in Little Port Walter Hatchery records.
- 4 The 1984 Annex shows this transfer, but it is not found in any other records.
- 5 The eggs were taken at Little Port Walter Hatchery, transferred to Crystal Lake Hatchery to be reared, and then released at Neets Bay Hatchery.

12b. Progenitor stocks: Chickamin River and Andrew Creek ¹

Brood Year	Source ²	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
91	Chickamin River (WLH)			1031.8			377.4	Neets Bay
92	Chickamin River (LPW)			783.0			215.0	Neets Bay
93								
94	Chickamin River (WLH) ³						564.7	Neets Bay
95	Chickamin River (WLH)	139					200.0	Neets Bay ⁴
	Andrew Creek (CLH) ⁵						338.8	Neets Bay
96	Chickamin River (WLH)						138.1	Neets Bay
	Chickamin River (WLH / CLH) ⁶			511.0			404.3	Neets Bay
97	Chickamin River (WLH)						194.1	Neets Bay
							29.8	Long Lake
	Chickamin River (WLH / CLH) ⁶			507.4			347.3	Neets Bay
98	Chickamin River (WLH)						273.6	Long Lake
	Chickamin River (WLH / CLH) ⁶			543.0			400.0	Neets Bay

- 1 These broodstock and their respective offspring were not mixed.
- 2 The following abbreviations are used to indicate the hatchery from which the broodstock originated: WLH – Whitman Lake Hatchery, LPW – Little Port Walter Hatchery and CLH – Crystal Lake Hatchery.
- 3 These could be from Whitman Lake, Little Port Walter or Medvejie Creek hatcheries.
- 4 These eggs came from returns to Carroll Inlet taken by Whitman Lake Hatchery. There is no information on the age at transfer.
- 5 The 1996 Annex lists this stock as Earl West Cove/Andrew Creek, stocking records list it as Crystal Lake.
- 6 Eggs taken at Whitman Lake Hatchery, but reared at Crystal Lake Hatchery.

Table 13. Port Armstrong Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1985-1991.

13a. Progenitor stock: Unuk River

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site ²
85	Unuk River (LPW)						69.9	Port Armstrong ²
86	Unuk River (LPW)			88.0			75.6	Port Armstrong
87	Unuk River (LPW)			130.0			90.0	Port Armstrong
88	Unuk River (LPW)			164.8			144.0	Port Armstrong
89	Unuk River (LPW)	28	29	154.0				
	Unuk River (LPW)			55.0 ³			62.0	Port Armstrong ⁴
90	Unuk River returns	26	26	160.3			89.0	Port Armstrong ⁵
	Unuk River (LPW)			155.0 ⁶			0.0	
91	Unuk River returns	6	6	32.8 ⁷			0.0	
	Unuk River (LPW)			42.1 ^{7, 8}			0.0	
	Unuk River (LPW / SH)						195.3	Port Armstrong ⁹

Production of Unuk River line temporarily halted. ¹⁰

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: LPW – Little Port Walter Hatchery, DMH – Deer Mountain Hatchery and SH – Snettisham Hatchery.
- 2 These are reported in the stocking records.
- 3 These were transferred as fry from Little Port Walter.
- 4 Of the 154.0 eggs 62.5 fry survived. Surviving fry were mixed with the 55.0 additional fry. Of these, only 62.0 were released due to otter predation and tail screen problems.
- 5 This number is from the Port Armstrong Hatchery records; ADF&G stocking records report a release of 110.0 [21.1 with coded wire tags and 89.0 untagged].
- 6 This number is reported by Little Port Walter Hatchery, Port Armstrong Hatchery records show a transfer of 176.0 eggs. All were destroyed due to the presence of BKD.
- 7 All offspring of this egg take died due to pipeline freezing.
- 8 This transfer is listed in the Port Armstrong Hatchery records.
- 9 This transfer is found in the Port Armstrong Hatchery and Snettisham Hatchery records with minor differences in the number released. These smolts from Snettisham Hatchery were very small for their age and survivals were near zero.
- 10 ADF&G determined that Port Armstrong Hatchery should cease using the Unuk River chinook broodstock in 1991 and switch to King Salmon River broodstock. Port Armstrong Hatchery replaced chinook production with coho salmon production to support the troll fleet pending a final determination from ADF&G. In 2001, ADF&G determined that the Unuk River broodstock was indeed appropriate for Port Armstrong, and approved the resumption of chinook salmon production at the hatchery.

13b. Progenitor stock: Andrew Creek

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
90	Andrew Creek (CLH / SH)						306.7	Port Armstrong ^{1, 2}
91	Andrew Creek (CLH / SH)						1079.8	Port Armstrong ²

Andrew Creek line discontinued

- 1 The ADF&G stocking records for Snettisham show a transfer of 217.6 smolts of Crystal Lake Hatchery (CLH) stock from Snettisham Hatchery (SH) and a transfer of 91.2 smolts of Ketchikan Creek (Deer Mountain Hatchery DMH) stock from SH. The stocking records do not record a transfer of eggs or fry from DMH to SH and the same records show a release of 306.7 smolts of CLH/Unuk stock from Port Armstrong Hatchery. Hatchery records show a release of 306.7 smolts of CLH/Andrew Creek smolts transferred from SH.
- 2 These smolts from Snettisham Hatchery were very small for their age and survivals were near zero.

Table 14. Pullen Creek Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1985-1997.

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
85	Tahini River (wild)						6.1	Taiya Inlet
86	Tahini River (wild)						4.7	Taiya Inlet
87	Tahini River (wild)			5.0			1.7	Taiya Inlet ¹
88	Tahini River (HFH)			7.0			6.4	Taiya Inlet
89	Tahini River (wild)	10		72.0			7.2	Taiya Inlet
						30.1		Tahini River
90	Tahini River (wild)	10		70.0			11.9	Taiya Inlet
						36.3		Tahini River
	Tahini River (HFH)						30.2	Taiya Inlet
91	Tahini River returns	3		12.0			12.9	Taiya Inlet
	Tahini River (HFH)						56.4	Taiya Inlet
92	Tahini River (HFH) ²			7.0			1.7	Taiya Inlet
							38.8	Taiya Inlet
93	Tahini River (wild)	1		5.0			5.6	Taiya Inlet
	Tahini River returns	3		15.0				
94	Tahini River returns	10		70.0			1.5	Taiya Inlet
95	Tahini River returns	3		20.0			10.0	Taiya Inlet ³
		2		8.0	8.0			Burro Creek Hatchery
96	Tahini River returns	3		15.0			8.6	Taiya Inlet
97	Tahini River returns	3		15.0			1.9	Taiya Inlet
98	⁴							

- 1 These eggs are from wild broodstock taken by Hidden Falls Hatchery (HFH).
- 2 From this Hidden Falls Hatchery egg take, 7.0 eggs were reared at Pullen Creek Hatchery and 1.7 age-1 smolts were released. At that time, 38.8 age-1 smolts from the same egg take, but reared at Hidden Falls Hatchery, were released.
- 3 These release numbers are an estimate from the 1996 Annex. There is no record of this release in the stocking records or the coded wire tag database.
- 4 No information is available for 1998.

Table 15. Sheldon Jackson Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1984-1998.

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
84	Andrew Creek (CLH)	15	16	72.5 ¹			43.5	Indian River
							10.7	Galankin
85	Andrew Creek (CLH)	10	10	52.7			46.7	Indian River
86	Andrew Creek (CLH)	10	8	48.7			32.3	Indian River
87	Andrew Creek (CLH)	20	19	115.1			96.7	Indian River
88	Andrew Creek (CLH)	22	17	125.3			100.5	Indian River
89	Andrew Creek (CLH)	2	2	9.0			50.5	Indian River
	Andrew Creek returns	11	11	49.1 ²				
90	Andrew Creek returns	34	36	155.0 ²			103.1	Crescent Bay
91	Andrew Creek returns	36	37	129.7 ³			89.4	Indian River
92	Andrew Creek returns	28	28	130.9			103.4	Indian River
93	Andrew Creek returns	28	28	146.7			78.4	Indian River
94	Andrew Creek returns	26	27	121.0			57.8	Sheldon Jackson ⁴
95	Andrew Creek returns	24		127.7			79.0	Sheldon Jackson ⁴
96	Andrew Creek returns	38		150.0			41.3	Crescent Bay
97	Andrew Creek returns	10		52.7			13.0	Crescent Bay
98	Andrew Creek returns	45		241.0			90.0	Crescent Bay

1 One family was culled when bacterial kidney disease (BKD) was detected.

2 Three families were culled when BKD was detected.

3 Seven families were culled when BKD was detected.

4 The release site is listed as Sheldon Jackson; possibly the Indian River.

Table 16. Snettisham Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1977-1993.

16a. Progenitor stock: Andrew Creek

Brood Year	Source	Egg take			Disposition (in thousands)				
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Age 2	Transfer / Release site
77	Andrew Creek (wild)			25.0			11.6		Speel Arm ¹
78									
79									
80									
81	Andrew Creek returns ²			139.0					
	Andrew Creek (CLH)			302.6			226.6		Speel Arm
82	Andrew Creek returns ²			96.6			221.0		Speel Arm
	Andrew Creek (CLH)			182.8					
83									
84	Andrew Creek (CLH)			1000.0			49.8		Speel Arm
							28.3		Montana Creek
							30.3		Sheep Creek
							85.6		Auke Creek
							60.3		Fish Creek (Juneau)
85	Andrew Creek (CLH)			5050.0			746.4		Speel Arm
						911.0			Redoubt Lake
							62.7		Fish Creek Ponds
							30.7		Montana Creek
							40.0		Auke Creek
							31.1		Sheep Creek
86	Andrew Creek (CLH)			1160.0			111.0		Speel Arm
							92.0		Auke Creek
							31.6		Sheep Creek
							52.0		Montana Creek
							74.0		Fish Creek (Juneau)
87	Andrew Creek returns			1440.0			677.0		Speel Arm ³
	Andrew Creek (CLH)			2760.0			127.0		Speel Arm
						269.0			Indian River
							33.0		Montana Creek
							11.0		Gastineau Hatchery
							120.0		Sheep Creek
							117.0		Auke Creek
							67.0		Fish Creek (Juneau)
								9.2	Twin Lakes
88	Andrew Creek returns			1443.0			337.4		Speel Arm ³
	Andrew Creek (CLH)			3692.2			718.7		Speel Arm
							175.3	101.1	Auke Creek

Brood Year	Source	Egg take			Disposition (in thousands)				
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Age 2	Transfer / Release site
							149.5	105.0	Fish Creek (Juneau)
							122.2	101	Sheep Creek
							101.5		Gastineau Hatchery
89	Andrew Creek returns	44		150.0			46.0		Auke Creek
							45.2		Fish Creek (Juneau)
								10.7	Twin Lakes
90	Andrew Creek returns	30		142.0			100.0		Speel Arm ^{3, 4}
	Andrew Creek (CLH)			1903.0			285.7	59.3	Fish Creek (Juneau)
							10.9		Twin Lakes
								50.1	Auke Creek
							217.6		Port Armstrong Hatchery
91	Andrew Creek returns	86		486.0			350.0		Speel Arm ^{3, 4}
	Andrew Creek (CLH)			2138.7 ⁵			105.7		Fish Creek (Juneau)
							100.5		Auke Creek
								10.0	Twin Lakes
							1070.0		Port Armstrong Hatchery
92	Andrew Creek (CLH)			687.7		10.6	143.0		Fish Creek (Juneau)
							141.0		Auke Bay Creek
93	Andrew Creek (CLH)			850.0		283.0			Indian Lake ⁶

Chinook Production Discontinued - chinook salmon on site are part of Gastineau Hatchery production

- 1 Eggs taken as part of Crystal Lake Hatchery (CLH) egg take from Andrew Creek wild stock.
- 2 This is listed in ADF&G (1985), but it is unclear if they are from wild Andrew Creek adults or from adults returning to the hatchery.
- 3 All juveniles from adults returning to the hatchery were released into Speel Arm.
- 4 These fish are recorded in the Annexes, but not in the stocking records.
- 5 This number is from the 1992 Annex, the stocking records only report 309.2 eggs transferred.
- 6 Some of the remaining juveniles may have been transferred to Gastineau Hatchery for release in the roadside sportfishing program as indicated by the 1994 Annex. Their eventual disposition is not recorded.

16b. Progenitor stocks: Situk River, King Salmon River and Unuk River

Brood Year	Source	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
77	Situk River ¹			39.6			7.4	Speel Arm
78								
79	King Salmon River			35.3			26.7	Speel Arm
80	Situk River ¹			66.1			39.2	Speel Arm
81	King Salmon River			20.0			7.5	Speel Arm
	Situk River ¹			18.4 ²				
82	King Salmon River						286.2	Speel Arm
83	Snettisham returns ³	1		5.6			4.9	Speel Arm
	King Salmon River (wild)	15		136.0			93.1	Speel Arm
84	King Salmon River returns	1		4.6			142.9	Speel Arm
	King Salmon River (wild)	31		189.0				
85	King Salmon River returns	6		32.1			86.0	Speel Arm ⁴
	King Salmon River (wild)	15		90.1			50.5	Auke Creek ⁴
	Snettisham – Mix ³	5		25.9				
86	King Salmon River (wild)	23		132.0			72.4	Speel Arm
	Snettisham – Mix ^{3, 5}	36		167.0			91.6	Speel Arm
87	King Salmon River (wild)	17		111.0			61.0	Speel Arm
	Snettisham returns ³						677.0	Speel Arm
88	King Salmon River returns			54.0			33.0	Speel Arm
	Snettisham returns ³						337.4	Speel Arm
89	King Salmon River returns			9.8	9.8			Little Port Walter Hatchery ⁶
90	King Salmon River returns	17		110.0	93.0			Little Port Walter Hatchery
	Unuk River (DMH)			140.4			91.2	Port Armstrong Hatchery
91	King Salmon River returns	3		12.8	12.8			Little Port Walter Hatchery
	Unuk River (LPW)	226		1226.0			194.4	Port Armstrong Hatchery ⁷

Chinook Production Discontinued - Chinook salmon on site are part of Gastineau Hatchery production

- 1 It is unclear if these were from wild adults.
- 2 There are no records on how many were released and where they were released.
- 3 The composition of this egg take is unclear.
- 4 Indications are that all sources were combined before release.
- 5 The stocking records do not record the release of these smolts.
- 6 This is reported in the 1990 Annex.
- 7 There is no record of the release of the remaining fish.

Table 17. Tamgas Creek Hatchery. Broodstock sources, egg takes, and final disposition of chinook salmon reared, 1982-1998.

Brood Year	Source ¹	Egg take			Disposition (in thousands)				
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Age 2	Transfer / Release site
82	Unuk River (LPW)			60.0					Tamgas Creek
83	Unuk River (LPW)			73.0 ²					
	Unuk River (DMH)	115	58	632.5		80.0	420.0		Tamgas Creek
84	Unuk River (LPW)	200	100	1100.0		350.0	550.0		Tamgas Creek
	Unuk River (DMH)	58	29	319.0					
85	Unuk River (LPW)	144	72	792.0		123.7	1700.0		Tamgas Creek
	Unuk River (WLH)			2422.0					
86	Unuk River (LPW)	333	167	1831.5		1000.0	1000.0		Tamgas Creek ³
	Chickamin River (LPW)			384.0					
	Unuk River (WLH)			425.0					
	Unuk River (NBH)			1100.0					
87	Unuk River (LPW)	888	444	4884.0		1700.0	1000.0		Tamgas Creek
	Unuk River returns			225.0					
88	Unuk River returns	484	242	2662.0			2300.0		Tamgas Creek
89	Unuk River returns	848	424	4664.0		1300.0	1000.0		Tamgas Creek
90	Tamgas returns ⁴	234	117	1287.0		600.0	600.0		Tamgas Creek
91	Tamgas returns	180	90	990.0		300.0	600.0		Tamgas Creek
92	Tamgas returns	248	124	1364.0		890.0	284.0		Tamgas Creek
93	Tamgas returns	244	122	1342.0		996.4	142.2		Tamgas Creek
94	Tamgas returns	269	135	1479.0		395.4	1131.2	271.0	Tamgas Creek
95	Tamgas returns	272		1585.5		900.0	300.0		Tamgas Creek
96	Tamgas returns	144		853.0		94.7	523.3		Tamgas Creek
97	Tamgas returns	114		676.1		10.0	501.0		Tamgas Creek
98	Tamgas returns	144		657.0			500.0		Tamgas Creek

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: LPW – Little Port Walter Hatchery, DMH – Deer Mountain Hatchery, WLH – Whitman Lake Hatchery and NBH – Neets Bay Hatchery.
- 2 There is no record of where these were used. They may have been combined with the Deer Mountain Hatchery juveniles.
- 3 Both Unuk River and Chickamin River embryos reared and released. No further distinction was made between these fish.
- 4 Source name changed to reflect the introduction of Chickamin River into the broodstock. Adults from the 1986 release began to return and were included in broodstock takes.

Table 18. Whitman Lake Hatchery. Broodstock sources, egg takes and final disposition of chinook salmon reared, 1977-1998.

18a. Progenitor stock: Chickamin River

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
80	Chickamin River						146.0	Carroll Inlet
81	Chickamin River (LPW)	29	27	177.0		78.3		Carroll Inlet
82								
83	Chickamin River (wild)	6		31.5			27.2	Herring Bay
84	Chickamin River (wild)	55		255.0		12.6	120.3	Whitman Lake
							51.3	Carroll Inlet
85	Chickamin River (wild)	42		230.0			98.0	Whitman Lake
						54.0		Carroll Inlet
86	Chickamin River (wild)	52		260.0			151.0	Whitman Lake
							41.0	Carroll Inlet
87	Chickamin River (wild)	36		195.0			55.0	Whitman Lake
	Chickamin River (LPW)			1031.0			703.0	Carroll Inlet
88	Chickamin River returns	335		1610.0			75.4	Whitman Lake
							1076.0	Carroll Inlet
89	Chickamin River returns	367		1999.0			73.7	Herring Bay
							1102.1	Carroll Inlet
					425.0			Medveje Hatchery
90	Chickamin River returns	547		3000.0			106.2	Herring Bay
							1217.8	Carroll Inlet
					1200.0			Medveje Hatchery
91	Chickamin River returns	718		4324.6			109.0	Whitman Lake
							1062.7	Carroll Inlet
					1031.8			Neets Bay Hatchery
92	Chickamin River returns	262		1572.0			123.2	Whitman Lake
							1147.8	Carroll Inlet
93	Chickamin River returns	120		699.8			233.6	Herring Bay
	Chickamin River (LPW)			203.4			513.3	Carroll Inlet
94	Chickamin River returns	88		519.0			239.0	Whitman Lake ²
	Chickamin River (LPW)			200.7			564.7	Neets Bay Hatchery ^{2, 3}
	Chickamin River (MCH)	50	48	225.9				
95	Chickamin River returns	123		1503.0 ⁴			697.2	Whitman Lake
	Chickamin River returns ⁵	139					200.0	Neets Bay Hatchery
96	Chickamin River returns	620		2065.0			713.3	Whitman Lake
							386.4	Earl West Cove
					511.0			Neets Bay Hatchery ⁶
97	Chickamin River returns	370		2120.0			742.0	Whitman Lake
							29.8	Long Lake ⁷

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
							364.4	Earl West Cove
					507.4			Neets Bay Hatchery ⁶
98	Chickamin River returns	343		1809.0			750.0	Whitman Lake
							273.6	Long Lake
					543.0			Neets Bay Hatchery ⁶

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: LPW – Little Port Walter Hatchery and MCH – Medvejie Creek Hatchery.
- 2 There is no indication that these releases were segregated by source.
- 3 This transfer is only recorded in the Neets Bay Hatchery records.
- 4 Spawners from both sites were used to get these eggs.
- 5 This egg take was from adult salmon returning to Carroll Inlet.
- 6 These eggs were taken at Whitman Lake Hatchery, reared at Crystal Lake Hatchery and released at Neets Bay.
- 7 The stocking records show that these fish were at Neets Bay Hatchery prior to release.

18b. Progenitor stock: Unuk River

Brood Year	Source ¹	Egg take			Disposition (in thousands)			
		Females	Males	Eggs (thousands)	Eggs	Age 0	Age 1	Transfer / Release site
80	Cripple Creek (wild)	31	26	194.0			145.6	Whitman Lake
81	Unuk River (LPW)	31	32	189.5			135.2	Neets Bay Hatchery
82	Unuk River (LPW)			125.0 ²				
83								
84	Unuk River returns	88		448.5	448.5			Neets Bay Hatchery
85	Unuk River returns	1310		7200.0			1056	Carroll Inlet
					2000.0			Tamgas Creek Hatchery
					4000.0			Neets Bay Hatchery
86	Unuk River returns	549		2350.0			1286.0	Carroll Inlet
					425.0			Tamgas Creek Hatchery
87	Unuk River returns	25		164.0			135.0 ³	

Unuk River line discontinued

- 1 The following abbreviations are used to indicate the hatchery from which the broodstock originated: LPW – Little Port Walter Hatchery and CLH – Crystal Lake Hatchery. Cripple Creek is the site on the Unuk River where these adults were captured.
- 2 This transfer is recorded in Little Port Walter Hatchery records, but not in Whitman Lake Hatchery records. There is no indication of the release of these fish. They are possibly the source of Unuk River eggs at Neets Bay Hatchery in 1982.
- 3 These are recorded in the 1988 Annex, but there is no record of where they ended up.

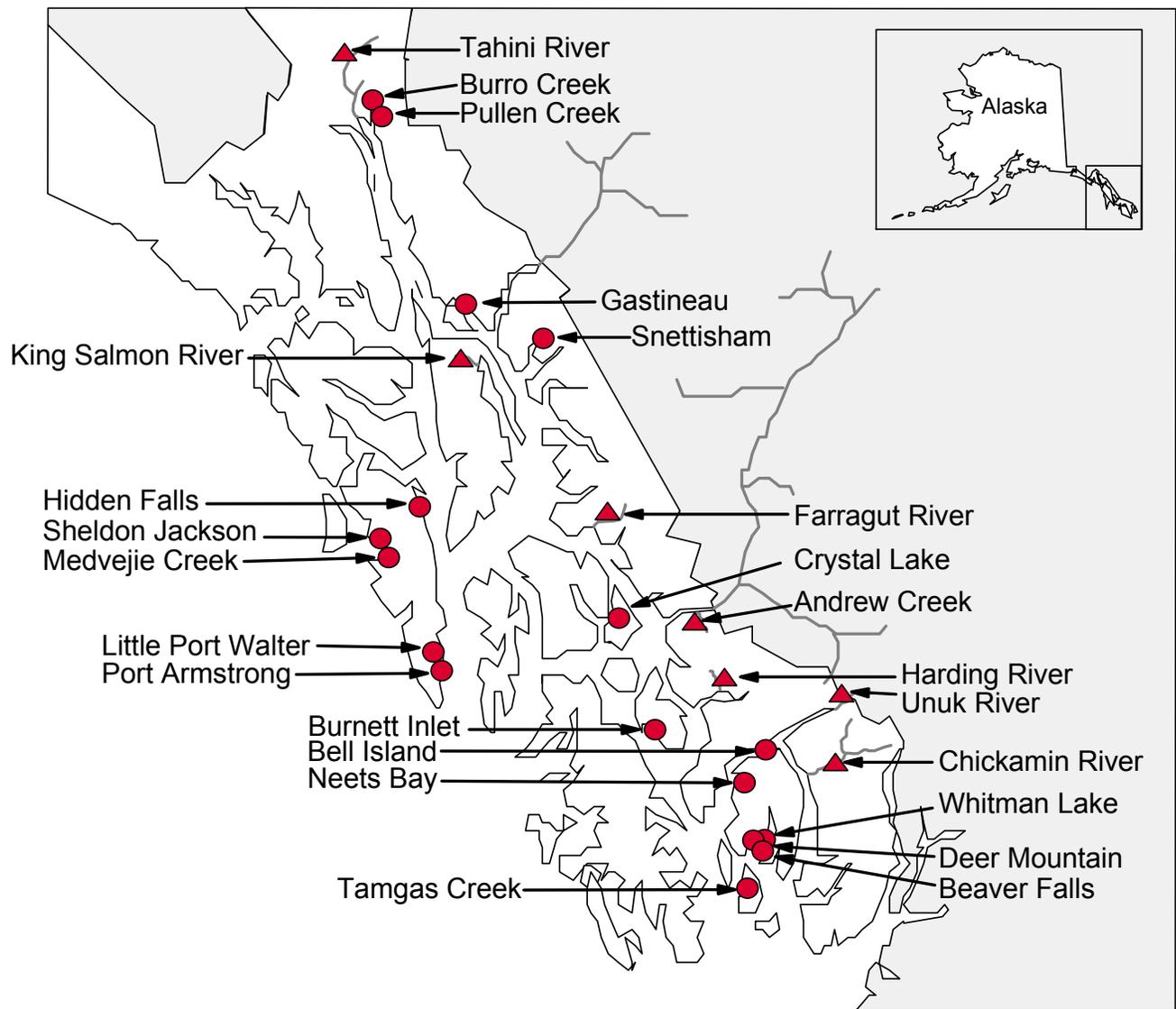


Figure 1. Locations of hatcheries that produced chinook salmon in southeastern Alaska (●), 1972-1998 and the locations from which broodstocks were taken (▲).

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