

2023 ANNUAL MANAGEMENT PLAN
Southern Southeast Regional Aquaculture Association (SSRAA)

This Annual Management Plan (AMP) plan is prepared to fulfill the requirements of 5 AAC 40.840. This plan must organize and guide the hatchery’s operations, for each calendar year, regarding production goals, broodstock development, and harvest management of hatchery returns. Egg take through release details are included in planning for succeeding calendar years. Inseason assessments and project alterations by the Southern Southeast Regional Aquaculture Association (SSRAA) or Alaska Department of Fish and Game (ADF&G) may result in changes to this AMP in order to reach or maintain program objectives. SSRAA will notify the ADF&G private nonprofit (PNP) hatchery program coordinator in a timely manner of any departure from the AMP. The ADF&G PNP coordinator will advise as to whether an amendment, exception report, or other action is warranted. No variation or deviation will be implemented until an AMP amendment has been approved or waived by both the department and SSRAA. This policy applies to all hatchery operations covered under the AMP.

Table of contents	Page
1.0 EXECUTIVE SUMMARY	3
1.1 <i>Background</i>	3
1.2 <i>New this year (production, harvest management, culture techniques, etc.)</i>	4
1.3 <i>New permits or permit amendments needed this year</i>	4
1.4 <i>Expected returns</i>	5
1.5 <i>Production Summary</i>	6
1.6 <i>Egg takes</i>	7
1.7 <i>Current Permitting</i>	7
2.0 FALL COHO SALMON: WLH AND NBH.....	8
2.1.1 <i>Whitman Lake Hatchery program details</i>	8
2.1.2 <i>Nakat Inlet coho salmon program details</i>	8
2.1.3 <i>Anita Bay coho salmon program details</i>	8
2.1.4 <i>Neets Bay Hatchery coho salmon program details</i>	9
3.0 SUMMER CHINOOK SALMON: WLH, CLH, AND DMH.....	12
3.1.1 <i>Whitman Lake Hatchery summer Chinook salmon program details</i>	12
3.1.2 <i>Crystal Lake Hatchery-Neets Bay Chinook salmon release program details</i>	12
3.1.3 <i>Whitman Lake Hatchery Neets Bay Chinook salmon release program details</i>	12
3.1.4 <i>Whitman Lake Hatchery Carroll Inlet Chinook salmon release program details</i>	12
3.1.5 <i>Whitman Lake Hatchery Deer Mountain Chinook salmon release program details</i>	13
3.1.6 <i>Deer Mountain Hatchery zero-check Chinook salmon release program details</i>	13
4.0 SUMMER CHUM SALMON: NBH AND WLH.....	17
4.1.1 <i>Neets Bay Hatchery summer chum salmon program details</i>	17
4.1.2 <i>Whitman Lake Hatchery Kendrick Bay summer chum salmon program details</i>	17
5.0 SUMMER CHUM SALMON: BIH, NBH, AND PSNH.....	19
5.1.1 <i>Burnett Inlet Hatchery summer chum salmon program details</i>	19
5.1.2 <i>Burnett Inlet Hatchery Anita Bay summer chum salmon program details</i>	20

5.1.3	<i>Burnett Inlet Hatchery Nakat Inlet summer chum salmon program details</i>	20
5.1.4	<i>Burnett Inlet Hatchery Port Asumcion summer chum salmon program details</i>	20
5.1.5	<i>Port Saint Nicholas Hatchery Port Asumcion summer chum salmon production</i>	21
6.0	FALL CHUM SALMON: NBH, BIH, AND NAKAT INLET	23
6.1.1	<i>Neets Bay Hatchery/Burnett Inlet Hatchery fall chum salmon program details</i>	23
6.1.2	<i>Nakat Inlet fall chum salmon program details</i>	23
7.0	KLAWOCK RIVER HATCHERY FALL COHO SALMON	25
8.0	PORT SAINT NICHOLAS CHINOOK SALMON	29
9.0	DEER MOUNTAIN TRIPLOID RAINBOW TROUT	32
10.0	MARK AND TAG PROGRAM	32
11.0	HARVEST MANAGEMENT	33
11.1	<i>Special Harvest Areas</i>	33
	<i>5 AAC 40.043. Neets Bay Special Harvest Area - Behm Canal</i>	33
	<i>5 AAC 40.041. Herring Bay Special Harvest Area - Ketchikan</i>	33
	<i>5 AAC 40.045. Nakat Inlet Special Harvest Area</i>	34
	<i>Kendrick Bay Terminal Harvest Area</i>	35
	<i>5 AAC 40.039. Burnett Inlet Special Harvest Area</i>	35
	<i>5 AAC 40.061. District 7: Anita Bay Special Harvest Area</i>	35
	<i>5 AAC 40.060 Neck Lake Special Harvest Area</i>	36
	<i>5 AAC 33.371 District 1: Carroll Inlet Terminal Harvest Area</i>	36
	<i>5 AAC 40.051, District 3: Klawock Inlet and River Special Harvest Area</i>	36
	<i>5 AAC 40.053. District 3: Port Saint Nicholas Special Harvest Area</i>	39
	<i>Port Asumcion Special Harvest Area</i>	39
11.2	<i>Cost Recovery</i>	40
12.0	HISTORICAL RETURNS	40
13.0	APPROVAL	41
	APPENDICES	42
	Appendix A. Facility Program Diagrams	43
	Appendix B. Production Summary Diagrams	50
	Appendix C. Maps	55

1.0 Executive Summary

1.1 *Background*

SSRAA operates six production salmon hatcheries in southern Southeast Alaska: Neets Bay Hatchery (NBH), Whitman Lake Hatchery (WLH), Burnett Inlet Hatchery (BIH), Klawock River Hatchery (KRH), Port Saint Nicholas Hatchery (PSNH) and Deer Mountain Hatchery (DMH). Since 2000, ADF&G has contracted SSRAA to operate the Crystal Lake Hatchery (CLH) in Petersburg.

Since 1983, SSRAA has operated NBH. The hatchery is at the outfall of Neets Creek at the head of Neets Bay, about 40 miles north of Ketchikan. The hatchery produces chum, coho, and Chinook salmon. Smolt releases are made from freshwater raceways and marine net pens into Neets Bay. NBH is a primary egg collection site for SSRAA chum salmon programs. Chum salmon, both summer and fall stocks, are spawned, incubated, reared, and released at NBH. Some of the fall chum salmon eggs incubated at NBH are transported as fry to Nakat Inlet for rearing and release. A portion of the eyed summer chum salmon eggs may be transported to WLH, PSNH, and BIH for incubation, rearing, and eventual release at several remote sites. Some of the summer chum eggs are incubated and transported as fry to Port Asumcion for rearing and release. Both summer and fall chum eyed eggs may be transported from NBH to BIH for incubation, rearing and release. NBH also is an alternate broodstock site for fall coho.

Since 1978, SSRAA has operated WLH as a production and central incubation facility. The hatchery is at Herring Cove in George Inlet, approximately 10 miles south of Ketchikan. The hatchery produces chum, coho, and Chinook salmon. Release sites are at the hatchery in Herring Cove, Neets Bay, Anita Bay near Wrangell, Nakat Inlet, Kendrick Bay, McLean Arm, Carroll Inlet and Deer Mountain Hatchery. WLH is the primary egg collection site for SSRAA fall coho salmon and Chickamin River stock Chinook salmon programs. WLH retains some of the eggs collected for freshwater rearing and release at the hatchery to provide future hatchery broodstock. Some of the Chinook and coho salmon reared in fresh water at WLH are transported to various remote-release sites. Some of the coho salmon eggs are transferred from WLH to NBH for freshwater rearing and eventual release from saltwater net pens. Chinook salmon eggs are transferred to CLH for freshwater rearing and then transported to PSNH for saltwater release. Chinook salmon eggs or fry are also transported to PSNH for fresh and saltwater rearing and release at PSN. Chinook salmon smolt, freshwater reared at WLH, are transported to Carroll Inlet each spring for marine pen rearing and release. Chinook salmon and coho fry are transported to Deer Mountain for freshwater rearing. Some Chinook smolt are released at Deer Mountain, some are transported to Carroll Inlet for saltwater rearing and release, and some coho are transported to Anita Bay and Nakat Inlet for saltwater rearing and release.

BIH is in Burnett Inlet approximately 25 miles south of Wrangell on Etolin Island. BIH was designed primarily as a sockeye salmon rehabilitation enhancement facility, but SSRAA has no plans at this time to propagate sockeye salmon. BIH is currently operated as a chum salmon hatchery. In 2023 SSRAA will collect summer chum salmon eggs at BIH for hatchery rearing and release, and fry transport to Anita Bay, Nakat Inlet, and Port Asumcion for saltwater rearing and release. Eyed summer chum eggs are sent to PSNH for incubation and transport to Port Asumcion.

Fall chum eggs will also be collected for rearing and release at BIH as well as transfer of eyed eggs to NBH.

In 2016, SSRAA was issued PNP Hatchery Permit #47 to operate KRH, at the outflow of Klawock Lake in the City of Klawock. KRH is operated as a coho salmon hatchery and is permitted to produce coho and sockeye salmon.

In 2016, SSRAA was issued PNP Hatchery Permit #48 to operate PSNH, which is at the water treatment plant in the City of Craig. PSNH is operated as a Chinook and chum salmon hatchery.

In 2017, SSRAA was issued PNP Hatchery Permit #49 to operate DMH, which is in the City of Ketchikan. DMH functions primarily as a satellite freshwater rearing site for WLH producing Chinook salmon smolt for release at the hatchery and at Carroll Inlet. DMH also acts as a rearing site for fall coho fry from WLH that are transported and released at remote sites. DMH is an alternate broodstock site for the WLH Chickamin River Chinook.

SSRAA's long-term goal is to have 75% of all returning adults harvested in common property fisheries, with the remaining 25% harvested by SSRAA to cover operating expenses and broodstock needs. Strong chum salmon survivals are usually necessary to achieve this goal.

1.2 *New this year (production, harvest management, culture techniques, etc.)*

2023 will be the second year of a 5-year study to evaluate the effects of release strategies (towed net pens and vessel transports) on survival and homing behavior of NBH summer chum. A portion of the NBH summer chum release will occur as normal at the head of Neets Bay, while transport groups will be moved by vessel and by towing net pens to a release location outside of Neets Bay in Behm Canal. Results will be evaluated annually as described in the study plan: *Chum Salmon*

Release and Transport Strategies at Neets Bay Hatchery.

SSRAA will conduct cost recovery on summer chum that return to Neets Bay, Burnett Inlet, Port Asumcion, and Anita Bay in 2023.

SSRAA will continue the use of the Autofish marking trailer at WLH and CLH.

New Production in 2023 will consist of an increase in summer chum at Port Asumcion with the progeny of 7.5 million summer chum eggs incubated at Neets Bay. This increase will be offset by a reduction of 7.5 million fall chum eggs from the Neets Bay release so no increase in total chum production will occur.

1.3 *New permits or permit amendments needed this year*

SSRAA has received an FTP authorizing an increase of the summer chum release at Port Asumcion by 7.5 million green eggs.

1.4 *Expected returns*

Species, Run	Release Location	Common Property Harvest	Other¹	Total Return
Coho salmon	Herring Cove	9,400	4,800	14,200
Coho salmon	Nakat Inlet	12,700	5,900	18,600
Coho salmon	Anita Bay	5,300	4,800	10,100
Coho salmon	Neets Bay	53,600	26,700	80,300
Coho salmon	Crystal Creek	1,600	1,600	3,200
Coho salmon	Klawock River	103,800	44,500	148,300
Chinook salmon	Whitman Lake	2,800	9,200	12,000
Chinook salmon	Anita Bay	1,500	6,200	7,700
Chinook salmon	Neets Bay	1,700	3,100	4,800
Chinook salmon	Crystal Creek	1,300	1,500	2,800
Chinook salmon	City Creek	500	0	500
Chinook salmon	Port Saint Nicholas	1,500	4,200	5,700
Chinook salmon	Deer Mountain	350	300	650
Chinook salmon	Carrol Inlet	2,600	7,500	10,100
Chum salmon, summer	Neets Bay	245,500	546,500	792,000
Chum salmon, summer	Anita Bay	161,700	112,300	274,000
Chum salmon, summer	Kendrick Bay	563,600	168,400	732,000
Chum salmon, summer	Nakat Inlet	168,000	103,000	271,000
Chum salmon, summer	Burnett Inlet	140,400	327,600	468,000
Chum salmon, summer	Port Asumcion	224,700	310,300	535,000
Chum salmon, fall	Nakat Inlet	44,500	28,500	73,000
Chum salmon, fall	Burnett Inlet	4,100	2,900	7,000
Chum salmon, fall	Neets Bay	27,300	37,700	65,000

¹ Includes cost recovery, broodstock, common property harvest in the THA, etc.

1.5 *Production Summary*

Species, Run	Program Name	Brood Year	Release Date	Number Release	Life Stage	Type of mark, percentage marked
Coho salmon, fall	WLH	2021	May 2023	400,000	smolt	CWT ¹ , 10.2%
Coho salmon, fall	NBH	2021	May 2023	3,200,000	smolt	CWT, 6.1%
Coho salmon, fall	WLH to DMH to Anita Bay	2021	May 2023	400,000	smolt	CWT, 16.5%
Coho salmon, fall	Nakat Inlet	2021	May 2023	600,000	smolt	CWT, 5.5%; TM 100%
Coho salmon, fall	WLH to Anita Bay	2021	May 2023	100,000	smolt	CWT, 21%
Coho salmon	KRH early lake release	2021	May 2023	1,200,000	smolt	CWT, 3.7%
Coho salmon	KRH lake release	2021	June 2023	3,150,000	smolt	CWT, 1.5%
Chinook salmon	WLH	2021	May 2023	700,000	smolt	CWT, 20% AC ³ 100%, TM 100%
Chinook salmon	WLH to CI	2021	May 2023	600,000	smolt	CWT, 20% AC 100%, TM 100%
Chinook salmon	CLH to PSN	2021	May 2023	450,000	smolt	CWT, 20% AC 100%, TM 100%
Chinook salmon	DMH	2021	May 2023	80,000	smolt	CWT, 20% AC 100%, TM 100%
Chinook salmon	CLH to Anita Bay	2021	May 2023	140,000	smolt	CWT, 20% AC 100%, TM 100%
Chinook salmon	NBH to Anita Bay	2021	May 2023	300,000	smolt	CWT, 20% AC 100%, TM 100%
Chinook salmon	PSN	2021	May 2023	100,000	smolt	CWT, 20% AC 100%, TM 100%
Chinook salmon	DMH	2022	June 2023	20,000	smolt	CWT, 100% AC 100%, TM 100%
Chum salmon, summer	NBH	2022	April 2023	65,000,000	smolt	TM ² , 100%
Chum salmon, summer	Anita Bay	2022	April 2023	23,000,000	smolt	TM, 100%
Chum salmon, summer	Kendrick Bay	2022	April 2023	40,000,000	smolt	TM, 100%

Species, Run	Program Name	Brood Year	Release Date	Number Release	Life Stage	Type of mark, percentage marked
Chum salmon, summer	Nakat Inlet	2022	April 2032	14,500,000	smolt	TM, 100%
Chum salmon, summer	BIH	2022	May 2023	29,000,000	smolt	TM, 100%
Chum salmon, summer	Port Asumcion	2022	May 2023	26,000,000	smolt	TM, 100%
Chum salmon, fall	BIH	2022	May 2023	5,500,000	smolt	TM, 100%
Chum salmon, fall	Nakat Inlet	2022	May 2023	3,000,000	smolt	TM, 100%

¹ Coded-wire tag and adipose fin clip (CWT)

² Otolith thermal mark (TM)

³ Adipose fin clip (AC)

1.6 Egg takes

Program Name	Ancestral Stock(s)	Egg-take Site	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
WLH coho salmon	Indian River	WLH	P	5,500,000 ¹	7,000,000
NBH coho salmon	Indian River	NBH	A		5,000,000
KRH coho salmon	Klawock River	KRH	P	5,000,000	5,500,000
WLH Chinook salmon	Chickamin River	WLH	P	2,800,000 ²	2,300,000 ³
DMH Chinook salmon	Chickamin River	DMH	P	35,000	600,000
NBH summer chum salmon	Carroll River	NBH	P	122,700,000	172,300,000 ⁴
NBH fall chum salmon	Cholmondeley	NBH	A		35,000,000
BIH summer chum salmon	Carroll River	BIH	P	91,000,000	96,000,000
BIH fall chum salmon	Cholmondeley	BIH	A	29,000,000	29,000,000

¹ 3,400,000 eyed eggs transferred to NBH.

² WLH may take an additional 700,000 eggs for Port Saint Nicholas Hatchery.

³ WLH has a permit for 2.3 million Chinook salmon eggs for SSRAA projects.

⁴ NBH is permitted for 70,500,000 summer chum salmon eggs for release on site as well as 7,500,000 can be transported to Port Asumcion. An additional 50,000,000 can be taken for BIH, and another 44,700,000 eggs may be taken for WLH. NBH has an FTP that allows up to 35,000,000 fall chum salmon eggs to be collected.

1.7 Current Permitting

SSRAA has six PNP hatchery permits: WLH was issued Permit #8 in 1978; NBH was issued Permit #19 in 1983; BIH was issued Permit #40 in 1997; KRH was issued permit #47 in 2016; PSN was issued permit #48 in 2016, and DMH was issued Permit #49 in 2017. The hatchery permits, including all approved permit alterations, and associated basic management plans (BMPs) specify the maximum green egg capacity at each SSRAA hatchery as follows:

Hatchery	Chinook Salmon	Coho Salmon	Chum Salmon	Sockeye Salmon	Rainbow Trout
Whitman Lake	2,300,000	7,500,000	45,100,000	0	
Neets Bay	2,000,000	5,000,000	102,700,000	0	
Burnett Inlet	0	4,500,000	97,200,000	2,700,000	
Klawock River	0	5,500,000	0	1,000,000	
Port Saint Nick	770,000	0	8,000,000		
Deer Mountain	600,000	0	0	0	200,000

Hatchery brood stocks and projects are similarly authorized and delimited by FTPs.

2.0 Fall coho salmon: WLH and NBH

2.1.1 *Whitman Lake Hatchery program details*

Approximately 5.5 million coho salmon eggs will be collected at WLH this fall and used for SSRAA’s coho salmon programs at Neets Bay, Nakat Inlet, and Anita Bay, as well as a release at WLH. A portion of the eyed eggs collected at WLH are transported to NBH for incubation, rearing, and release. The remainder of the eggs are incubated and reared at WLH. In the past, fry have been transported to Neck Lake for rearing and eventual transport to NBH and Anita Bay or eggs have been transported to BIH prior to fry being transported to Neck Lake. SSRAA has terminated the Neck Lake fall coho program resulting in a reduction of 1.2 million smolt. Each spring, beginning in April, smolt are transported to Nakat Inlet and Anita Bay for short-term rearing, imprinting, and release. Coho salmon are released from the WLH into Herring Cove to provide a sustainable broodstock. The purpose of the WLH coho salmon program is to provide increased harvest of coho salmon in common property fisheries, primarily the troll fleet in Districts 9 and 13. NBH may be used as a backup egg source. CWTs are used to evaluate contribution to common property fisheries and evaluate survival rates of different fish culture methods. In 2023, 10.2% of BY21 coho salmon releases from WLH will be tagged. The production goal is to release 400,000 25-gram yearling coho salmon smolt into Herring Cove annually.

2.1.2 *Nakat Inlet coho salmon program details*

In mid-April, 15-gram coho salmon smolt from WLH are transported to saltwater net pens in the upper end of Nakat Inlet, in the freshwater influence of Nakat Creek. Smolt are reared for approximately 45 days. Target release is 600,000 25-gram coho salmon smolt. The purpose of the program is to provide increased harvest of coho salmon in common property fisheries, primarily in District 1 troll and gillnet fisheries, and in the terminal harvest area (THA). Nakat Inlet coho salmon are also harvested by the troll fleet in Districts 9 and 13. CWTs are used to evaluate contribution to common property fisheries and evaluate the survival rates of different fish culture methods. In 2023, 5.5% of BY21 coho salmon released at Nakat Inlet will be tagged and 100% will be thermal marked.

2.1.3 *Anita Bay coho salmon program details*

In mid-April, 15-gram coho smolt from WLH and DMH are transported to saltwater net pens in the upper end of Anita Bay. The pens are placed in the freshwater influence of the upper tributaries

to ensure proper imprinting and minimize straying. Smolt are reared for approximately 45 days. The production goal is release of 500,000 25-gram coho salmon smolt. The purpose of the program is to provide coho salmon for harvest in the common property fisheries. Anita Bay coho salmon are primarily harvested by the troll fleet in traditional fisheries and in Anita Bay THA by the gillnet fleet. Returning adults may also contribute to Districts 6 and 8 gillnet fisheries, Districts 5, 6, and 7 seine fisheries, and sport fisheries in the Wrangell area. CWTs are used to evaluate contribution to common property fisheries and evaluate the survival rates of different fish culture methods. In 2023, 17.4% of BY21 coho salmon released at Anita Bay will be tagged.

2.1.4 *Neets Bay Hatchery coho salmon program details*

NBH is a backup egg source for WLH. Approximately 2.0 million coho salmon smolt are reared in fresh water at NBH and 1.2 million coho are reared in salt water from July through May. In April, coho salmon are transferred from fresh water to saltwater net pens for short-term rearing. Smolt are reared in net pens for approximately 45 days for imprinting and growth, prior to release at a target size of 25 grams. Adult coho salmon have been returning to NBH since 1981. The purpose of the program is to provide adult coho salmon for common property harvest, primarily the troll fleet in Districts 9 and 13. NBH coho salmon are also harvested in the NBH special harvest area (SHA) for cost recovery and in possible fall seine and gillnet rotational fisheries. CWTs are used to evaluate contribution to common property fisheries and evaluate the survival rates of different fish culture methods. In 2023, the tagging rate of BY21 coho salmon at NBH will be 6.1%.

2.2.1 *Whitman Lake Hatchery and Neets Bay Hatchery fall coho salmon egg take*

Program Name	Ancestral Stock(s)	Egg-take Site	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Whitman Lake coho salmon	Indian Creek	WLH	P	5,500,000 ¹	7,500,000
Neets Bay coho salmon	Indian Creek	NBH	A	0	5,000,000
Species/Run Totals				5,500,000	7,500,000

¹ 3,200,000 eyed eggs transferred to NBH. Application submitted to amend 13J-1005 and increase the max. number transferred to 4,000,000 eyed eggs.

2.3 *Broodstock capture method*

Adult returns to WLH and NBH enter adult holding ponds through a fish ladder.

2.4 *Spawning*

Coho salmon are dispatched with a blow to the head. Eggs are fertilized and transported to the hatchery for rinsing. Fertilized eggs are placed in Heath-style incubators. Eggs are water hardened in Iodophor. Family tracking is used to control bacterial kidney disease (BKD).

2.5 Egg-take schedule

Eggs are collected from late October to early December as fish ripen.

2.6 Carcasses

At WLH, carcasses are taken to a local processor for disposal or given away as bait. Fish in excess of broodstock needs may be sold for cost recovery.

At NBH, carcasses will be disposed of by dumping whole in deep water, given away as bait, sold to a local processor, or removed by a local processor for disposal.

2.7 Whitman Lake Hatchery planned releases this calendar year

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Whitman Lake coho salmon	2021	May 2023	400,000	Smolt	CWT, 10.2%
Nakat Inlet coho salmon	2021	May 2023	600,000	Smolt	CWT, 5.5%, TM 100%
WLH to Anita Bay coho salmon	2021	May 2023	100,000	Smolt	CWT, 21%
WLH to DMH to Anita Bay	2021	May 2023	400,000	smolt	CWT, 16.5%
Total			2,320,000		

2.8 Neets Bay Hatchery planned releases this calendar year

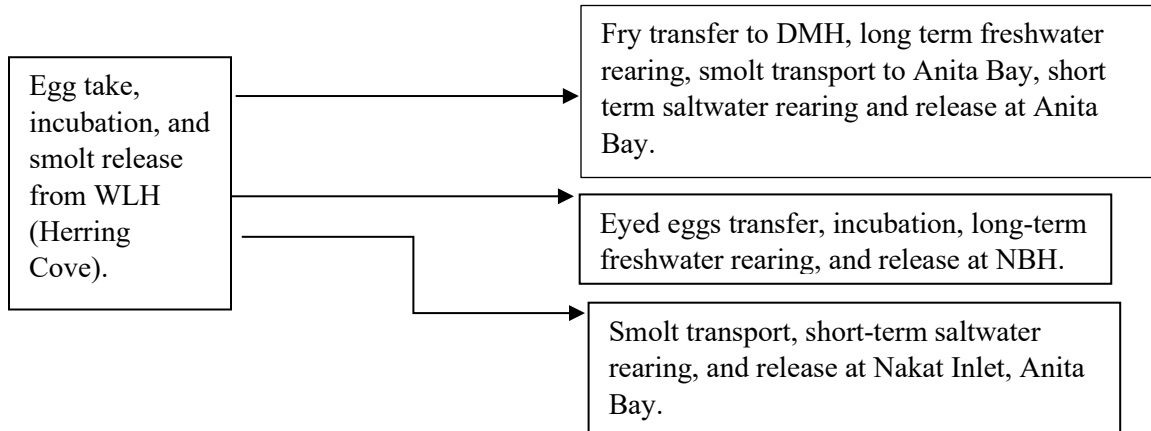
Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Neets Bay coho salmon	2021	5/23	3,500,000	Smolt	CWT, 6.1%

2.9 Previous brood years that will remain in culture during the entire calendar year

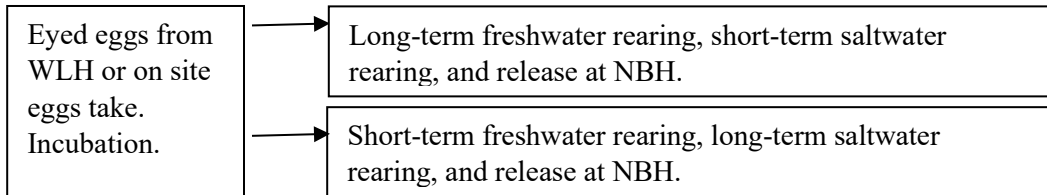
Program Name	Brood Year	Number Live (Jan. 1)	Number to Release	Date	Life Stage
Whitman Lake coho salmon	2022	440,000	400,000	May 2024	alevin
Neets Bay coho salmon	2022	3,300,000	3,200,000	May 2024	alevin
Nakat Inlet coho salmon	2022	660,000	600,000	May 2024	alevin
Anita Bay coho salmon	2022	550,000	100,000	May 2024	alevin

2.10 Operational diagrams

2.10.1 *Whitman Lake Hatchery*



2.10.2 *Neets Bay Hatchery*



2.11 *Fish transport permits*

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal #, Life Stage	Expires
01J-1001	Transport, release	WLH to Anita Bay	600,000 smolt	5/31/2023 ¹
05J-1008	Backup egg take, transport	NBH to WLH	4,500,000 eggs	6/30/2025
05J-1007	Egg take, release	WLH to Herring Cove	4,500,000 eggs, up to 1,000,000 of these for Herring Cove	6/30/2025
05J-1026	Transport, release	WLH to Nakat Inlet	600,000 smolt	12/31/2025
13J-1002	Egg take, transport, release	WLH to BIH to Neck Lake to Neets Bay	2,200,000 eggs	12/31/2023
13J-1005	Transport, release	WLH to NBH to Neets Bay	3,200,000 eyed eggs plus 600,000 smolt	4/30/2023 ²
98J-1007	Egg take, release	NBH to Neets Bay	4,500,000 eggs	6/30/2028
20J-1008	Transport, release	WLH to DMH to NBH	230,000 fry	12/31/2029
22J-1003	Transport, release	WLH to DMH to Anita Bay	400,000 smolt	4/1/2032

¹Application for renewal is being processed.

²Application for renewal and increase to 4 million eyed eggs is being processed.

3.0 Summer Chinook salmon: WLH, CLH, and DMH

3.1.1 Whitman Lake Hatchery summer Chinook salmon program details

Adult Chinook salmon returns to WLH are the source for eggs used in all of SSRAA's Chickamin River stock Chinook salmon programs (CLH has Andrew Creek stock Chinook salmon with releases at Blind Slough and Anita Bay). WLH may also act as a source of up to 700,000 Chinook salmon eggs for Port Saint Nicholas Hatchery (PSNH). A portion of the eggs are held at WLH for incubation and long-term freshwater rearing, and then transported to Carroll Inlet for short-term saltwater rearing and release each spring. Some eggs are also held at WLH for incubation and short-term rearing prior to transfer to DMH for long-term freshwater rearing and release in Ketchikan Creek. A portion of the eggs collected at WLH are shipped to CLH for incubation and long-term freshwater rearing, and then transported to PSN for short-term saltwater rearing and release each spring. SSRAA received a one-time FTP in 2022 to allow for an increase in the Chickamin stock Chinook reared at CLH for eventual release at Anita Bay and this will occur in 2023. In 2016, SSRAA began to shift production away from Neets Bay by moving 200,000 smolt from NBH to Carroll Inlet and another 200,000 from NBH to PSN. In 2023 there will be no Chinook released at NBH. The balance of the eggs are held at WLH for incubation and long-term freshwater rearing, and then released directly into Herring Cove for continuation of SSRAA's Chinook salmon broodstock program. In 2023, SSRAA is not anticipating a shortage of broodstock. A portion of the BY21 yearling smolt will be transported from WLH to a release site in Carroll Inlet for short-term saltwater rearing and release while 80,000 yearling smolt will be reared and released at DMH to provide an alternate broodstock site for the Chickamin River stock Chinook salmon. WLH will collect additional Chinook salmon eggs for PSNH if eggs are available. The program provides increased harvest of Chinook salmon in common property fisheries, primarily the troll and sport fleet in District 1. CWTs are used to evaluate contribution to common property fisheries and evaluate survival rates of different fish culture methods. Chinook salmon released from WLH have typically been coded-wire-tagged at a rate of 10%. In 2021, SSRAA began use of an Auto-fish tagging trailer with the goal of clipping 100% of the production while tagging 20%. This will continue in 2023. The production goal is to release 700,000 Chinook salmon from WLH and 600,000 from Carroll Inlet. Target weight is 25 grams for all Chinook salmon releases.

3.1.2 Crystal Lake Hatchery-Neets Bay Chinook salmon release program details

SSRAA has suspended the CLH to NBH Chinook program and redirected those fish to PSN.

3.1.3 Whitman Lake Hatchery Neets Bay Chinook salmon release program details

SSRAA has suspended the WLH to NBH Chinook program and redirected those fish to Carroll Inlet.

3.1.4 Whitman Lake Hatchery Carroll Inlet Chinook salmon release program details

Egg take, incubation, and short-term freshwater rearing occur at WLH. A portion of the fry are transported to DMH for long-term freshwater rearing. Smolt are transported to Carroll Inlet for short-term saltwater rearing, imprinting, and release. The purpose of the program is to provide

Chinook salmon for common property fisheries, primarily the troll fleet in District 1. Terminal fish present after July 1 will be harvested as cost recovery by either seine or gillnet. CWTs are used to evaluate contribution to common property fisheries and evaluate survival rates of different fish culture methods. In 2023, 20% of Chinook salmon smolt transported from WLH to Carroll Inlet will have CWTs. The production goal is to release 600,000 Chinook salmon smolt in Carroll Inlet each May.

3.1.5 *Whitman Lake Hatchery Deer Mountain Chinook salmon release program details*

Egg take, incubation, and short-term freshwater rearing occur at WLH. Fry are transported to DMH for long-term freshwater rearing and release into Ketchikan Creek. The purpose of the program is to provide Chinook salmon for common property fisheries, primarily the troll fleet in District 1 and to serve as a backup broodstock source for the SSRAA Chickamin River stock Chinook program. Adults returning to DMH will be harvested for cost recovery, donated to the public, utilized for brood stock, or harvested in personal use fisheries. In 2023, 20% of Chinook salmon yearling smolt transported from WLH to DMH will have CWTs. The production goal is to release 80,000 Chinook salmon smolt in Ketchikan Creek each May.

3.1.6 *Deer Mountain Hatchery zero-check Chinook salmon release program details*

Adult Chinook salmon returned to DMH in 2020 and SSRAA will continue a zero-check program utilizing eggs from those adults. Eggs take occurs at DMH or WLH in August and incubation occurs at DMH. Eggs are allowed to mature rapidly on warm water at DMH with a goal of having emergent fry by January. Rearing will occur from January through June when fish will be released into Ketchikan Creek. The purpose of the program is to provide Chinook salmon for common property fisheries, primarily the troll fleet in District 1, and to serve as a backup broodstock source for the SSRAA Chickamin stock Chinook program. This is an experimental program to test the validity of zero-check Chinook at DMH. Fish will be tagged at a high rate for valid evaluation. In 2023, 100% of the zero-check Chinook smolt released into Ketchikan Creek will have CWTs. The production goal is to release 20-gram Chinook smolt in mid-June. Adults returning to DMH will be utilized for broodstock, donated to the public, sold for cost recovery, or harvested in personal use fisheries.

3.2 *Egg takes*

Program Name	Ancestral Stock(s)	Egg-take Site, Stat. Area	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Whitman Lake Chinook salmon	Chickamin River	WLH	P	2,800,000 ¹	2,300,000

¹ Goal includes a conditionally permitted 700,000 green eggs taken for Port Saint Nicholas Hatchery for release at PSN (770,000 green eggs permitted).

Program Name	Ancestral Stock(s)	Egg Take Site, Stat Area	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Deer Mountain Hatchery Chinook Salmon	Chickamin River	DMH	Primary	35,000	600,000

3.3 *Broodstock capture method*

Adults returning to WLH enter adult holding ponds through a fish ladder.

Chinook returning to DMH are hatchery produced. Adults will swim up a fish ladder from Ketchikan Creek to a small holding area in the hatchery. Broodstock needs are very limited and recruitment will be restricted. Fish in excess of broodstock needs will be given away or sold for cost recovery.

3.4.1 *Spawning at WLH*

Chinook salmon are removed from the raceway with a Pescolator™ (Archimedes screw) and dispatched using a club. The fish are bled by cutting the tail. Eggs are fertilized, rinsed, and placed in Heath-style incubators in the hatchery. Eggs are water hardened in Iodophor. Family tracking is used to control bacterial kidney disease (BKD).

3.4.2 *Spawning at DMH*

Chinook salmon are dispatched with a blow to the head. Eggs are fertilized and transported to the hatchery for rinsing. Fertilized eggs are placed in Heath-style incubators. Eggs are water hardened in Iodophor. Family tracking is used to control bacterial kidney disease (BKD).

3.5 *Egg-take schedule*

Eggs are collected from early-August to early-September as fish ripen.

3.6 *Carcass disposal*

Carcasses are taken to a local processor for disposal or given away as bait. Fish in excess of broodstock needs may be sold for cost recovery.

3.7 *Planned releases this calendar year*

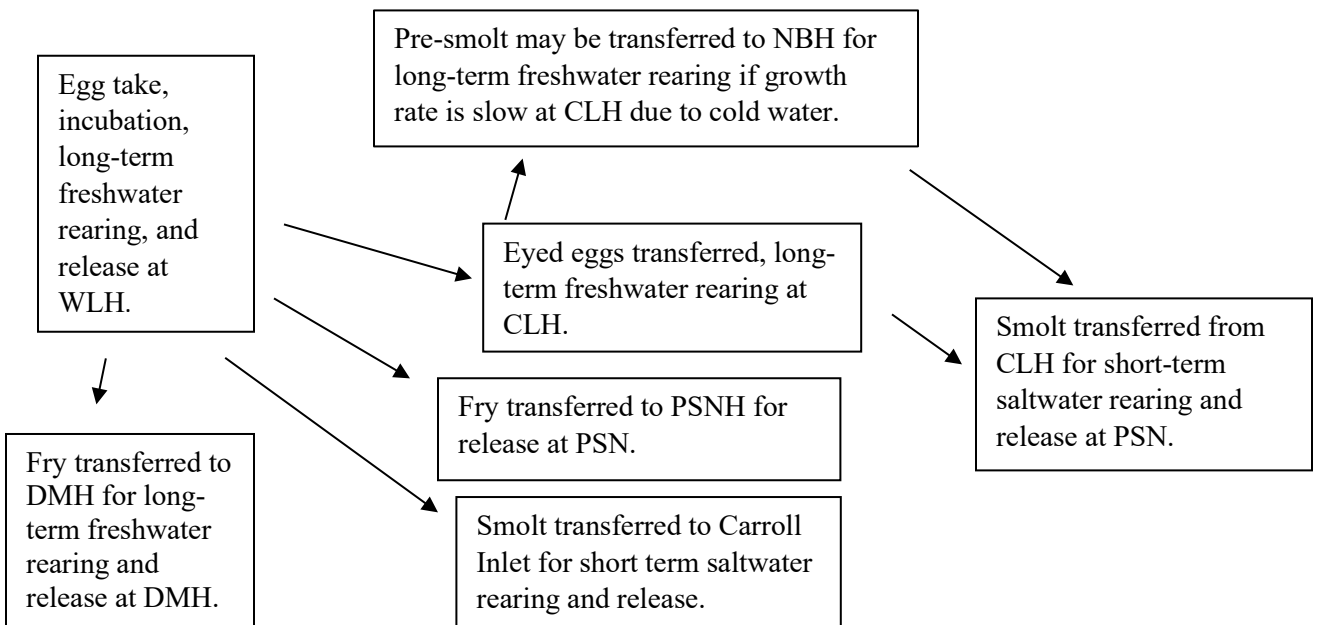
Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Whitman Lake Chinook salmon	2021	5/23	700,000	Smolt	CWT, 20% AC, 100% TM 100%

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Carroll Inlet Chinook salmon WLH	2021	5/23	600,000	Smolt	CWT, 20% AC, 100% TM 100%
Port Saint Nicholas Chinook salmon CLH	2021	5/23	450,000	Smolt	CWT, 20% AC, 100% TM 100%
Deer Mountain Chinook salmon	2021	5/23	80,000	Smolt	CWT, 20% AC, 100% TM 100%
Port Saint Nick Chinook salmon	2021	5/23	100,000	Smolt	CWT, 20% AC, 100% TM 100%
Deer Mountain zero-check Chinook	2022	6/23	20,000	smolt	CWT, 100%
Total			1,950,000	Smolt	

3.8 *Previous brood years that will remain in culture during the entire calendar year*

Program Name	Brood Year	Number Live (January 1)	Number to Release	Release Date	Life Stage
SSRAA Chinook salmon programs	2022	2,200,000 eggs	2,050,000	Spring 2024	fry

3.9 *Operational diagram*



3.10 *Fish transport permits*

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal #, Life Stage	Expires
14J-1019	Transport, release	WLH to DMH to Ketchikan Creek	105,000 smolt	6/30/2024
19J-1001	Egg take, transport, release	DMH to Carroll Inlet	600,000 eggs	12/31/2028
14J-1023	Transport, release	WLH to DMH to Neets Bay	500,000 pre-smolt	12/1/2024
14J-1015	Transport, release	WLH to CLH to Neets Bay	520,000 emergent fry	4/30/2024
15J-1021	Egg take, transport, release	WLH to CLH to Neets Bay	1,000,000 eggs	6/30/2025
14J-1022	Egg take, release	WLH to Herring Cove	2,100,000 eggs; 750,000 presmolt to Herring Cove	7/30/2024
15J-1006	Transport, release	WLH to Neets Bay	300,000 pre-smolt	4/30/2025
15J-1019	Transport, release	WLH to DMH to Carroll Inlet	420,000 fed fry	12/1/2025
19J-1003	Egg take, transport	WLH to DMH	600,000 eggs	12/31/2028
18J-1003	Transport, release	WLH to Carroll Inlet	620,000 smolt	4/1/2032
19J-1004	Rearing, release	DMH to Ketchikan Creek	25,000 zero-check smolt	8/1/2029
19J-1002	Transport, release	DMH to City Pond to Ketchikan Creek	114,000 juveniles	12/31/2028
19J-1013	Transport	DMH to WLH	500 adult	7/15/2029
20J-1021	Egg take, transport	NBH to WLH	500,000 eggs	8/1/2030
20J-1022	Egg take, transport	Carroll Inlet to WLH	500,000 eggs	8/1/2030
20J-1024	Egg take, transport	PSN to WLH	500,000 eggs	8/1/2030
14J-1014	Transfer	PSNH to WLH	350,000 fed fry	4/30/2024
20J-1027	Transport, release	CLH to PSN	500,000 smolt	3/30/2022
21J-1011	Transport, release	CLH to NBH to PSN	315,000 fed fry	4/1/2031
22J-1010	Transport, release	WLH to PSN	110,000 fed fry	7/1/2032

4.0 Summer chum salmon: NBH and WLH

4.1.1 *Neets Bay Hatchery summer chum salmon program details*

NBH is a central incubation facility for a portion of SSRAA's summer chum salmon programs. A portion of the eyed eggs collected at NBH are transported to WLH for incubation, rearing, and release at Kendrick Bay and Nakat Inlet. The rest of the eggs collected remain at NBH. Fry are transferred to saltwater net pens in February and released in late-April with a target weight of 2.5 grams. Chum salmon releases at Neets Bay ensure a sustainable broodstock to provide eggs for some of SSRAA's summer chum salmon programs. Chum salmon production at NBH provides returning adult chum salmon for harvest in common property fisheries in Districts 1 through 7. Some of the chum salmon that return to the Neets Bay SHA are harvested for cost recovery. All chum salmon are thermally marked to allow statistically valid evaluation of contributions to common property fisheries, assist in predicting returns, and evaluate optimal rearing and release strategies. NBH's production goal is to annually release 61 million 2.5-gram chum salmon.

4.1.2 *Whitman Lake Hatchery Kendrick Bay summer chum salmon program details*

Summer chum salmon are spawned at NBH. A portion of the eyed eggs are transported to WLH for incubation and rearing. In the event of a broodstock shortage at NBH, eggs could be collected at either Kendrick Bay or Nakat Inlet. Fry are transferred by vessel to the two release sites for long-term rearing and release. The traditional site is located in Kendrick Bay proper, while a second site, added in 2013, is located at the head of McLean Arm which is the next bay south of Kendrick Bay in lower Clarence Strait. In 2023 all fish are in Kendrick Bay distributed between two netpen sites. The FTP allows the use of any or all release sites in any given year provided that the total number of fry released does not exceed the maximum number permitted. Summer chum salmon smolt are released at Kendrick Bay or McLean Arm to produce adults for common property harvest, primarily the seine fleet in Districts 1 and 2, and terminal fishery harvest in the Kendrick Bay terminal harvest area. All chum salmon are thermally marked to allow statistically valid evaluation of contribution to common property fisheries, assist in predicting returns, and evaluating optimal rearing and release strategies. The production goal is to release 40 million 2.5-grams or larger, summer chum salmon each April.

4.1.3 *NBH Port Asumcion summer chum salmon program details*

In 2022, SSRAA received a NPA for NBH to allow the release of resultant fry from 7,500,000 green eggs collected at NBH. In 2023, SSRAA intends to collect eggs at NBH and transport fry to Port Asumcion. This NPA is coupled with a reduction to the NBH fall chum program of equal number so that there is no increase in overall chum production. The release at Port Asumcion contributes to SSRAA cost recovery and common property harvest in Districts 3 and 4. The program goal is to release 7,000,000 chum salmon at an average size of 2.5 grams. All smolt are thermally marked to allow statistically valid evaluation of contribution to the common property fisheries, assist in predicting returns and evaluating optimal rearing and release strategies. Port Asumcion production now consists of 12 million eggs from BIH, 7.5 million eggs from NBH, and 8 million at PSNH.

4.2 *Egg takes*

Program Name	Ancestral Stock(s)	Egg-take Site, Stat Area	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Neets Bay summer chum salmon	Carroll River	Neets Bay	Primary	70,500,000	70,500,000
Kendrick Bay	Carroll River	Neets Bay	Primary	44,300,000	44,700,000
Port Asumcion	Carroll River	Neets Bay	Primary	7,500,000	7,500,000

¹ NBH is permitted for 70,500,000 summer chum salmon eggs, plus an additional 50,000,000 can be taken for BIH (BIH and Anita Bay), another 44,700,000 eggs may be taken for WLH (Kendrick Bay release), and an additional 7,500,000 eggs can be taken for Port Asumcion.

4.3 *Broodstock capture method*

Chum salmon returning to NBH are hatchery-produced fish. An adequate number of adult chum salmon returning to NBH are collected by seine boat and placed behind a barrier net. The barrier net helps ensure that fish in excess of broodstock needs cannot enter the hatchery raceway system. Adults placed behind the net migrate up Neets Creek, into a fish ladder, and then are held in raceways for egg collection.

4.4 *Spawning*

Adult chum salmon are dispatched using an electro-anesthesia unit. Eggs are fertilized in buckets and transported to the hatchery to be rinsed and placed in NOPAD incubators. Eggs are sterilized with Iodophor.

4.5 *Egg-take schedule*

Eggs are collected in late July to late August as fish enter the raceway.

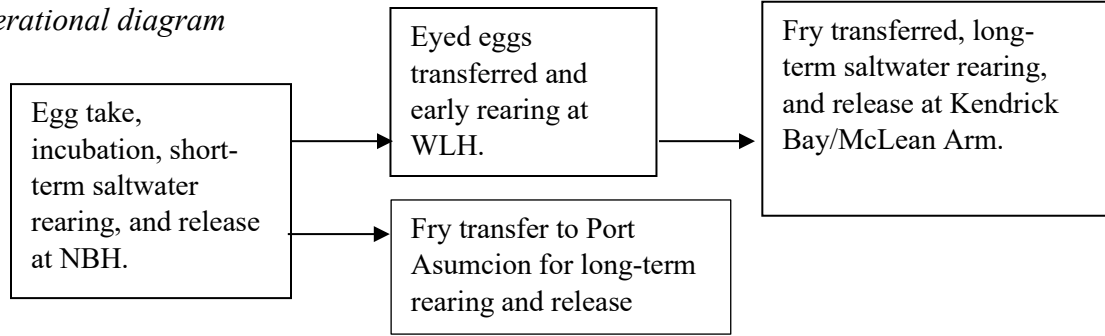
4.6 *Carcass disposal*

Carcasses are sold to contracted processor.

4.7 *Planned releases this calendar year*

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Neets Bay summer chum salmon	2022	4/2023	65,000,000	Smolt	TM, 100%
Kendrick Bay summer chum salmon	2022	4/2023	40,000,000	Smolt	TM, 100%
Port Asumcion summer chum salmon	2022	5/23	7,000,000	Smolt	TM, 100%
Total			112,000,000		

4.8 *Operational diagram*



4.9 *Fish transport permits*

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal#, Life Stage	Expires
85J-1027	Egg take, release	NBH to Neets Bay	70,500,000 eggs	12/31/2024
85J-1064	Egg take, transport, release	NBH to WLH to Nakat Inlet	9,200,000 eggs	9/1/2024
12J-1013	Egg take, transport, release	NBH to WLH to Kendrick Bay	44,700,000 eggs	8/1/2032
19J-1014	Remote egg take	Nakat Inlet to NBH	15,000,000 eggs	8/1/2029
19J-1015	Remote egg take	Kendrick Bay to NBH	20,000,000 eggs	8/1/2029
22J-1006	Transport	Tow net pens from NBH to near Bushy Point	10,000,000 smolt	4/1/2027
22J-1007	Transport	NBH to near Bushy Point by vessel	20,000,000 smolt	4/1/2027
23J-1001	Egg take, transport, release	NBH to PSN	7,500,000	2/01/2033

5.0 **Summer chum salmon: BIH, NBH, and PSNH**

5.1.1 *Burnett Inlet Hatchery summer chum salmon program details*

In 2023 SSRAA intends to collect up to 31,000,000 eggs at Burnett Inlet for BIH. The program provides for common property harvest throughout the region and particularly the District 6 gillnet and seine fisheries while also providing broodstock for other SSRAA programs and potential cost recovery as well. All chum salmon are thermally marked to allow statistically valid evaluation of contribution to the common property fisheries, assist in predicting returns, and evaluation of optimal rearing and release strategies. The program goal is to release 28,000,000 2.5-gram chum salmon each April or May.

5.1.2 *Burnett Inlet Hatchery Anita Bay summer chum salmon program details*

In 2023, SSRAA intends to collect summer chum eggs for the Anita Bay, Nakat Inlet, Port Asumcion, and BIH releases at BIH. In the event of a broodstock shortfall at BIH, eggs will be transferred from NBH, or remote egg-takes could occur at Anita Bay in the event that neither BIH nor NBH could secure adequate broodstock. Fry will be transported from BIH to Anita Bay by vessel for short-term saltwater rearing. Net pens are located in the freshwater influence of several creeks mixing at the head of the bay to ensure proper imprinting. Fish are released into Anita Bay in late April. The purpose of the program is to provide increased harvest of summer chum salmon for the seine fleet in District 7, the gillnet fleet in Districts 6 and 8, and the troll fleet in Districts 6, 7, and 8. These fish are harvested by all commercial fleets in the terminal area. The District 8 gillnet fishery is the primary harvester of returns of summer chum salmon to Anita Bay. All chum salmon are thermally marked to allow statistically valid evaluation of contribution to the common property fisheries, assist in predicting returns, and evaluation of optimal rearing and release strategies. The production goal is to release 22 million, 2.5-grams or larger, summer chum salmon each April. BIH also serves as an alternate broodstock site for NBH.

5.1.3 *Burnett Inlet Hatchery Nakat Inlet summer chum salmon program details*

In 2018, SSRAA received a NPA for BIH allowing for the addition of 6 million green eggs for the release site at Nakat Inlet. In 2020, a SSRAA received a NPA to consolidate all of the Nakat Inlet summer chum production under the BIH permit while shifting the Kendrick Bay/McLean Arm to Whitman Lake. SSRAA intends to collect eggs at BIH and transport resultant fry from BIH to Nakat Inlet where SSRAA has a longstanding summer chum program. The release at Nakat contributes primarily to the District 1 gillnet fishery. All chum salmon are thermally marked to allow statistically valid evaluation of contribution to the common property fisheries, assist in predicting returns, and evaluation of optimal rearing and release strategies. The program goal is to release 13,500,000 2.5-gram chum salmon each April or May.

5.1.4 *Burnett Inlet Hatchery Port Asumcion summer chum salmon program details*

In 2018, SSRAA released BY17 summer chum at Port Asumcion that were incubated and transported from Burnett Inlet. The permit for Port Asumcion was approved for Prince of Wales Hatchery Association (POWHA) through the PSN Hatchery Permit but never implemented. SSRAA acquired POWHA including the Port Asumcion permit in 2016 and acquired a permit to allow Burnett Inlet to produce the fish on behalf of PSNH. In 2019, SSRAA modified the PSNH site to accommodate incubation of 8,000,000 chum. In 2023, an additional 7.5 million green eggs for release at Port Asumcion were added to the NBH permit bringing the total green egg authorization for the site to 27.5 million. Port Asumcion production now consists of 12 million eggs from BIH, 7.5 million eggs from NBH, and 8 million at PSNH. Adult returns to Port Asumcion will be harvested in the terminal area as cost recovery to support all SSRAA programs, particularly the KRH coho production. Some returning adults will be harvested by the seine and troll fleets in common property fisheries. The first returns to the site occurred in 2020. All smolt are thermally marked to allow statistically valid evaluation of contribution to the common property fisheries, assist in predicting returns, and evaluate optimal rearing and release strategies. SSRAA's

overall summer chum salmon production goal at Port Asumcion is to release 25,000,000 chum salmon at 2.5 grams in April.

5.1.5 *Port Saint Nicholas Hatchery Port Asumcion summer chum salmon production*

In 2014, the PSNH permit was altered to add 8 million Carroll River stock summer chum salmon green eggs to the permitted capacity and add Port Asumcion as the chum salmon remote release site. The eggs will be provided by either Neets Bay or Burnett Inlet. SSRAA collected eggs for the program in 2017 and the first fish were released in the spring of 2018. The eggs for 2018 were collected and incubated at BIH under a permit that allows BIH to conduct the program on behalf of PSNH. In 2023 SSRAA intends to collect eggs again at BIH and transport eyed eggs to PSNH.

5.2 *Egg takes*

Program Name	Ancestral Stock(s)	Egg-take Site, Stat Area	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Burnett Inlet summer chum	Carroll River	BIH	Primary	31,000,000	35,000,000 ¹
Anita Bay summer chum	Carroll River	BIH	Primary	25,000,000	25,000,000 ¹
Nakat Inlet	Carroll River	BIH	Primary	15,000,000	15,200,000 ¹
Port Asumcion	Carroll River	BIH	Primary	20,000,000	20,000,000 ²
TOTAL				91,000,000	95,200,000

¹ BIH PNP permit.

² Includes 12 million eggs taken at BIH and 8,000,000 taken at BIH on behalf of PSNH that are transported to PSNH for hatch.

5.3 *Broodstock capture method*

Chum salmon returning to BIH are hatchery-produced fish. Fish are spawned as they swim up the fish ladder into the holding raceways. Fish in excess of broodstock needs may be harvested for cost recovery.

5.4 *Spawning*

Adult chum salmon are dispatched using a pass-through electro-anesthesia unit. Eggs are fertilized in buckets and transported to the hatchery to be rinsed and placed in incubators. Eggs are sterilized with Iodophor.

5.5 *Egg-take schedule*

Eggs are collected in late July to late August as fish enter the raceway.

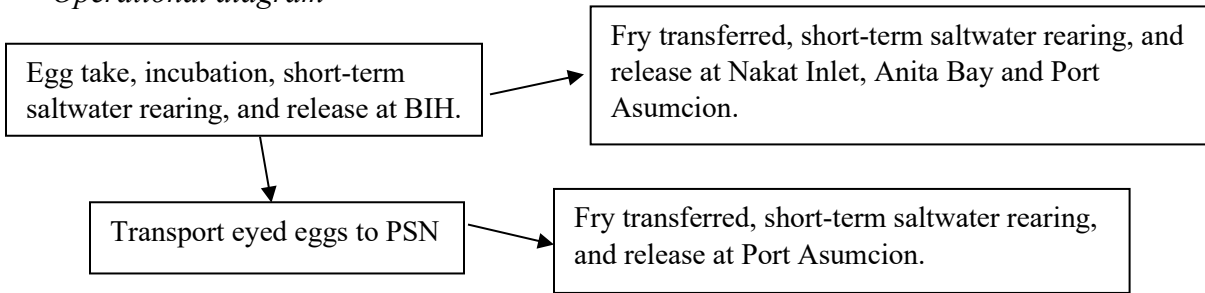
5.6 *Carcass disposal*

Carcasses are removed by the licensed cost recovery firm, given away as bait, or dumped whole in an approved deep-water location.

5.7 *Planned releases this calendar year*

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Burnett Inlet summer chum	2022	4/2023	28,000,000	Smolt	TM, 100%
Anita Bay summer chum salmon	2022	4/2023	22,000,000	Smolt	TM, 100%
Port Asumcion	2022	4/2023	18,000,000	Smolt	TM, 100%
Nakat Inlet	2022	4/2023	14,000,000	Smolt	TM, 100%
Total			89,000,000		

5.8 *Operational diagram*



5.9 *Fish transport permits*

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal #, Life Stage	Expires
15J-1002	Backup egg take, transfer, release	NBH to BIH to Burnett Inlet	25,000,000 eggs	7/30/2025
18J-1009	Egg take, release	BIH to Burnett Inlet	35,000,000 eggs	7/31/2028
18J-1010	Egg take, transfer, release	BIH to Nakat Inlet	15,200,000 eggs	7/31/2030
18J-1011	Egg take, transfer, release	BIH to Kendrick Bay	10,000,000 eggs	7/31/2028
18J-1007	Egg take, transfer, release	BIH to Port Asumcion	12,000,000 eggs	7/31/2028
22J-1015	Egg take, transport, rearing, release	NBH to PSNH	8,000,000 eggs	10/01/2032
10J-1028	Egg take, transfer, release	NBH to BIH to Anita Bay	25,000,000 eggs	12/31/2025
18J-1008	Egg take, transfer, release	BIH to Anita Bay	25,000,000 eggs	7/31/2028
19J-1016	Backup remote egg-take	Anita Bay to BIH	20,000,000 eggs	8/1/2029

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal #, Life Stage	Expires
19J-1019	Egg take, transfer, release	BIH to PSNH to Port Asumcion	8,000,000 eggs ¹	12/31/2029
20J-1028	Remote brood-take	Anita Bay to BIH	15,000 brood	12/31/2023
21J-1018	Egg take, transfer	BIH to NBH	50,000,000 eggs	8/1/2031

¹ On behalf of Port Saint Nicholas Hatchery

6.0 Fall chum salmon: NBH, BIH, and Nakat Inlet

6.1.1 Neets Bay Hatchery/Burnett Inlet Hatchery fall chum salmon program details

SSRAA intends to collect all fall chum eggs at BIH in 2023 but forecasts indicate that it may be difficult to reach the full goal. NBH will remain an alternate site and will be managed in real time as the 2023 season unfolds. If BIH is able to collect all of the necessary eggs, then eyed eggs will be transferred to NBH. Fall chum salmon releases at NBH provide returning adult chum salmon for harvest in common property fisheries, primarily the gillnet fleet in Districts 1, 6, and 7. Fall chum salmon returning to the Neets Bay SHA in excess of broodstock are harvested for cost recovery. All smolt are thermally marked to allow statistically valid evaluation of contribution to the common property fisheries, assist in predicting returns, and evaluate optimal rearing and release strategies. The production goal is to release 20,000,000, 2–grams or larger, fall chum salmon by mid-May.

6.1.2 Nakat Inlet fall chum salmon program details

Approximately 31.5 million eggs are collected each September at NBH or BIH for the fall chum program. Eight million fry produced from these eggs are short-term reared in freshwater raceways at NBH, then transported by vessel to Nakat Inlet for continued rearing in seawater pens. The pens are located in the freshwater influence of Nakat Creek to ensure proper imprinting. Chum salmon smolt are released from the pens at Nakat Inlet in early May. Fall chum salmon returns to Nakat Inlet provide harvest in the common property fisheries, primarily by the gillnet fleet in Districts 1, 6, and 7 and terminal gillnet fisheries in the Nakat Inlet THA. All chum salmon are thermally marked to allow statistically valid contribution to the common property fisheries, assist in predicting returns, and evaluate optimal rearing and release strategies. The production goal is to release 8 million 2-grams or larger, fall chum salmon by mid-May.

The purpose of moving the broodstock program to BIH is to provide a second broodstock source for SSRAA fall chum salmon programs. In brood years 2013–2016, approximately 6 million eggs were collected at NBH and transferred to BIH as eyed eggs or fry. In 2023, SSRAA intends to collect all eggs for the fall chum program at BIH. In 2019, SSRAA received a NPA to allow for an increase of 4 million eggs for BIH to ensure that the goal of meeting all program needs at BIH can be attained. The returning adults contribute significantly to the District 6 gillnet fishery. Fish in excess of broodstock needs will be harvested for cost recovery. All chum salmon are thermally marked to allow statistically valid contribution to the common property fisheries, assist in

predicting returns, and evaluating optimal rearing and release strategies. The production goal is to release 9 million 2-grams or larger fall chum salmon by mid-May.

6.2 *Egg takes*

Program Name	Ancestral Stock(s)	Egg Take Site, Stat Area	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Neets Bay fall chum salmon	Disappearance + Lagoon Creek	Neets Bay Hatchery	Alternate	0	35,000,000 ¹
Burnett Inlet Fall Chum salmon	Disappearance + Lagoon Creek	NBH	Primary	31,500,000 ²	10,000,000 ³

¹BIH fall chum egg take limit for eggs transferred to NBH is 29 million.

²Fall chum eggs, up to the NBH permitted capacity, can be taken at BIH.

³BIH fall chum egg take limit for BIH is 10 million (egg take through release at BIH). Up to 6 million eggs, or fry from up to 6 million eggs, can be transported from NBH to BIH.

6.3 *Broodstock capture method*

Fall chum salmon returning to NBH are hatchery-produced fish. An adequate number of adult chum salmon returning to NBH are collected by seine boat and placed behind a barrier net. The barrier net helps ensure that fish in excess of broodstock needs cannot enter the hatchery raceway system. Adults placed behind the net migrate up Neets Creek, into a fish ladder, and then are held in raceways for egg collection.

6.4 *Spawning*

Adult chum salmon are dispatched using an electro-anesthesia unit. Eggs are fertilized in buckets and transported to the hatchery to be rinsed and placed in NOPAD incubators. Eggs are sterilized with Iodophor.

6.5 *Egg-take schedule*

Eggs are collected in September as fish enter the raceway.

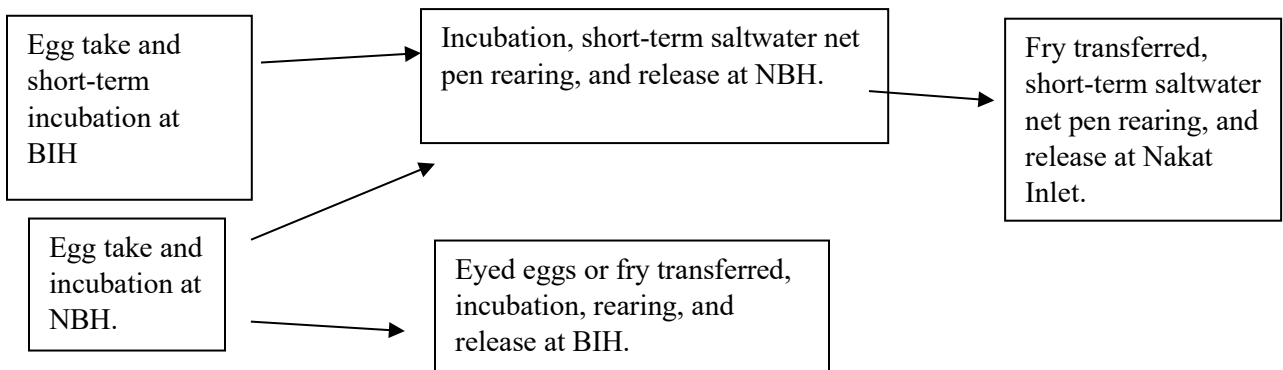
6.6 *Carcass disposal*

Carcasses are given away as bait, sold for cost recovery, or removed by the licensed cost recovery firm.

6.7 *Planned releases this calendar year*

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Neets Bay fall chum salmon	2022	May 2023	0	Smolt	TM, 100%
Nakat Inlet	2022	May 2023	3,000,000	Smolt	TM, 100%
Burnett Inlet fall chum salmon	2022	May 2023	5,500,000	Smolt	TM, 100%
Total			8,500,000		

6.8 *Operational diagram*



6.9 *Fish transport permits*

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal #, Life Stage	Expires
98J-1006	Egg take, release	NBH to Neets Bay	35,000,000 eggs	6/30/2028
16J-1022	Egg take, transfer, and release	BIH to NBH to Neets Bay	29,000,000 eggs	12/31/2026
13J-1006	Egg take, transfer, release	NBH to BIH to Burnett Inlet	6,000,000 eggs	8/1/2023
14J-1003	Transfer, release	NBH to Burnett Inlet	Fry from 6,000,000 eggs	12/31/2024
16J-1021	Egg take, release	BIH to Burnett Inlet	10,000,000 eggs	12/31/2026
00J-1004	Transfer, release	NBH to Nakat Inlet	8,000,000 fry	12/31/2030

7.0 **Klawock River Hatchery fall coho salmon**

7.1 *Program details*

The purpose of this program is to enhance production of coho salmon for common property fisheries in the Craig and Klawock areas. Returning coho salmon in excess of escapement and broodstock needs are harvested for cost recovery.

Prior to release, 85,000 of the total coho salmon production are coded-wire-tagged and adipose fin clipped. Tag recovery from adult coho salmon will commence in salt water where ADF&G conducts port sampling and a dockside creel census throughout Southeast Alaska. The coho salmon that pass through the commercial and sport fisheries in salt water and move into Klawock River are sampled during cost recovery and egg takes. Recovered heads, assumed to hold CWTs, are sent to the Mark, Tag, and Age Lab in Juneau where they are processed to help determine hatchery contribution. ADF&G estimates freshwater sport harvest of coho salmon in Klawock River from the Statewide Harvest Survey and harvest reports on federal and state subsistence permits. The hatchery contribution of the freshwater harvest can be estimated by applying the hatchery composition of the cost recovery and egg take.

7.2 *Egg takes*

Program Name	Ancestral Stock(s)	Egg-Take Site, Stat Area	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
Klawock River coho salmon	Klawock River	Klawock River Hatchery 103-60-10470	P	5,000,000	5,500,000
Species/Run Totals				5,000,000	5,500,000

7.3 *Escapement Requirement and Removal Schedule*

The escapement goal is 4,000–9,000 coho salmon based on weir count. The department developed a weekly escapement schedule for statistical week 31 through statistical week 48 to achieve an escapement target, 6,500, which is within the escapement goal range. The schedule removes 140 coho salmon from the 6,500 fish escapement target to account for fish returning prior to statistical week 31 and after November 30. SSRAA will follow the weekly escapement schedule and provide the department a weekly report containing daily counts of coho and sockeye salmon passed upstream, used for cost recovery, and collected for broodstock. All other species will be passed as efficiently as possible. Fish given away to the community are classified as cost recovery. The weekly report must be e-mailed to the department contacts listed below by noon Monday of the following statistical week. Significant overage/underage in a given statistical week will be made up the following week until the schedule’s cumulative totals are caught up. SSRAA staff will contact the department if large numbers of coho salmon are seen migrating into Klawock Lake prior to weir installation.

Weekly Coho Salmon Escapement Schedule, 2023¹

Stat Week	Dates	Weekly Escapement	Sum
31	7/30–8/5	30	30
32	8/6–8/12	45	75
33	8/13–8/19	75	150
34	8/20–8/26	135	285
35	8/27–9/2	190	475
36	9/3–9/9	265	740

Stat Week	Dates	Weekly Escapement	Sum
37	9/10–9/16	370	1,110
38	9/17–9/23	580	1,690
39	9/24–9/30	705	2,395
40	10/1–10/7	815	3,210
41	10/8–10/14	815	4,025
42	10/15–10/21	725	4,750
43	10/22–10/28	575	5,325
44	10/29–11/4	425	5,750
45	11/5–11/11	260	6,010
46	11/12–11/18	180	6,190
47	11/19–11/25	100	6,290
48	11/26–11/30	70	6,360

¹ This schedule assumes the weir will be installed during statistical week 31 and that it be pulled no later than November 30, to allow unimpeded fish migration to and from Klawock Lake. The department believes that based on historical data, enough coho salmon will return before statistical week 31, and after November 30, to reach the 6,500 coho salmon escapement target using the above escapement schedule.

Department contacts for weekly salmon count reports are:

- Division of Sport Fish, Region 1 Enhancement Coordinator, Matt Catterson (matt.catterson@alaska.gov)
- Division of Commercial Fisheries area management biologist (AMB) in Ketchikan, Bo Meredith (bo.meredith@alaska.gov)
- Division of Sport Fish AMB in Craig, Craig Schwanke (craig.schwanke@alaska.gov).

7.4 Weir Operation

In 2023, ADF&G requests that the Klawock River weir be installed on July 1 in order to estimate Klawock Lake sockeye salmon escapement. Hatchery personnel will count all sockeye salmon that pass upstream through the weir beginning July 1. The numbers will be reported to ADF&G weekly. A downstream gate will be installed in the weir to allow unimpeded outmigration of fish in the Klawock River through July.

The weir will be operated as follows to capture coho salmon for cost-recovery and broodstock needs:

Beginning Statistical Week 31: Fish will be counted through the cost-recovery raceways and/or counted through an opening in the weir face, each week until the weekly escapement target for coho salmon has been achieved. Coho and sockeye salmon will be counted by species as they are passed through the weir or placed in cost-recovery/broodstock raceways and recorded in daily logbooks. The numbers will be reported to ADF&G weekly. The following data will need to be included each day in the logbook: start and stop times for counts; counts of fish passed by species; and sampling location (e.g., weir face or raceway). All species that enter the raceways and passed upstream for escapement will be moved as quickly as possible.

The weir will be removed from the river no later than November 30:

November 30: Disassemble and remove the weir from the river. In the event that escapement has not been met by that time, it will be assumed that additional numbers will be minimal and that unhindered movement upstream and downstream by all species will occur. Furthermore, eliminating the weir from the river at this time will reduce equipment damage due to increases in late fall flood events.

7.5 *Broodstock capture method*

Returning coho salmon are a mix of wild stock and hatchery-origin fish. Fish migrating up the river are diverted into raceways at the weir. Coho salmon are sorted back into the river upstream of the weir, held as broodstock, or sold as cost recovery. Broodstock will preferably not be removed from the fish previously passed upstream of the weir as escapement. The department may approve removal of fish from the river and lake above the weir only if the escapement goal has been exceeded and there is a broodstock shortage. At no time will collection of broodstock above the weir reduce the coho salmon escapement below the escapement goal range. If the weir has been overtopped by a flood, an accurate estimate of the number of fish that passed the weir during the flood event should be reported to the department shortly after the event occurs. Hard counts of passing fish are preferred over calculated estimations.

7.6 *Spawning*

An estimated 3,800 fish are required for broodstock. Fish migrating up the river are diverted into raceways at the weir. Broodstock will be held in raceways until ripe. Eggs from three females are fertilized with milt from two males in two-gallon buckets. Fresh water is added to activate fertilization. The eggs are rinsed in clean water and then loaded into Kitoi box incubators for water hardening in 100 ppm Iodophor solution for one hour.

7.7 *Egg-take schedule*

Broodstock collection begins in September and ends in November. Egg takes occur weekly from late October until mid-November. Females are sorted for ripeness prior to spawning. The number of eggs collected is based on a fecundity of 2,800 eggs per female.

7.8 *Carcass Disposal*

These will be returned to the watershed or sold as bait per AS 16.10.450.

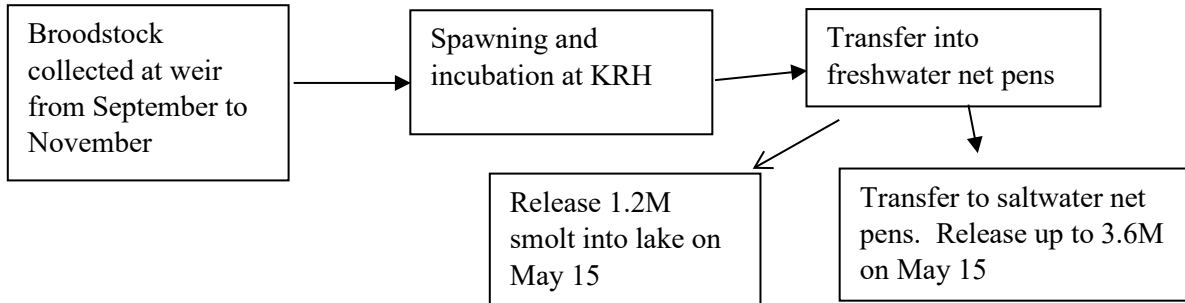
7.9 *Planned releases this calendar year of previous brood years' production*

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, # Marked	Thermal Mark
Early lake release coho salmon	2021	5/15/2023	1.2 million	smolt	CWT, 3.5%	No
Lake release	2021	6/01/2023	2.9 million	smolt	CWT, 1.5%	No

7.10 Previous brood years that will remain in culture during the entire calendar year.

Program Name	Brood Year	Number Live (Jan. 1)	Number, Release Date	Life Stage
Klawock River coho salmon	2022	4.2 million	4 million, 2024	Eyed Eggs/Alevins

7.11 Operational Diagrams



7.12 Fish Transport Permits

FTP #	Egg take, transport, or release?	Trans. From → To	Maximal #, Life Stage	Expires
16J-1011	Egg take, transport, release	KRH to Klawock Lake	5,000,000 eggs ¹	6/30/2029
16J-1010	Transport, release	Klawock Lake to saltwater net pens	Pre-smolt from 5,000,000 eggs	6/30/2026

¹ Up to 1.2 million fish maybe be released on May 15. Remaining fish will be released June 1. Maximum egg take on FTP is 5,000,000 and does not include eggs taken for release at Port Asumcion.

8.0 Port Saint Nicholas Chinook salmon

8.1 Program Details for Port Saint Nicholas Release

Beginning in 2018, SSRAA increased the number of smolt released at PSN with yearling smolt from CLH. The PSNH was producing 130,000 at the time, which was well below the permitted capacity of 770,000 smolt. The fish in question were slated for transport to NBH but in response to concerns relative to the Behm Canal corridor and the Unuk River Chinook salmon wild stock returns, SSRAA shifted production to the release site at PSN. In 2023, SSRAA will continue the PSN release at the 600,000 fish level with 500,000 of those coming from CLH. Returning adults will contribute to the commercial and sport harvest in Districts 3, 4, and 13 as well as cost recovery. PSNH will continue to produce smolt on site for release at the PSN netpen site but eggs will remain at WLH from egg take until approximately July 1 when fed fry will be transported via the Inter-Island Ferry from Ketchikan to Prince of Wales Island and overland to PSNH for

continued freshwater rearing until April of the following year. This will allow the facility to be vacant from April–July each year.

8.2 Weir Operation

A weir will be installed at the terminus of Port Saint Nicholas Creek to prevent returning Chinook salmon that enter the creek from transiting to upstream spawning habitat. The weir will be located at approximately 55°26'59"N lat., 132°59'30"W long., approximately 100-feet upstream of the saltwater sport fishing boundary, as determined and marked by ADF&G. This corresponds to city-owned property along the creek, also known as tract K, ANCSA 14 C subdivision plat 95-57, recorded September 12, 1995. The weir will be operated from May 1 through August 15. If adult Chinook salmon are no longer in the system, the weir will be removed before August 15. Picket spans will be gauged to allow pink and chum salmon, and trout species, free access in either direction yet inhibit passage of Chinook salmon by virtue of their size. Due to run timing of salmon in the system, it is not expected that there will be any major conflicts between returning Chinook salmon and native pink salmon. The weir will be angled to lead Chinook salmon into a covered trap section with an anti-backout device. Returning Chinook salmon will not be allowed to spawn. Chinook salmon carcasses will be given away or sold as bait per AS 16.10.450. The weir location is in very shallow water, therefore, installation and maintenance will be relatively easy. Hatchery staff will walk the Port Saint Nicholas headstream weekly until August 31 and remove any Chinook salmon found upstream of the weir. The department requests that a weekly update of weir and stream survey activity be provided to the Division of Commercial Fisheries (CF) area management biologist (AMB) in Ketchikan and Division of Sport Fisheries (SF) AMB in Craig during the period that the weir is in place.

8.3 Egg Takes

Program Name	Ancestral Stock(s)	Egg-Take Site	Primary or Alternate Source?	Current Year Egg Goal	Permitted Maximum
PSNH Chinook salmon	Chickamin River	Whitman Lake Hatchery	Primary	120,000	770,000
CLH to PSN Chinook salmon	Chickamin River	Whitman Lake Hatchery	Primary	520,000	520,000

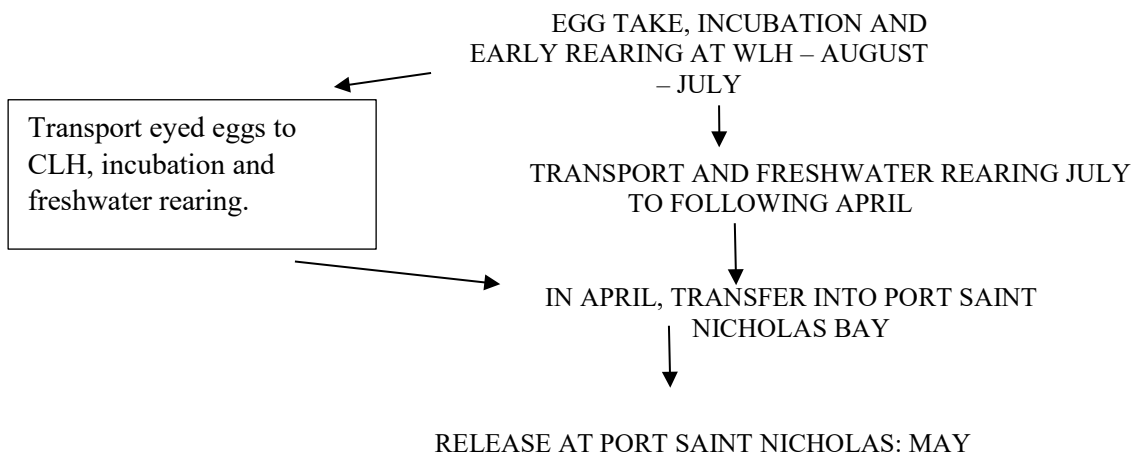
8.4 Planned releases this calendar year of previous brood years' production

Program Name	Brood Year	Release Date	Target Release	Life Stage	Type of Mark, # Marked
PSNH Chinook salmon	2021	May 2023	100,000	Smolt	CWT, 20% AC 100%, TM 100%
CLH to PSN Chinook salmon	2021	May 2023	450,000	Smolt	CWT 20% AC 100%, TM 100%

8.5 *Previous brood years that will remain in culture during the entire calendar year*

Program Name	Brood Year	Number Live (Jan. 1)	Release Date	Life Stage
PSNH salmon (Chickamin River stock)	2022	110,000	May 2024	Sac fry
CLH to PSN Chinook salmon	2022	510,000	May 2024	Sac fry

8.6 *Operational diagram for Port Saint Nicholas Release*



8.7 *Fish transport permits*

FTP #	Egg take, transport, or Release?	Transport From → To	Maximal #, Life Stage	Expires
16J-1012	Transport, release	WLH to PSNH to Port St Nicholas	770,000 eggs	6/30/2026
16J-1014	Transport	PSN to Neck Lake to PSN	140,000 pre-smolt	6/30/2026
20J-1027	Transport, release	CLH to PSN	500,000 smolt	8/1/2030
20J-1031	Transport, release	CLH to NBH to PSN (cold-water rearing option)	250,000 fed fry	10/1/2030
21J-1011	Transport, release	CLH to NBH to PSN	315,000 fed fry	4/1/2031
22J-1010	Transport, release	WLH to PSN	110,000 fed fry	07/01/2032

9.0 Deer Mountain triploid rainbow trout

9.1 Deer Mountain Triploid trout program details

Triploid rainbow trout eggs are transported from William Jack Hernandez Hatchery (WJHH) to DMH in February each year as eyed eggs. Eggs are incubated and reared to various sizes prior to stocking in local Ketchikan lakes (Harriet Hunt Lake and Carlanna Lake). Four stockings occur at 1 gram, 2 grams, 4 grams, and 10 grams throughout the summer. Some fish are retained at the hatchery for 16 months to be stocked to City Park for harvest in a “Kid’s Fishing Day” in June. All three lakes are category 3, meaning they have barriered or weired outlets.

9.2 Planned releases this calendar year

Program Name	Brood Year	Release Date	Number to Release	Life Stage	Type of Mark, % Marked
Deer Mountain Rainbow Trout	2023	May - August	50,000	Juvenile	none

9.3 Fish transport permits

FTP #	E.t., trans., or rel.?	Trans. From → To	Maximal #, Life Stage	Expires
20J-1001	transfer	WJHH to DMH	200,000 eggs	12/31/2029
20J-1002	release	DMH to Carlanna Lake	12,000 subcatchable	12/31/2029
20J-1003	release	DMH to Harriet Hunt Lake	40,000 subcatchable	12/31/2029
20J-1004	release	DMH to City Park	2,000 catchable	12/31/2029

10.0 Mark and tag program

The purpose of marking hatchery releases is to evaluate SSRAA’s contribution to fisheries. Mark recoveries provide valuable data for estimating survival by hatchery, release site, stock, brood year, rearing strategy, and release strategy. All SSRAA hatchery-produced chum, Chinook, and coho salmon releases are marked by otolith marks, clipped adipose fin, CWT, or a combination of these. Chum salmon are otolith marked. A portion of all coho and Chinook salmon releases are marked by having their adipose fin clipped (AC) and CWT'd. Starting in 2020, a portion of Chinook releases were 100% AC with a portion of these fish being CWT'd.

Chum salmon otoliths will be sampled from the fisheries and the hatchery rack from across the return. All Chinook and coho salmon returning to the hatchery rack will be examined for marks and tags. Chinook and coho salmon harvested in cost recovery fisheries will also be sampled for CWTs as necessary for return evaluation.

Additionally, mark recoveries assist National Marine Fishery Service (NMFS), ADF&G, and hatchery operator's research on salmon return forecasts. Otolith mark recoveries can also be recovered from at-sea surveys to determine marine distribution by origin, for example. Otoliths may be sampled from streams for mark presence and identification.

Releases by mark type are listed in the Production Summary (section 1.5). Fishery mark recovery programs are in program details, above.

11.0 Harvest Management

11.1 *Special Harvest Areas*

Sport and personal use fisheries will be managed as described in regulations for these waters. The department may use emergency order (EO) authority to address issues that arise in season.

5 AAC 40.043. Neets Bay Special Harvest Area - Behm Canal

Management Considerations: Returning fish to the SHA will be sufficient to meet broodstock needs. No management considerations are required to meet the facilities' broodstock goals. Common property fisheries will occur in the SHA in the event adult returns either exceed SSRAA's ability to harvest all fish in a timely manner or SSRAA's cost-recovery needs.

Projected returns this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Coho salmon	Neets Bay	53,600	26,700	80,300
Chinook salmon	Neets Bay	1,700	3,100	4,800
Chum salmon, summer	Neets Bay	245,500	546,500	792,000
Chum salmon, fall	Neets Bay	27,300	37,700	65,000

¹ Includes terminal harvest area, broodstock, escapement, etc.

5 AAC 40.041. Herring Bay Special Harvest Area - Ketchikan

Management Considerations: That portion of the SHA between the hatchery outlet and south Tongass Highway Bridge is closed to sport fishing by regulation. Herring Cove Creek downstream of the highway bridge may be closed to sport fishing if broodstock shortages develop in season. The remainder of the SHA may be closed to all fishing if hatchery broodstock needs are jeopardized.

Chinook salmon

In 2023, SSRAA is not anticipating a shortage of broodstock; however, protection of broodstock from the sport fishery in the Herring Cove SHA may be requested to allow adults to pass through to the hatchery.

In 2012, a Herring Bay THA management plan was adopted by the Alaska Board of Fisheries (BOF). Three THAs were established: one for troll gear, one for sport fish gear, and one for a personal use fishery. Trolling will be open from July 1 through August 30. Personal use fishing will be allowed at all times that the troll THA is open. Sport fishing will be open from June 1 through July 31. Modification may be considered to the plan if broodstock shortages occur at the WLH.

Coho salmon

SSRAA does not anticipate a broodstock shortfall in 2023 but SSRRA may request an SHA closure if the anticipated return does not appear to support broodstock requirements. Fish in excess of broodstock needs will be removed and sold to a local processor.

Coho salmon returns are expected to be average. Due to the configuration of the SHA, protection of the broodstock from the sport fishery is sometimes requested during early August through October. There are two primary concerns: first, the eggs for all of SSRAA’s fall coho salmon projects are collected from adults returning to Whitman Lake and second, SSRAA has documented a common property harvest rate on these fish that has exceeded 95% of the return.

SSRAA staff tracks harvest and return of these fish by the net, sport, and personal use fisheries. SSRAA monitors the CWT database and contacts ADF&G stock assessment personnel, including the Division of Commercial Fisheries troll biologist, to assess this return.

SSRAA will ask the department for an SHA closure if the anticipated return does not appear to support broodstock requirements. SSRAA will ask the department to reopen the SHA once enough broodstock have been collected. There have been occasions when SSRAA has not been able to collect the required number of adults at Whitman Lake despite this closure.

There is no plan for cost recovery harvest of coho salmon at Whitman Lake. If excess fish do enter the raceway, they are processed and sold locally as a means of removing carcasses from the hatchery.

Projected return this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Fall coho salmon	Herring Cove	9,400	4,800	14,200
Chinook salmon	Herring Cove	2,800	9,200	12,000

¹Includes terminal harvest area, broodstock, and escapement.

5 AAC 40.045. Nakat Inlet Special Harvest Area

Management considerations: Management considerations do not need to be made, as broodstock acquisition will not be performed at Nakat Inlet. The summer fishery in the Nakat Inlet SHA is gillnet, troll, and personal use for both summer and fall seasons. If significant numbers of unharvested fish remain in the SHA after common property fishing efforts have ceased, SSRAA will conduct a clean-up fishery to remove any excess fish.

Projected return this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Coho salmon	Nakat Inlet	12,700	5,900	18,600
Chum salmon, summer	Nakat Inlet	168,000	103,000	271,000
Chum salmon, fall	Nakat Inlet	44,500	28,500	73,000

¹Includes terminal harvest area, broodstock, and escapement.

Kendrick Bay Terminal Harvest Area

Management Considerations: The Kendrick Bay THA is defined as those waters of Kendrick Bay west of 131°59'00"W. longitude and those waters of McLean Arm west of 131°57.80'W. longitude. Management considerations do not need to be made to protect broodstock, as broodstock will not be taken at Kendrick Bay. Kendrick Bay opens by regulation on June 15 and closes September 30 each season.

Projected return this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Chum salmon, summer	Kendrick Bay	563,600	168,400	732,000

¹Includes terminal harvest area, broodstock, and escapement.

5 AAC 40.039. Burnett Inlet Special Harvest Area

Management Considerations: Special management considerations to protect broodstock are not anticipated at this time. Summer and fall chum will be returning to Burnett Inlet in 2023 and any excess broodstock will be harvested for cost recovery.

Projected return this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Chum salmon, summer	Burnett Inlet	140,400	327,600	468,000
Chum salmon, fall	Burnett Inlet	4,100	2,900	7,000

¹Includes terminal harvest area, broodstock, and escapement.

5 AAC 40.061. District 7: Anita Bay Special Harvest Area.

Management Considerations: A hatchery permit holder harvesting salmon within the SHA is exempt from the provisions of 5 AAC 33.310. Fishing periods for the hatchery permit holder will be opened and closed by EO by gear type. SSRAA intends to conduct cost recovery in 2023 from the summer chum return beginning July 15 and ending August 12 with the intention of harvesting

the bulk of the terminal summer chum. SSRAA may request that the area be opened by EO if cost recovery becomes unnecessary or non-viable.

Projected returns for this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Coho salmon	Anita Bay	5,300	4,800	10,100
Chum salmon, summer	Anita Bay	161,700	112,300	274,000
Chinook salmon	Anita Bay	1,500	6,200	7,700

¹Includes terminal harvest area, broodstock, and escapement.

5 AAC 40.060 Neck Lake Special Harvest Area

Management Considerations: There will be no return to the Neck Lake SHA in 2023.

Projected returns for this year:

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Coho salmon, summer	Neck Lake	0	0	0

¹Includes terminal harvest area, broodstock, and escapement.

5 AAC 33.371 District 1: Carroll Inlet Terminal Harvest Area.

Management Considerations: The Carroll Inlet THA was re-established by the BOF in 2018. The area will be managed from June 1 through July 1 for troll gear, purse seine, and drift gillnet gear to provide for the harvest of hatchery produced Chinook salmon during periods established by EO. After July 1, SSRAA will coordinate with ADF&G to remove excess Chinook from the water if needed. Excess Chinook would be sold as cost recovery. The Carroll Inlet Terminal Harvest Area consists of the waters of Carroll Inlet north of Nigelius Point at 55°33.50' N. Latitude. Management considerations do not need to be made to protect broodstock, as broodstock will not be taken at Carroll Inlet.

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Chinook salmon	Carroll Inlet	2,600	7,500	10,100

5 AAC 40.051, District 3: Klawock Inlet and River Special Harvest Area.

Management Considerations

Commercial Fisheries

Commercial seine and troll fisheries will intercept coho salmon returning to KRH on the west coast of Prince of Wales Island. Additional harvest also occurs throughout the Southeast Alaska troll fishery. Commercial fisheries specifically targeting these fish will not occur unless returns justify it based on inseason information. Returns of coho salmon to the Klawock River weir should be adequate to meet the escapement goal range of 4,000–9,000 fish and broodstock needs of 3,800 fish.

Freshwater Sport Fisheries

The entire Klawock River watershed is open to sport fishing for coho salmon and is managed under the region wide limit of 6 fish per day and 12 in possession. By regulation, fishing is closed within 300 feet of the installed weir. By regulation, bait is not allowed in most of the drainage because of the presence of fall-run steelhead and designation of the Klawock drainage as a high-use trout system. In the spring of 2015, BOF adopted a proposal to allow bait in the Klawock River downstream of the weir from September 15 to October 15. Sport fisheries will be managed by general regulations for the waters outlined by the SHA. The department may use EO authority to address in season issues.

Saltwater Sport Fisheries

Currently, the marine sport fishery for coho salmon is managed under the region wide limit of 6 fish per day and 12 in possession year-round. Sport fisheries will be managed by general regulations for the waters outlined by the SHA. The department may use EO authority to address inseason issues.

State Subsistence Fisheries

The BOF established a state subsistence fishery whereby Alaska residents are allowed harvest opportunity under provisions of a subsistence permit obtained from the department. The department has established harvest limits of 20 coho salmon per day, with a 40 fish annual limit, in the customary and traditional use area in the Klawock River estuary below the bridge. Allowable fishing gear in state waters includes dip nets, hand beach seines, hand purse seines, spears, and cast nets throughout the July 1–October 31 fishing season. Use of rod and reel is not an allowable gear type in this fishery.

Federal Subsistence Fisheries

In addition to the state fishery described above, a federal subsistence fishery on Klawock River is authorized under federal regulations by permit for residents of Prince of Wales Island. The fishery allows for a harvest of 20 coho salmon per day with no annual limit. Permitted gear includes rod and reel with bait (bait is only allowed from September 15–November 15), dip net, hand snagging lines, and spears. Please contact the local U.S. Forest Service representative for questions regarding the federal subsistence fishery on the Klawock River.

Cost Recovery Management

Cost recovery may be conducted at the Klawock weir or in the Klawock SHA as defined by 5 AAC 40.051 with the stipulations described in the paragraphs below.

Cost-recovery harvest of coho salmon in the Klawock SHA may be conducted weekly after escapement needs have been met. The department must receive timely weir data from the previous

statistical week. If the weekly reports from the weir are not received by the date and time specified an EO closing cost-recovery harvest in the Klawock SHA will be issued. Cost recovery in the Klawock SHA will remain closed until weir data has been properly submitted.

Cost-recovery harvest in Klawock Inlet may be conducted using purse seine or troll gear. Although gillnet gear is allowed by regulation, the department will not allow gillnet gear at this time. Harvest in the SHA will continue to operate experimentally to determine whether hatchery-origin coho salmon can be harvested by means of purse seine or troll gear without adversely impacting wild salmon stocks that transit the area or return to the Klawock River. Hatchery personnel must notify the CF AMB, in Ketchikan, prior to any SHA cost-recovery operations. Once the department has reviewed the cost-recovery plan, the department will allow cost recovery operations in the SHA to begin. The department reserves the right to have an observer on board any cost-recovery vessel. The department reserves the right not to open the SHA or to close the area to cost recovery if the department feels the cost recovery will adversely impact the escapement of wild stock salmon or steelhead to any of the streams in the vicinity of the SHA. If the mortality rates of other species are determined to be unacceptable, then cost recovery operations in the SHA will be terminated.

Coho salmon are the only species of salmon that may be retained onboard the cost-recovery vessel. All other species of salmon and steelhead must be released alive immediately. The cost-recovery vessel may not have other commercially caught fish onboard. All vessels involved in cost recovery must have a current CFEC vessel license.

The cost-recovery vessel must document all activities on a daily log which will be provided by the department. The following must be on the daily log; numbers of coho salmon harvested including whether it has an adipose fin clip or not, numbers of released salmon by species (including steelhead), numbers of mortalities of released salmon (including steelhead), latitude and longitude of fishing area, times and duration of sets and clear details on processing times and locations. At the end of each fishing day, the daily log must be sent via fax, or email to the Ketchikan CF AMB where it will be reviewed. Any changes to the cost-recovery program will be immediately passed on to the SSRAA General Manager.

The KRH hatchery manager will also provide daily information on the timing and location of landings and processing to the Ketchikan CF AMB while cost-recovery operations are taking place in the SHA. This will allow the department to sample the catch if onboard observers are not present. The department may require that salmon heads are given to the department to be otolith sampled.

At the end of the season, the department and SSRAA will examine the results of the cost-recovery fisheries and determine the feasibility of using the SHA for long-term cost recovery.

Any fish given away are considered cost recovery and must be documented on a fish ticket. Fish tickets are to be sent to the department on a weekly basis while conducting cost recovery.

Projected returns for this year:

Species, Run	Release Location	Common Property Harvest	Other¹	Total Return
Coho salmon, fall	Klawock River	103,800	44,500	148,300

¹Includes terminal harvest area, broodstock, and escapement.

5 AAC 40.053. District 3: Port Saint Nicholas Special Harvest Area.

Management Considerations:

In 2023, experimental use of a setnet for cost-recovery harvest in the SHA will be allowed under EO. Due to concern for incidental catch of steelhead, any gillnet used will have a minimum 7-inch mesh restriction. The operator will notify the department if steelhead are incidentally harvested during cost-recovery efforts. The operator should keep in close contact with the Craig area port samplers to help ensure cost-recovery harvest is sampled for CWTs. The department requests that a weekly update of cost-recovery activity be provided to the CF AMB in Ketchikan and SF AMB in Craig during the period that the SHA open is open. By regulation the SHA is open to cost recovery May 1-August 15. In 2023, the start date for cost recovery in the SHA will be delayed until June 1.

If deemed necessary by either the department or SSRAA, to achieve full utilization of Chinook salmon returning to the Port Saint Nicholas release location, a personal use fishery can be authorized by EO per 5 AAC 77.685. A personal use fishery would be open in the SHA, or a portion of the SHA, and would allow both dip net and beach seine gear. Daily and annual limits would be set by ADF&G in consultation with SSRAA.

Projected returns for this year:

Species, Run	Release Location	Common Property Harvest	Other¹	Total Return
Chinook salmon	Port Saint Nicholas	1,500	4,200	5,700

¹Includes terminal harvest area, broodstock, and escapement.

Port Asumcion Special Harvest Area.

The Port Asumcion SHA is designated as all waters within Port Asumcion north and west of a line from Point Cosinas located at 55°21.789'N latitude, 133°30.645'W longitude to a point west of Point Maria located at 55°2.040'N latitude, 133°30.256'W longitude.

Fishing periods and legal gear for cost recovery harvest in the SHA may be modified for the hatchery permit holder by EO, as needed.

Management Considerations:

There are no broodstock concerns at Port Asumcion and no common property fisheries are anticipated. The site is intended to be a cost recovery site only. There will be no hatchery produced coho returning the site.

Species, Run	Release Location	Common Property Harvest	Other ¹	Total Return
Summer chum	Port Asumcion	224,700	310,300	535,000

11.2 Cost Recovery

In general, SSRAA conducts cost recovery harvest at five sites: Neets Bay SHA, Burnett Inlet SHA, Klawock River SHA, Port Asumcion SHA, and the Port Saint Nicholas SHA. In addition, SSRAA may sell excess Chinook and coho salmon that enter the holding ponds at BIH and WLH and any Chinook removed from the water in the Carroll Inlet THA will also be sold as cost recovery. In 2023 SSRAA will also conduct cost recovery in Anita Bay.

SSRAA's goal is that ultimately 75% of all fish produced will be harvested in common property fisheries by the commercial fishing fleets it represents, with the remaining 25% harvested as cost recovery by SSRAA to cover operating expenses and retire long-term debt and broodstock for continuing production. In 2022, about 55% of SSRAA's returning adults were harvested by common property fishermen.

12.0 Historical Returns

Historical returns by brood year and age class – please see: <https://ssraa.org/chum-historic-releases/>, <https://ssraa.org/fall-chum-historic-data/>, and <https://ssraa.org/chinook-historic-data/>.

13.0 APPROVAL

Recommendation for Approval: SSRAA Hatcheries' Annual Management Plan 2023

Susan Doherty, General Manager, SSRAA 5/30/2023

Bo Meredith, Area Management Biologist, Division of Commercial Fisheries 5/31/2023

Kelly Reppert, Area Management Biologist, Division of Sport Fish 5/31/2023

Craig Schwanke, Area Management Biologist, Division of Sport Fish 5/31/2023

Jeff Rice, Area Management Biologist, Division of Sport Fish 5/31/2023

Matt Catterson for Judy Lum, Regional Supervisor, Division of Sport Fish 5/31/2023

Lowell Fair, Regional Supervisor, Division of Commercial Fisheries 5/31/2023

Lorraine Vercessi, PNP Hatchery Program Coordinator, Division of Commercial Fisheries 6/13/2023

Approval:

The 2022 SSRAA Hatcheries' Annual Management Plan is hereby approved:

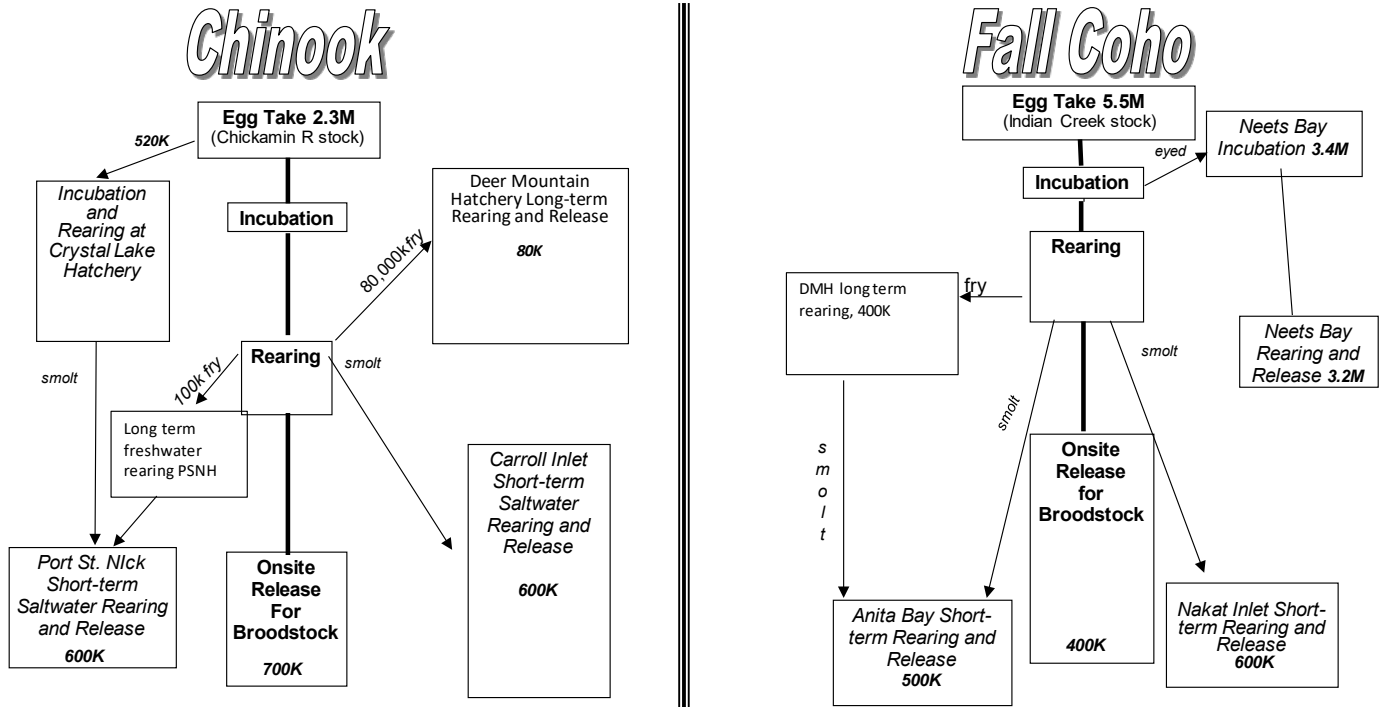
Tom Taube, Deputy Director, Division of Sport Fish 6/15/2023

Forrest Bowers, Operations Manager, Division of Commercial Fisheries 6/21/2023

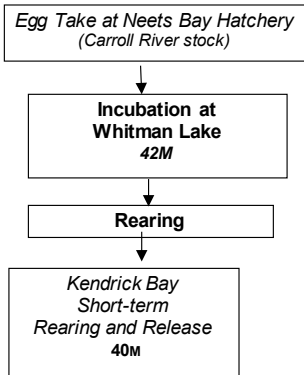
APPENDICES

- Appendix A – Facility Program Diagrams
- Appendix B – Production Summary Diagrams
- Appendix C – Maps

Whitman Lake Hatchery



Summer Chum



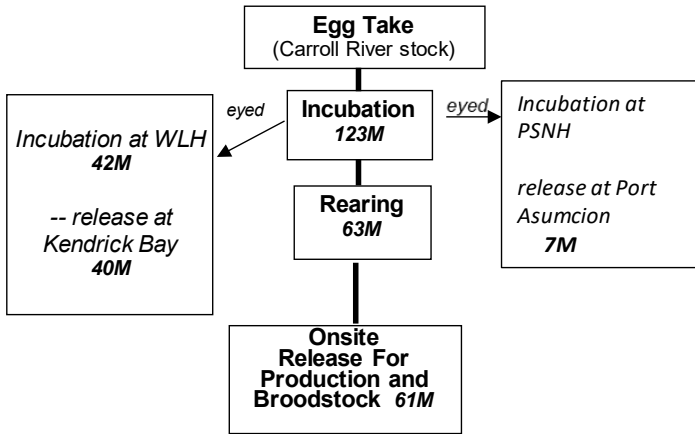
Summer Coho

PROGRAM TERMINATED

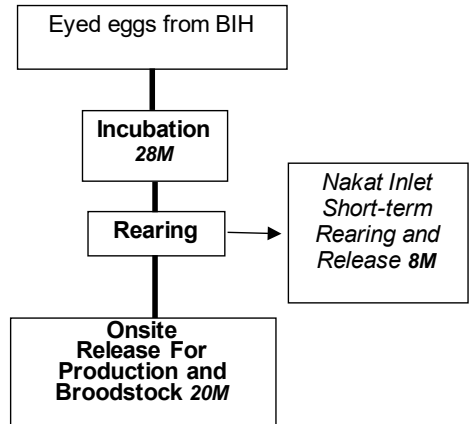
= Onsite Hatchery Operation
 = Transport
Bold Type = Core Onsite Program
Italic Type = Remote rearing or release program
are bold and *K*=thousands *M*=millions

Neets Bay Hatchery

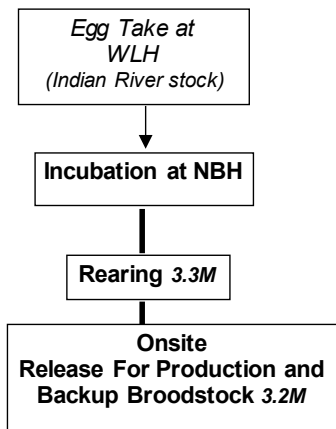
Summer Chum



Fall Chum



Fall Coho



Chinook

**PROGRAM
DISCONTINUED**

———— = Onsite Hatchery Operation

————> = Transport

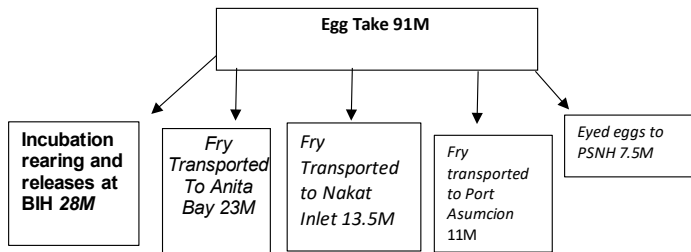
Font = Core Onsite Program

Font = Remote rearing or release program

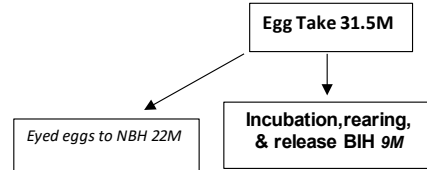
are bold and *κ*=thousands *M*=millions

Burnett Inlet Hatchery

Summer Chum



FALL CHUM



———— = Onsite Hatchery Operation

————> = Transport

Bold Type = Core Onsite Program

Italic Type = Remote rearing or release program

are bold and *italic* *K*=thousands *M*=millions

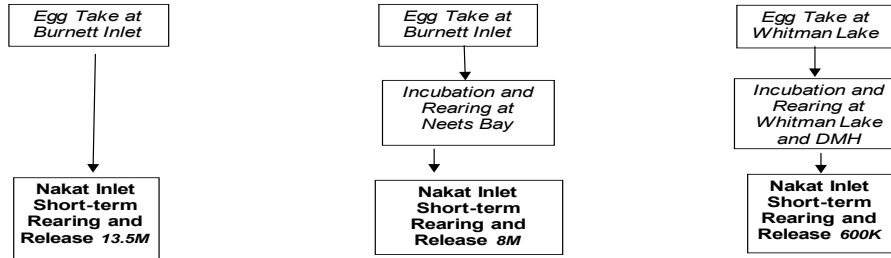
Remote Release Sites

Nakat Inlet, Anita Bay, Kendrick Bay, Port Asuncion

All Remote Sites are for Production

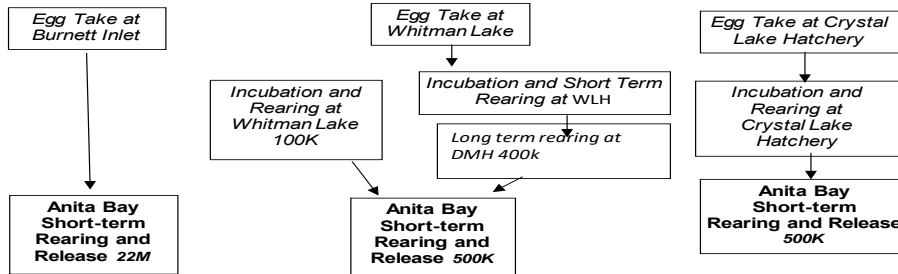
Nakat Inlet

Summer Chum Fall Chum Fall Coho



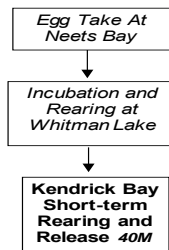
Anita Bay

Summer Chum Fall Coho Chinook



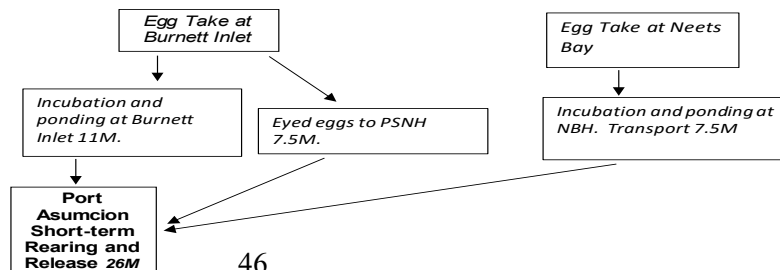
Kendrick Bay

Summer Chum



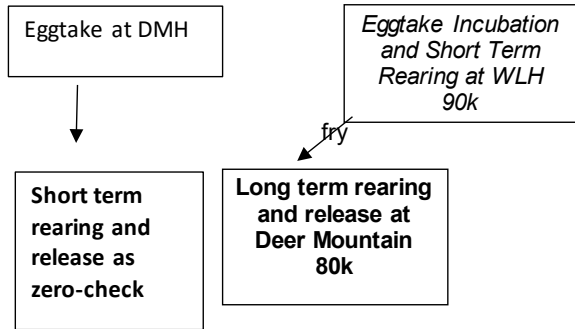
PORT ASUMCION

Summer Chum

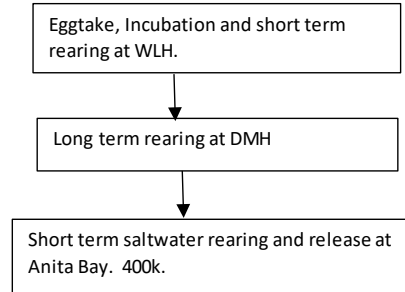


Deer Mountain

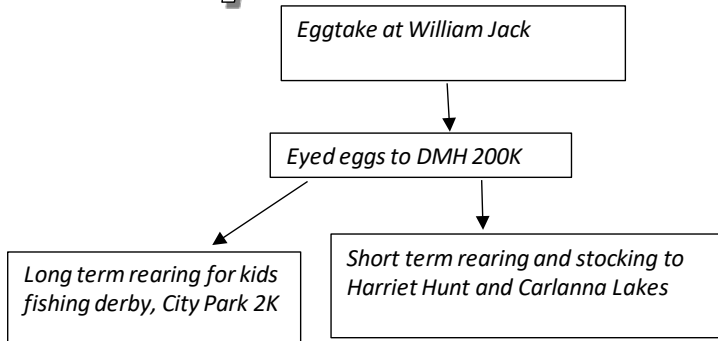
Chinook



Fall Coho



Triploid Rainbow Trout



- = Onsite Hatchery Operation
- = Transport
- Bold Type = Core Onsite Program**
- Italic Type = Remote rearing or release program*
- # are bold and Italic *K*=thousands *M*=millions
- red type - permits pending

KLAWOCK RIVER HATCHERY

Coho

Eggtake at KRH 5M



Long term rearing
and release at
Klawock Lake
4.5M

Port Saint Nicholas

Chinook

Eggtake at WLH 700K



Long term rearing at
CLH 500K

Short term rearing at WLH
110K



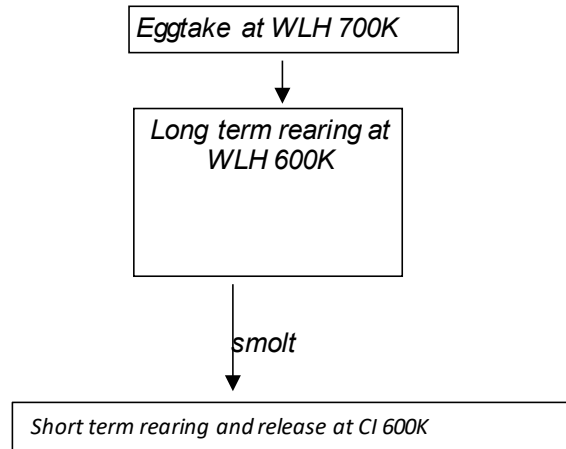
long term rearing at PSNH



Short term rearing and release at PSN 600K

Carroll Inlet

Chinook



PRODUCTION SUMMARY

Organization or Hatchery Southern Southeast Regional Aquaculture Association

Species: CHUM(S)	2022							2023							2024										
	J	A	S	O	N	D		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
NEETS BAY	E 70.5M										R65M NBH			E 70.5M									R61M NBH		
NAKAT	E15.2 BIH			FROM BIH	14.5M WLH						R 14M NI			E15.2BIHM									R 13.5M NI		
ANITA BAY	E25M BIH								To ANB		R 22 fry ANB			E25M BIH							To ANB		R 22M ANB		
KENDRICK BAY/ McLEAN ARM	E44.7M NB			FROM NBH 42M	to WLH				from WLH		R 40M KB			E44.7M NBH		FROM NBH 44.7i	to WLH				from WLH		R 39M KB		
BURNETT INLET	E31M BIH										R 28M BIH			E31M BIH									R28M BIH		
PORT ASUMCION	E20M BIH								fromBIH11.5M		R18M PA			E20M BIH							fromBIH11.5M		R 18M PA		
	E 7.5M NBH			8M to PSNH					fromPSNH1.5M		R 7M PA			E 10M nbh		8M to PSNH					from PSNH 7.5		R 9M PA		

FTPs					Expires	Codes: Egg take Tagging Release	E number & site T number R number & site
Species/Project	ET, trans, or rel?	FTP #	Maximal #				
S.Chum Neets Bay	ET, REL	85-J1027	70.5 mill.		12/31/2024		
S.Chum Nakat	ET, trans, rel	85-J1064	8 mill.		9/1/2024		
S. Chum Anita Bay	ET, trans, rel	10J-1028	25 mill		12/31/2025		
S.Chum NBHBIH	ET, trans, rel	15J-1002	25 MILL.		7/30/2025		
Schum BIH-KB	ET, trans, rel	18J-1011	10M		7/31/2028		
Schum BIH-NAK	ET, trans, rel	18J-1010	6M		7/31/2028		
Schum BIH-BIH	ET, trans, rel	18J-1009	35M		7/31/2028		
Schum BIH-Anita	ET, trans, rel	18J-1008	25M		7/31/2028		
Schum BIH-PA	ET, trans, rel	19J-1019	8M		12/31/2029		
Schum Anita-BIH	ET	19J-1016	20M		7/31/2029		
Schum Ken-NBH	ET	19J-1015	20M		8/1/2029		
SchumNak-NBH	ET	19J-1014	15M		8/2/2029		
Schum NBH - BIH	ET, trans	21J-1018	50m		8/1/2031		
Schum NBH - PA	ET, trans, rel	23J-1001	7.5M		2/1/2033		

PRODUCTION SUMMARY

Organization or Hatchery Southern Southeast Regional Aquaculture Association

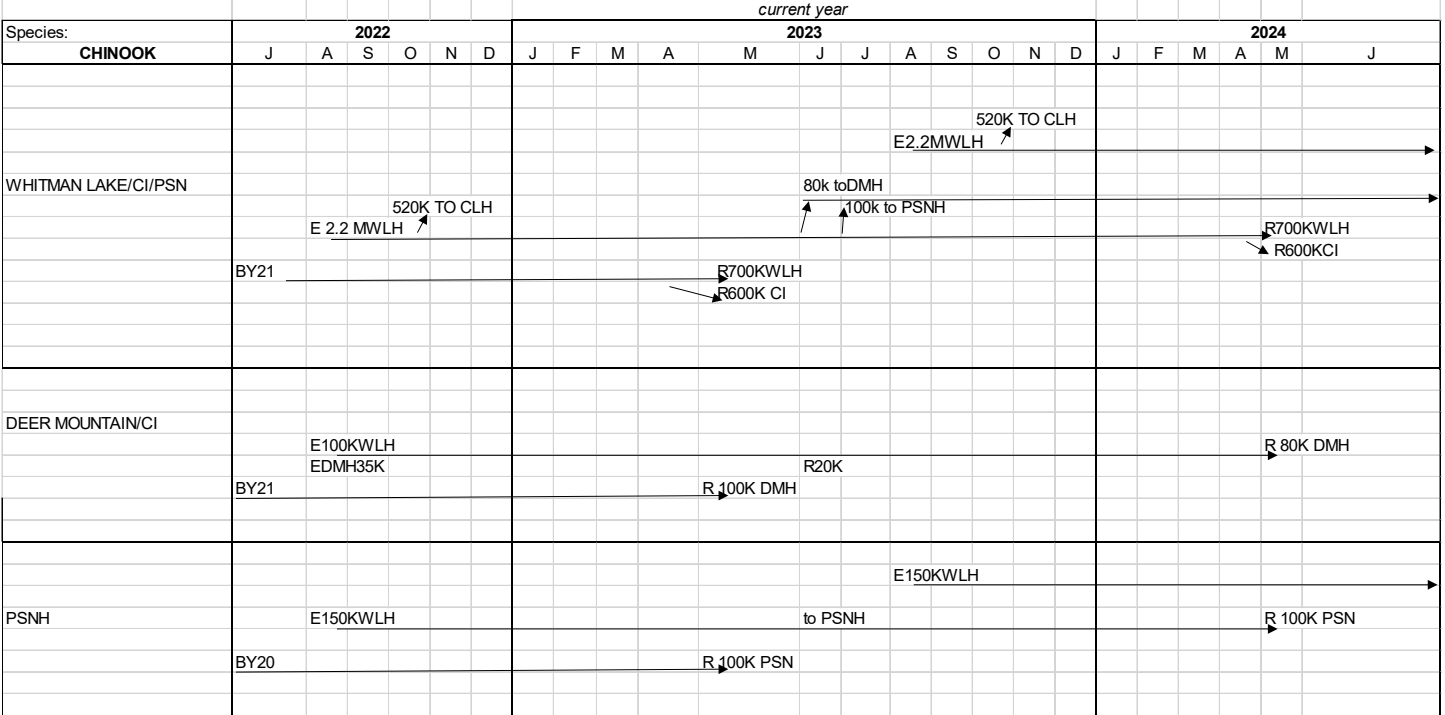
Species: CHUM(F)	2022							2023							2024										
	J	A	S	O	N	D		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
NEETS BAY			E 9.5M												E 21M BIH	TO NBH							R 12M NBH		
BURNETT INLET			E0.5M	↑ eyed							R 5.5M			E31.5M BIH									R 9M BIH		
NAKAT											R 2.5M			E 8.5MM BIH									from NBH		R8M NI

FTPs					Expires	Codes: Egg take Tagging Release	E number & site T number R number & site
Species/Project	ET, trans, or rel?	FTP #	Maximal #				
FchumNBH	ET, rel	16J-1021	10M		12/31/2026		
Fchum BIH to NBH	ET,trans,rel	16J-1022	29M		12/31/2026		
FchumNBHtoBIH	trans,rel.	14J-1003	6M		12/31/2024		
FchumNBHtoNak	trans,rel.	00J-1004	8M		12/31/2030		
FchumNBH	ET,trans,rel	98J-1006	35M		3/28/2028		

* renewal pending

PRODUCTION SUMMARY

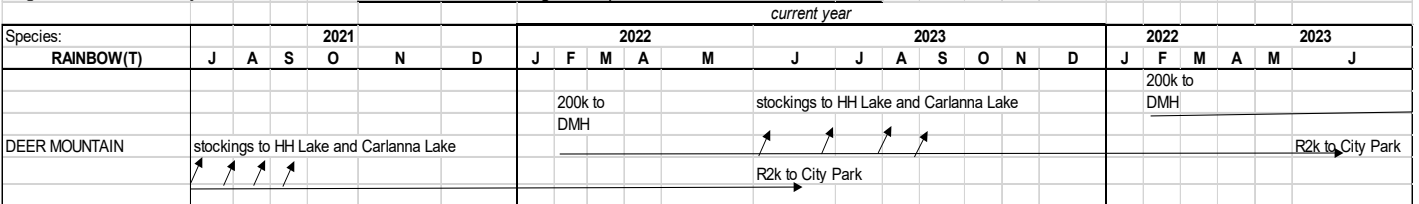
Organization or Hatchery Southern Southeast Regional Aquaculture Association



FTPs						Codes:	
Species/Project	ET, trans, or rel?	FTP #	Maximal #	Expires			
WL/NB/CLH/POWHA Chinook	ET, trans,rel	14J-1022	2.2 mill.	7/30/2024			E number & site
WLH-CLH-NBH	ET, trans,rel	05J-1010	1mill	6/30/2025			rearing
WLH/DMH	ET, trans,rel	14j-1019	105k	6/30/2024			R number & site
WLH - NBH	ET, trans,rel	15J-1006	300k	4/30/2025			transfers
WLH/DMH/CI	ET, trans,rel	15J-1019	420k	12/1/2025			"to _"
WLH-PSN	trans,rel	16J-1012	770k	6/30/2026			
WLH-PSN-CC	trans,rel	16J-1013	385k	6/30/2026			
WLH-CI	ET, trans,rel	18J-1003	200k	3/31/2028			
DMH-DMH	ET, trans,rel	19J-1001	600k	12/31/2028			
DMH-DMH	rea,R	19J1002	100k	12/31/2028			
WLH-DMH	ET,rea	19J-1003	600k	12/31/2028			
DMH_DMH	rea,R	19J-1004	30k	8/1/2029			
WLH-DMH	trans	19J-1013	500	7/15/2029			
WLH-PSN	rea, trans,rel	22J-1010	110K	7/1/2032			

PRODUCTION SUMMARY

Organization or Hatchery Southern Southeast Regional Aquaculture Association



FTPs						Codes:	
Species/Project	ET, trans, or rel?	FTP #	Maximal #	Expires			
DMH triploid rainbow trout	trans	20J-1001(1)	200k	12/31/2029			E number & site
DMH triploid rainbow trout	R	20J1002	12k	12/31/2029			
DMH triploid rainbow trout	R	20J-1003	40k	12/31/2029			R number & site
DMH triploid rainbow trout	R	20J-1004	2k	12/31/2029			"to _"

Appendix C. Maps

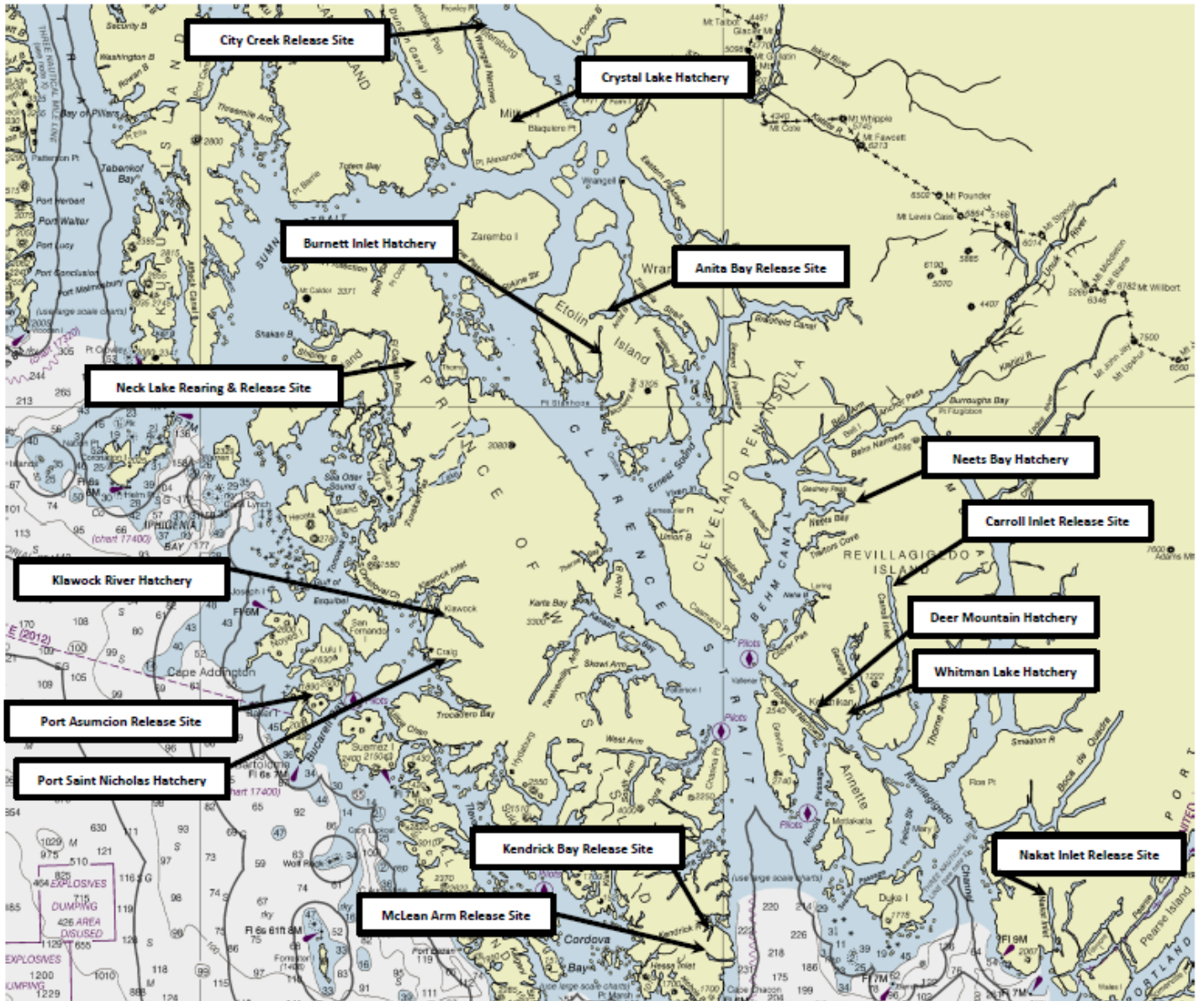


Figure 1.– SSRAA hatcheries and release sites.