**2025 Annual Management Plan**
**Hidden Falls Hatchery**
Northern Southeast Regional Aquaculture Association

This Annual Management Plan (AMP) is prepared to fulfill the requirements of 5 AAC 40.840. This plan is prepared to guide hatchery operations in accordance with the hatchery permit. The plan must be developed with consideration of the hatchery's production cycle and must organize and guide the hatchery's operations regarding production goals, broodstock management, and harvest management of hatchery-produced salmon. The production cycle begins with adult returns, that lead to egg takes and end with fish releases. Action may be taken outside of the management plan if allowed under the hatchery permit or modified by emergency order. Inseason assessments and project alterations by Northern Southeast Regional Aquaculture Association (NSRAA) or Alaska Department of Fish and Game (ADF&G) may result in changes to this AMP in order to reach or maintain program objectives. NSRAA 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 NSRAA. This policy applies to all hatchery operations covered under the AMP.

## 1.0 SUMMARY

### 1.1 *Introduction*

In 1978, the State of Alaska constructed Hidden Falls Hatchery (HFH). In 1988, operation of HFH was contracted to NSRAA, and PNP Hatchery Permit #28 was issued. The hatchery is located in Kasnyku Bay on the eastern shore of Baranof Island.

Projected returns are shown in Table 1 at the end of this narrative. Historical release and survival data are presented in Tables 2–5. Chum salmon broodstock requirements and egg-take goals are shown in Table 6. The HFH Terminal Harvest Area (THA) for chum and Chinook salmon is shown in Figure 1, the HFH Special Harvest Area (SHA) for coho salmon is shown in Figure 2, and the modified HFH THA for coho salmon during summer troll fishery closure is shown in Figure 3. Figure 4 shows the Hidden Falls inner Kasnyku Bay closure line, Figure 5 the Mist Cove SHA, and Figure 6 the Thomas Bay SHA.

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

NSRAA and NOAA, through their collaborative partnership to continue to develop the Keta River Chinook stock, have decided to release a portion of the brood year 2023 eggs collected at LPW from the Kasnyku Bay site. Two hundred thousand of the approximately 650,000 BY23 yearlings being reared at HF will be transferred and released from LPW for continued broodstock, the remaining yearlings will be released from HF.

NSRAA again collected Keta River stock Chinook salmon eggs from returns to Little Port Walter Research Station (LPW) in 2024. LPW again had a strong return of Keta Chinook, and

approximately 1.46 million green eggs were collected. Survival to eye was typical for saltwater matured broodstock at LPW. Due to unmarked and untagged releases from brood year 2018 and a portion of 2019, the unknown origin broodstock were genetically screened, which resulted in the discard of non-Keta River stock, or unknown, pairings. These eggs were again collected and transported under FTP 18J-1015. As of May 2025, there is significant uncertainty surrounding NOAA's continued operations at the LPW facility. The previously planned zero check experimental studies and subsequent releases from LPW were suspended for BY24. NSRAA is attempting to conduct similar zero check release trials at HFH for the BY24 production. Any future releases from LPW will be evaluated following 2025 Keta River stock egg takes.

In 2022, NSRAA stopped releasing Andrew Creek stock Chinook salmon at Kasnyku Bay to prepare the site for returns of a single new stock, Keta River. In 2025, all Andrew Creek stock Chinook salmon produced at HFH will be released at Gunnuk Creek (200,000). This will be repeated in 2026due to another broodstock shortfall in 2024. The return to HF in 2025 will be the last Andrew Creek stock return made up of 6 year old Chinook from BY19.

### 1.3 *New permits or permit amendments*

FTP 16J-1004 and FTP 20J-1026 expire in 2025 and will not be renewed. Both FTP's involve transfer of chum salmon (adults and gametes) from the GCH SHA to HFH.

FTP 16J-1005 will be submitted for renewal in 2025. This allows the transport of up to 55,000 adult chum salmon from the SEC SHA to HFH.

FTP 15J-1008 and FTP 15J-1009 will be submitted for renewal in 2025. The FTP's allow for the same stocking activity into Parry Lake with the 2 stocks in production at HFH.

FTP 95J-1009 will be renewed in 2025 to continue the egg take and release of chum for the Takatz Bay program.

FTP 95J-1010 will be renewed in 2025 to continue the egg take and release of chum for the Kasnyku Bay program.

NSRAA will again apply for an FTP to allow for the collection of milt from wild Keta River stock Chinook and transport to HFH.

## 1.4 *Expected Returns*

| Species | Return Site | Common Property Harvest | Cost Recovery | Broodstock | Total Return |
|---|---|---|---|---|---|
| Chum salmon | HFH | 1,841,000 | 615,000 | 210,000 | 2,666,000 |
| Chum Salmon | Thomas Bay | 379,000 | 0 | 0 | 379,000 |
| Coho salmon | HFH | 25,500 | 15,500 | 10,000 | 51,000 |
| Coho salmon | Mist Cove | 24,000 | 24,000 | 0 | 48,000 |
| Chinook salmon | HFH | 20 | 0 | 0 | 20 |
| Chinook salmon | Gunnuk Creek | 425 | 0 | 425[1] | 850 |
| Chinook salmon | Southeast Cove | 550 | 0 | 0 | 550 |

[1] Backup brood collection site. No fisheries management is requested to ensure broodstock returns. These are the fish expected to escape fisheries to the Gunnuk Creek rack.

## 1.5 *Production Summary*

| Program Name | Brood Year | Planned Release Date | Release Goal | Life Stage | Type of Mark, % Marked[b] |
|---|---|---|---|---|---|
| Kasnyku chum salmon | 2024 | May 2025 | 29,931,000 | Fed fry | 100% TM |
| Kasnyku 4.0 chum salmon | 2024 | May 2025 | 29,931,000 | Fed fry | 100% TM |
| Takatz chum salmon | 2024 | May 2025 | 13,605,000 | Fed fry | 100% TM |
| Takatz 4.0 chum salmon | 2024 | May 2025 | 13,605,000 | Fed fry | 100% TM |
| Thomas Bay chum salmon | 2024 | May 2024 | 11,340,512 | Fed fry | 100% TM |
| Thomas Bay 4.0 chum salmon | 2024 | May 2025 | 11,340,512 | Fed fry | 100% TM |
| SE Cove 4.0 chum salmon[a] | 2024 | May 2025 | 20,412,923 | Fed fry | 100% TM |
| SE Cove chum salmon[a] | 2024 | May 2025 | 20,412,923 | Fed fry | 100% TM |
| Gunnuk Cr Chinook salmon | 2023 | May 2025 | 200,000 | Smolt | 100% TM 30,000 CWT |
| LPW Yearling Chinook | 2023 | May 2025 | 200,000 | Smolt | 100% TM 30,000 CWT |
| Kasnyku Yearling Chinook | 2023 | May 2025 | 450,000 | Smolt | 100% TM 30,000 CWT |

| Program Name | Brood Year | Planned Release Date | Release Goal | Life Stage | Type of Mark, % Marked[b] |
|---|---|---|---|---|---|
| Kasnyku Zero Check Chinook | 2024 | July and Oct 2025 | 200,000 | Smolt | 100% TM 100% CWT |
| Deer Lake coho salmon | 2023 | May 2025 | 2,165,760 | Smolt | 100% TM 70,000 CWT |
| Kasnyku early saltwater entry coho salmon | 2023 | May 2025 | 917,169 | Smolt | 100% TM 30,000 CWT |
| Kasnyku late saltwater entry coho salmon | 2023 | May 2025 | 917,160 | Smolt | 100% TM 30,000 CWT |
| Kasnyku saltwater overwinter coho salmon | 2023 | May 2025 | 1,018,440 | Smolt | 100% TM 60,000 CWT |
| Kasnyku early saltwater overwinter coho salmon | 2023 | May 2025 | 442,400 | Smolt | 100% TM 20,000 CWT |

[a] On behalf of Gunnuk Creek Hatchery.
[b] TM short for Thermal Mark, CWT short for Coded Wire Tag.

### 1.6 *Current Permitting*

HFH is permitted to take 101 million green chum salmon eggs for HFH programs; in addition, 24 million green chum salmon eggs may be taken for transport to Medvejie Creek Hatchery (MCH) and release at Deep Inlet. HFH is a backup chum salmon egg source for Port Armstrong Hatchery (PAH) and Macaulay Salmon Hatchery (MSH). HFH may take an additional 55 million green chum salmon eggs for release as fry at SE Cove and up to 20 million chum salmon fry may be released at Gunnuk Creek, on behalf of Gunnuk Creek Hatchery (GCH). Additionally, HFH may take 40 million green chum salmon eggs on behalf of Port Armstrong Hatchery for release at HFH permitted release locations. An additional 10 million green chum salmon eggs may be taken for PAH. Backup chum salmon sources in case of an egg shortfall at HFH include MCH (up to 101 million eggs), GCH (up to 101 million eggs), PAH (up to 50 million eggs), MSH (up to 40 million eggs with resultant fish released at Thomas Bay), 55,000 brood for up to 55 million eggs may be taken at SE Cove, and up to 55,000 brood may be taken at GCH (this permit will be allowed to expire in 2025).

HFH is permitted for 7.7 million green coho salmon eggs. HFH is permitted to take an additional 1.0 million green coho salmon eggs as a backup egg source for PAH. Up to 3.2 million coho salmon eggs can be taken for its lake rearing program and 4.5 million eggs for release at Kasnyku Bay. The backup coho salmon egg source for HFH is PAH (up to 7.7 million eggs).

HFH is permitted to take 3.8 million green Chinook salmon eggs for HFH programs, which includes 300,000 eggs for the Haines Chinook salmon project that is not currently active. HFH may collect an additional 5.2 million green Chinook salmon eggs for transfer to MCH. In addition, HFH is a backup Chinook salmon egg source for Crystal Lake Hatchery (CLH) and MSH. Backup Chinook salmon egg sources for HFH include CLH (up to 900,000 eggs), MSH (up to 900,000 eggs), and MCH (up to 1,000,000 eggs). HFH is permitted to receive 3.5 million Keta River stock Chinook salmon eggs from LPW for broodstock development.

The following table lists current permitted green egg capacity and release sites by species for HFH.

| Species | Release Site | HFH acts as a Primary or Backup egg source | Permitted Number of Eggs or Fry/Smolt Releases |
|---|---|---|---|
| Chum salmon | Kasnyku/Takatz | Primary | 101 million[a] |
| | Bear Cove[b] | Primary | 20 million |
| | Deep Inlet[c] | Primary | 24 million |
| | GCH[d]/SE Cove[e] | Primary | 55 million |
| | PAH | Backup | 30 million |
| | MSH | Backup | 32 million |
| | Port Malmesbury | Primary | 40 million fry |
| | Thomas Bay | Primary | 40 million fry |
| Coho salmon | Kasnyku | Primary | 4.5 million |
| | Lake Rearing | Primary | 3.2 million |
| | PAH | Backup | 1.0 million |
| Chinook salmon (Andrew Creek) | Kasnyku | Primary | 3.5 million |
| | Gunnuk Creek | Primary | 200,000 smolt |
| | Southeast Cove | Primary | 700,000 smolt |
| | MCH | Backup | 5.2 million |
| | MSH | Backup | 650,000 |
| | CLH | Backup | 1.0 million |
| Chinook salmon (Keta River) | Kasnyku | Primary | 3.5 million |
| | Little Port Walter | Primary | 1,000,000 smolt |

[a] Up to 101 million green eggs can be taken at HFH for release at Kasnyku Bay and/or Takatz Bay but combined cannot exceed 101 million eggs.

[b] Permitted to MCH. Up to 20 million green eggs to be taken for MCH for Bear Cove, as an alternative to HFH-permitted releases.

[c] Permitted to MCH. Up to 44 million chum salmon green eggs can be incubated at HFH to the eyed stage prior to transfer for MCH.

[d] Up to 20 million chum salmon fry may be released at Gunnuk Creek on behalf of GCH.

[e] Up to 55 million chum salmon eggs may be incubated to the fry stage at HFH and transported to Southeast Cove for release on behalf of GCH.

## 2.0 OPERATIONAL PLANS FOR 2025

### 2.1 *Egg-take Goals and Brood Sources*

| Species | Donor Stock | Eggs (millions) | Females | Total Broodstock | Release Site |
|---|---|---|---|---|---|
| Chum salmon | Hidden Falls | 66 | 33,000 | 66,000 | Kasnyku Bay |
| | Hidden Falls | 30 | 15,000 | 30,000 | Takatz Bay |
| | Hidden Falls | 25 | 12,500 | 25,000 | Thomas Bay |
| | Hidden Falls | 20 | 10,000 | 20,000 | Bear Cove |
| | Medvejie | 24 | 12,000 | 24,000 | Deep Inlet |
| | Hidden Falls | 45 | 22,500 | 45,000 | SE Cove |

| Species | Donor Stock | Eggs (millions) | Females | Total Broodstock | Release Site |
|---|---|---|---|---|---|
| Total | | 210 | 105,000 | 210,000 | |
| Chinook salmon | Hidden Falls[1] | 0 | 0 | 0 | SE Cove |
| | Hidden Falls[1] | 0 | 0 | 0 | Gunnuk Creek |
| | Medvejie[1] | 1.0 | 200 | 400 | Kas/SE Cove |
| | Crystal Lake[1] | backup | 0 | | Kasnyku Bay |
| | Little Port Walter[5] | 0.50 | 100 | 200 | Kasnyku Bay |
| Total | | 1.5 | 300 | 900[3] | |
| Coho salmon | Hidden Falls | 4.5 | 1,850 | | Kasnyku Bay |
| | Deer Lake | backup | | | Kasnyku Bay |
| | Hidden Falls | 3.2 | 1,250 | | CLR |
| | Hidden Falls | backup | | | Port Armstrong |
| Total | | 7.7 | 3,100 | 6,200[4] | |

[1] Andrew Creek stock.

[2] This level assumes 50% female ratio and an additional 10,000 for green/bad females. Additional brood may be needed to ensure egg-take goals are met, but that would not allow sufficient backup broodstock for any other project (GCH or PAH).

[3] This includes excess brood. Cost-recovery harvest cannot catch all Chinook salmon in excess of broodstock needs.

[4] This requirement doesn't include all coho salmon expected to ascend the fish ladder. Excess coho salmon to broodstock needs will likely be about 5,000 resulting in a total rack escapement of approximately 10,000 fish.

[5] Keta River stock.

## 2.2 *Broodstock Collection*

Chum salmon

Broodstock are captured passively inside Kasnyku Bay using leads on the barrier net, nets, and net pen frames. The number of fish will be estimated as they enter the inner bay behind the barrier net. Some of the required broodstock may be captured by purse seine and transferred over the barrier net if the barrier leads do not capture sufficient broodstock in a timely manner. As the run progresses, the barrier net will be lowered, allowing the remaining broodstock to enter the inner bay. Broodstock may be transferred via tender from Southeast Cove and/or Gunnuk Creek if broodstock needs will not be met at Hidden Falls. Those transferred fish will be pumped behind the enclosed barrier net. Fish are held in raceways above the ladder until ready for spawning.

Chinook salmon

There are no plans to use Chinook salmon returns to HFH for broodstock in 2025.

Coho salmon

Broodstock enter the lagoon at HFH through a fixed weir. Once in the lagoon, coho salmon will hold for approximately one month prior to heading up the ladder and into the adult raceways. Cost recovery is managed to allow for passage of adequate broodstock numbers through the weir into the lagoon throughout the return. Portions of the return in excess of broodstock needs will be harvested for cost recovery by seine, gillnet, or out of the adult freshwater raceways. Coho salmon will be captured from holding raceways after ascending the fish ladder for spawning. See coho salmon Section 3.0 *Broodstock Management* and Section 4.3 *Cost-recovery Fishery* for additional details.

## 2.3 *Egg-Take, Transport, and Carcass Disposal Plans*

Chum salmon

Broodstock will be collected from the adult holding raceways, and eggs and sperm removed in an attached covered spawning area. Fertilization occurs in the spawning area; eggs are transported by vehicle several hundred feet to the incubation building. In 2024, HFH experimented with using a pump supplied with low concentration saline to transport fertilized eggs from the spawning area to the incubation building. The trials were small scale and tested various pump speeds and salinities. Refined experimentation is planned for 2025 before considering large-scale implementation. Neets Bay Hatchery has had success with this method. There they are rinsed and then water-hardened in bulk R-48 type incubators. Broodstock carcasses are typically sold and will be iced and loaded on tenders. Attempts will be made to donate unsold carcasses prior to grinding.

Chinook salmon

There are no plans to use Chinook salmon returns to HFH for broodstock in 2025.

Coho salmon

Coho salmon returning to HFH will be collected from the adult holding raceways, and eggs and sperm removed in an attached covered spawning area. If backup broodstock is required, gametes will be transported from Mist Cove via aircraft or vessel. Fertilization will occur in the spawning area; water-hardening and egg-surface disinfection will occur in bulk R-48 type incubators for the HFH freshwater overwinter and coho lake rearing (CLR) groups. The HFH saltwater overwinter group will be placed into Heath trays for water-hardening, egg-surface disinfection, and BKD family tracking. Broodstock carcasses and coho salmon in surplus of broodstock needs will be either ground and discharged into the Alaska Department of Environmental Conservation (ADEC) approved Zone of Deposit in Kasnyku Bay or disposed of whole at the approved ADEC carcass disposal site. Attempts will be made to donate or sell these carcasses prior to grinding.

## 2.4 *Incubation Plans*

Chum salmon

Chum salmon will be incubated in R-48 incubators until the eyed stage and then transferred to NOPAD incubators for hatch. Eggs for the Deep Inlet and/or Bear Cove release will be transported to MCH via vessel during the fall, after the eggs have eyed. The eggs may or may not be otolith marked prior to transport due to incubation constraints. Eggs collected at MCH for HFH programs will be transported to HFH via vessel in early September, after the eggs have eyed, but prior to otolith marking.

Chinook salmon

Chinook salmon will be incubated and hatched in Heath trays. Eggs from high BKD-positive parents will be removed and destroyed. Eyed and otolith marked eggs destined for MCH will be transported via air or vessel in coolers. Keta River stock eggs collected at LPW will be transported by boat or air as gametes throughout egg take activities. Fertilization and water hardening in iodophor will occur at HFH.

Coho salmon

Hidden Falls Hatchery freshwater overwinter and CLR group coho salmon will be incubated in R-48 incubators until the eyed stage and then transferred to NOPAD incubators for hatch. HFH saltwater overwinter group will be placed into Heath trays for water-hardening, egg-surface disinfection, and BKD family tracking and hatched in either NOPADs or Heath trays.

## 2.5 *Rearing and Release Plans*

Chum salmon

Expected chum salmon survival from green eggs to ponding is 92%. Approximately 60.7 million fry will be reared in Kasnyku Bay, 27.6 million fry will be reared in Takatz Bay, 22.7 million fry will be reared in Thomas Bay, and 40.8 million fry will be reared at Southeast Cove. Fry reared in Kasnyku Bay will be transferred by pipeline to saltwater net pens for short-term rearing (normally 70 to 80 days) and then released. Approximately half of the Kasnyku Bay release will be tendered 10 nm north and released off the Catherine Island shoreline. Fry reared at Takatz Bay, Thomas Bay and Southeast Cove will be loaded on a boat and transported to saltwater net pens for short-term rearing and then released. Survival from ponding until release is expected to be about 90%. See *Production Summary* for expected release numbers (Section 1.5).

Chinook salmon

In May 2025, approximately 200,000 BY23 Andrew Creek Chinook salmon will be transferred and reared in salt water at Gunnuk Creek. These fish will be short term reared for two to three weeks and released as yearling smolt. See *Production Summary* for expected release numbers

(Section 1.5). Approximately 200,000 BY24 Andrew Creek Chinook salmon fry will be ponded into freshwater raceways for initial swim up and feeding. Fry will be transferred to round ponds for summer through winter rearing prior to transfer to saltwater net pens at Gunnuk Creek in May 2026. They will be reared in saltwater net pens for 2–3 weeks prior to release.

Approximately 200,000 BY23 Keta River Chinook salmon will be reared in fresh water until May when they are transported to Little Port Walter for short term rearing and release. Approximately 450,000 BY23 Keta River Chinook salmon will be transferred to net pens in Kasnyku Bay for short term rearing and release. This will be the first release of Keta River Chinook outside of LPW. Approximately 800,000 BY24 Keta River Chinook salmon fry will be ponded into freshwater raceways for initial swim up and feeding. Given NOAA's operational uncertainty, it is unlikely any BY24 Keta River Chinook will be transferred or released from LPW. A portion will be used for experimental zero check rearing trials targeting summer and fall release cohorts. The remainder will be transferred to round ponds for summer through winter rearing prior to transfer to saltwater net pens at Kasnyku Bay the following May.

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

| Program Name | Brood Year | Number Live (Jan. 1) | Release goal | Release Date |
|---|---|---|---|---|
| Gunnuk Creek FWOW | 2024 | 200,000 | 200,000 | Spring 2026 |
| Keta River FWOW | 2024 | 840,000 | 1,000,000 | Spring 2026 |

Coho salmon

Hidden Falls

The current HFH age-1 production goals are 1.5 million smolt from overwinter saltwater net pens and 1.8 million smolt from traditional freshwater rearing. All coho salmon fry will be ponded into freshwater raceways for initial swim up and feeding. The saltwater overwinter population will be treated with erythromycin as fry to treat BKD. Age-0 fry will be transferred to round ponds for summer rearing.

The saltwater overwinter production is broken up into a typical fall entry and an earlier summer entry (modeled after Port Armstrong Hatchery's program). Six hundred thousand pre-smolt will be transferred to saltwater net pens for overwinter rearing (SWOW) in July, with the remaining 1 million transferring in October. The remaining 1.8 million pre-smolt will be reared in freshwater round ponds until spring.

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

| Program Name | Brood Year | Number Live (Jan. 1) | Release goal | Release Date |
|---|---|---|---|---|
| SWOW | 2024 | 2,300,000 | 1,500,000 | Spring 2026 |
| Hidden Falls | 2024 | 2,100,000 | 1,800,000 | Spring 2026 |

An alternate release strategy may be implemented where after saltwater net pen rearing, up to half of the smolt will be pushed in net pens outside of Kasnyku Bay for release.

Coho Lake Rearing

Approximately 2.8 million age-0 coho salmon fry will be reared at HFH until mid-June, when they will be transported via aircraft to rearing pens in Deer Lake. Fry will be reared in pens throughout the summer and fall. In December or January, approximately half of the production will be released to the lake for natural rearing and emigration the following spring. The remaining production will overwinter in the pens and be pumped out of the lake for emigration in the spring. There is a smolt weir installed in the outlet of Deer Lake that captures and transports the smolts over a barrier waterfall and to saltwater at Mist Cove. Smolt are enumerated and held for an acclimation period prior to release. NSRAA may move fish in net pens out of Mist Cove if there is a predation concern and based on conditions at the time of release. NSRAA rotates stocking surplus fry into Banner, Cliff, Blanchard, and Parry Lake; NSRAA expects some surplus fry for lake stocking in 2025.

## 3.0 BROODSTOCK MANAGEMENT

The Hidden Falls SHA will be managed as follows: to protect broodstock and facilitate broodstock collection activities, the inner portion of the SHA will be closed by regulation to sport and commercial fishing (5 AAC 33.374 (g)).

The inner portion of the SHA will be defined as the waters north and west of a line between a point at 57°13.17′N lat, 134°51.86′W long and a point at 57°13.08′N lat, 134°52.02′W long, and the waters north of a line from 57°13.05′N lat, 134°52.24′W long and a point at 57°13.06′N lat, 134°52.20′W long (see Figure 4).

Chum salmon

About 95,000 females are required for broodstock, although an additional 10,000 may be captured to ensure that egg-take goals are met. Assuming an equal sex ratio, NSRAA plans to manage returns for 210,000 total broodstock. NSRAA will inform department area staff if arrangements are made with PAH to provide broodstock, since this may decrease returns available for common property harvest.

The barrier net will be fish-tight by the last week in June. Broodstock collection will begin during the same week or when chum salmon become available in Kasnyku Bay, usually no later than July 4. Similar to 2020–2024, the center portion of the barrier net may be left open until an estimated

100,000 broodstock have volitionally passed into the inner bay. At that point, the priority will be to enumerate and volitionally pass the remaining broodstock needed. Broodstock collection will end once 160,000 chum salmon are protected behind the barrier net, which is traditionally accomplished by the third week of July. An additional 50,000 chum salmon broodstock will be allowed to collect on the ocean side of the barrier net. Generally, once the first 50,000 chum salmon are spawned, the barrier net is dropped so additional broodstock can move toward the lagoon and fish ladder. Historically, this occurs the last week of July or the first week in August, depending on run timing.

Chinook salmon

Due to the very small potential for 6 year old Chinook to return to HF there are no broodstock plans for 2025. About 500 Chinook salmon will be required for the HFH programs, which will be collected at Medvejie Hatchery.

Coho salmon

Hidden Falls

About 6,000 coho salmon are needed for broodstock. Coho salmon returning to hatchery raceways will be used for broodstock and surplus coho salmon will be harvested for cost recovery. Total escapement into the raceway may reach 10,000 coho salmon (brood, escapees from cost recovery, and unusable brood fish). Broodstock is collected from all portions of the return. A closure of the entire Hidden Falls coho salmon SHA is unlikely to be necessary but may be requested if broodstock needs are not being achieved. Broodstock management occurs simultaneously with coho salmon cost-recovery management. See Section 4.3 *Cost-recovery Fishery* for additional details.

Mist Cove

The primary source of coho salmon broodstock for the Hidden Falls and CLR programs will be from the HFH. Mist Cove returns will only be used as a backup source of broodstock. If broodstock for HFH is needed from the Mist Cove SHA, NSRAA will request the entire area be closed by emergency order (EO) authority to all common property fishing. Coho salmon returning will be captured by beach or purse seine in Mist Cove and held until fully mature in marine net pens off the Fawn Lake outlet. An artificial freshwater lens may be used around the net pens to facilitate maturity.

## 4.0 FISHERIES MANAGEMENT

### 4.1 *Intercepting Fisheries*

Troll Fishery

Several spring troll fisheries will open along the outer coast that will likely intercept HFH Chinook salmon, along with other Alaska hatchery-produced Chinook salmon. Most spring troll fisheries target Chinook salmon and are conducted during May and June. In 2025, both Chatham Strait and

Icy Strait corridors will have fishery restrictions implemented during May and June, based on wild stock Chinook salmon concerns. These restrictions will delay initial openings and close areas to Chinook salmon retention. HFH coho salmon are predominantly harvested during the general summer troll season. Troll coho salmon retention is allowed from June 1 through September 20. The fishery may be extended through September 30 if wild coho salmon abundance is projected to meet escapement needs after considering harvest and effort.

Purse Seine Fishery

Hatchery chum salmon are taken incidentally in wild pink and/or chum salmon purse seine fisheries. The majority of HFH chum salmon migrate from the north through Icy Strait, primarily down the western shore of Chatham Strait. Some HFH chum salmon migrate from the south through lower Chatham Strait. Weekly seine openings will occur at Point Augusta, where a small area is traditionally opened to gauge run strength of pink and chum salmon. To a lesser degree, returns may enter seine fisheries in Chatham Strait along Admiralty Island, southeast Baranof Island, and Kuiu Island. Common property harvest of HFH and Thomas Bay chum salmon are expected to be primarily in the THAs. When wild chum salmon escapements to Kelp Bay streams have been strong and there are indications of good pink salmon abundance in the Chatham Strait corridor, the boundary of the HFH THA has been extended north to include Kelp Bay and the Catherine Island shoreline south of the Point Lull light. Portions of Kelp Bay may also be opened specifically to harvest surplus wild stock pink and chum salmon returns. In recent years, Clear River summer chum salmon escapements have been well below historical levels. Historically, Ralph's Creek summer chum salmon returns have been strong, but beginning in 2020 the wild chum runs to this system have been very poor. Common property harvest opportunities in Kelp Bay in 2025 will be determined by inseason pink and chum salmon estimates of run strength.

Gillnet Fishery

Coded wire tag (CWT) recovery data from previous years indicates that relatively small catches of HFH chum salmon are taken by commercial drift gillnet gear. In recent years, otolith thermal-mark data has corroborated the CWT data. The District 8 drift gillnet fishery is expected to harvest Thomas Bay chum salmon.

Sport Fishery

Relatively small numbers of HFH salmon are caught in sport fisheries in Chatham Strait. Concentrated sport fishing effort does occur terminally in Kasnyku Bay for Chinook and coho salmon. Sport fisheries will be managed as described in regional codified regulations for those waters defined in each SHA. In 2025, the retention of Chinook salmon will be prohibited in the majority of Chatham Strait and parts of Peril Strait through June 14. The department may use EO authority to address additional issues as they arise in season. This may include allowing harvest of Chinook salmon in Kasnyku Bay prior to June 14. Thomas Bay chum salmon are not expected to contribute to sport fisheries.

## 4.2 *Terminal Fisheries*

### 4.2.1 Hidden Falls THA

The *Hidden Falls Terminal Harvest Area Management Plan* regulations (5 AAC 33.374) for management of common property fisheries stipulate that during June, trollers may target and retain chum and Chinook salmon, and purse seine openings will be limited to two days per week. In June, if the purse seine fishery does not open as scheduled in the *Southeast Alaska Purse Seine Fishery Management Plan*, to achieve broodstock goals, trollers are not allowed to retain chum salmon provided at least 7 days remain prior to July 1. During June, an area within Kasnyku Bay may be closed during seine openings to allow trollers continued access to Chinook salmon. Beginning in July, trollers are limited to retaining one chum salmon for each Chinook salmon in their catch. During July, areas within the THA may be closed to seine and troll gear, as needed, to provide for broodstock needs at the hatchery. In the event of very large catches or fish buildups, openings at HFH may be announced with a 24-hour minimum notice.

The HFH THA boundary definition was modified in 2025 to provide for easier enforcement and compliance with THA boundaries and to provide a better hook off location on the south line. HFH THA is described as those waters within approximately two nautical miles of the easternmost shore of Baranof Island, south of the latitude of South Point at 57°16.28' N lat, north of 57° 06.76' N lat, west of a line from 57°06.76' N lat, 134°43.00' W long to 57°16.28 'N lat, 134°48.00' W long, excluding the waters of Kelp Bay.

During some years, the boundary of the HFH THA has been extended north to include Kelp Bay and the Catherine Island shoreline south of the Point Lull light when wild chum salmon escapements to Kelp Bay streams have been strong and there are indications of good pink salmon abundance in the Chatham Strait corridor.

A contraction of the offshore boundary of the HFH THA to less than 2 miles off the Baranof Island shoreline will occur in 2025due to Chinook salmon conservation and to protect weak pink salmon stocks moving through the area.

<u>Chum salmon</u>

In 2025 broodstock management at HFH will be managed less conservatively than in recent years. The forecasted HFH return of 2,666,000 fish should provide for a substantial increase in common property opportunity. NSRAA intends to work with the department to open the Hidden Falls THA beginning the third Sunday in June. Biweekly openings are planned but could be reduced if catch data are not made available in a timely enough manner to allow for run strength estimation and broodstock management. Both time and area restrictions could be used to conserve broodstock as was done in 2022-2024. Common property openings may be restricted during cost recovery operations which will likely begin statistical week 28. Openings may continue through August 9.

Chum salmon troll catches comprise only a small percentage of the total return to the hatchery. On July 1, regulations go into effect that limits troll harvest to one chum salmon per Chinook salmon.

Coho salmon

Approximately 50% of HFH coho salmon will be harvested in the general summer troll and sport fisheries seasons, and about 50% are expected to return to the terminal area. Trollers may retain coho salmon in the HFH THA beginning June 1, until the end of the general summer troll season, unless closed by EO.

During the mid-August troll closure, the HFH THA will open restricted to an area within 1 mile from shore south of 57°15.00′N lat, north of 57°10.00′N lat and west of a line from 57°15.00′N lat, 134°48.60′W long to 57°10.00′N lat, 134°46.40′W long (5 AAC 33.374 (e)) (Figure 3).

Chinook salmon

Spring troll fisheries are prosecuted to intercept surplus hatchery Chinook salmon stocks and will occur near Sitka in areas designated as Salisbury Sound (113-62), Sitka Sound (113-41), Redoubt Bay (113-30), Goddard (113-31), Western Channel (113-01), and West Crawfish Inlet (113-32). These areas, all located on the outer coast of Baranof Island, are much reduced from the historical corridor fisheries of both Icy and Chatham Straits. Fishery restrictions to inside waters and adjacent corridors are for wild stock Chinook salmon conservation during May and June. The HFH THA may be opened on a continuous basis beginning June 1. Unlike the HFH THA opening, spring fisheries will be opened for specific dates through June 30. The 2025 Spring Troll Fishery Management Plan will be available in areas offices and on the spring troll webpage in early May. Maps and areas descriptions for 2025 spring troll and Terminal Harvest Areas will also be available on the spring troll webpage. Adjustments to spring troll fisheries may occur in season, in accordance with 5 AAC 29.090 based on the percentage of Alaska hatchery fish in the catch.

### 4.2.2 Thomas Bay THA

The chum salmon return to Thomas Bay will be comprised of all age classes of chum and is forecast to be 379,000 fish in 2025. This year will be the seventh year of terminal purse seine and troll fisheries in Thomas Bay. From June 15 through August 7, seine fishing will occur on Sunday and Thursdays. Troll openings will occur June 15 through August 9 during those time periods the area is not open to purse seine. As mentioned above (4.1 *Intercepting Fisheries*) it is expected that some gillnet harvest of chum salmon bound for Thomas Bay will occur in District 8. Analysis of NSRAA otolith sampling data has shown the interception of Thomas Bay chum to be primarily from samples collected north of Frederick Sound. This indicates, as hypothesized, the migratory path of Thomas Bay chum salmon is likely similar to HFH chum salmon up to the HFH THA. Conversely, Southeast Cove chum salmon are predominately intercepted in samples to the south of Frederick Sound, indicating a preference for a southerly migration route.

The THA boundaries are defined as those waters of Thomas Bay northeast of a line from Point Vandeput at 57°00.96′ N lat, 133°00.02′ W long, to Wood Point at 56°59.55′ N lat, 132°56.96′ W long, northwest of a line from a point on the mainland shoreline at 56°59.57′ N lat, 132°54.02′ W long to Ruth Island at 57°00.42′ N lat, 132°51.07′ W long, north of line from a point on the southeastern shoreline of Ruth Island at 56°58.70′ N lat, 132°49.16′ W long, to the mainland shoreline at 56°58.70′ N lat, 132°47.32′ W long, west of a line from the mainland shoreline at

56°59.38′ N lat, 132°47.60′ W long, to the southern tip of Spray Island at 56°59.80′ N lat, 132°47.73′ W long, to the northern tip of Spray Island at 57°00.07′ N lat, 132°47.80′ W long, to the mainland shoreline at 57°00.56′ N lat, 132°47.57′ W long, and south of a line from 57°03.00′ N lat, 132°49.62′ W long, to 57°03.00′ N lat, 132°52.03′ W long. The waters of Spurt Cove are closed northwest of a line from 57°01.98′ N lat, 132°52.49′ W long, to 57°02.08′ N lat, 132°52.37′ W long.

In order to reduce conflict with recreational users, the Thomas Bay Bluffs will be closed on Saturdays and Sundays. The Bluffs areas are those waters northeast of a line from the northern tip of Spray Island at 57°00.07′ N lat, 132°47.80′ W long to a point on the northern boundary line approximately 1.5 nautical mile (nmi) from the mainland shoreline at 57°03.00′ N lat, 132°50.55′ W long (Figure 6).

#### 4.2.3 Mist Cove SHA

The major portion of the common property harvest will be in the traditional summer troll fisheries along the outer coast of Baranof and Chichagof islands, and in lower Chatham Strait. Traditional purse seine fisheries in Section 9-A will incidentally harvest some coho salmon returns, if pink salmon fisheries are open. The Mist Cove SHA will remain open to commercial trolling by EO and is open to sport fishing under regional sport fishing regulations, except a small area inside the Mist Cove SHA is closed to both commercial and sport fishing by regulation to facilitate cost-recovery harvest in Mist Cove SHA. See Section 4.3 *Cost-recovery Fishery,* for additional details on Mist Cove SHA.

Except for the closed portion, sport and commercial fisheries will be managed as described in regional codified regulations for those waters defined in each SHA. The department may use EO authority to address inseason issues.

### 4.3 *Cost-recovery Fishery*

In 2025, NSRAA is planning to harvest approximately 23% of the Hidden Falls chum return for cost recovery. This harvest will likely begin the Monday of stat week 28 and continue through week 30. Depending on run timing, strength and cost recovery progress, portions of the THA may open to common property fishing during cost recovery efforts. There is no direct cost-recovery planned in the Thomas Bay SHA. If a broodstock closure is in place and cost recovery harvest is necessary, every effort will be made to minimize cost recovery harvest of the species closed to common property harvest.

**Hidden Falls SHA**

Chum salmon

Terminal chum salmon returns to HFH are harvested by common property fisheries and processor contracted cost-recovery fisheries. The HFH THA and adjacent waters have been designated as a tax assessment area to generate cost-recovery revenue from common property seine openings. Chum salmon cost recovery can be achieved by a tax assessment applied to all chum salmon caught

in the HFH THA, as well as subdistricts 112-11 and 112-21, from June 15 until July 31 each year. This tax amount can be adjusted yearly to balance NSRAA's operating and capital budget. The tax assessment dollar amount is the difference of the total from the previous year salmon enhancement tax revenue, combined with the Chinook and coho salmon cost-recovery revenue generated the previous season, and the board-approved NSRAA budget.

In 2024, the NSRAA board did not approve a tax assessment due to an unsatisfactory rate proposed by the Alaska Department of Revenue (DOR) and the expected chum salmon price. NSRAA has continued discussions with DOR for potential implementation of a tax in the future. Current DOR regulation requires the operator to submit all necessary information prior to October 1 of the preceding year. DOR has indicated they plan to modify the regulations based on input received by the associations. The NSRAA board has opted for an alternative cost recovery plan the last 2 years. NSRAA is committed to ensuring that all terminal returns will be "mopped up" to ensure full utilization and complete harvest.

Coho salmon

Cost recovery in the HFH SHA is conducted to achieve the financial goals and objectives of NSRAA. In 2008, NSRAA passed a resolution directing all cost-recovery revenue generated from harvest of Chinook and coho salmon be applied to the following fiscal year budget. Thus, the cost-recovery goal each year is to harvest all Chinook and coho salmon not intercepted in THA/SHA common property fisheries, excluding what is necessary for broodstock.

Approximately 6,000 coho salmon are needed for broodstock; the remainder will be harvested by seine gear for cost recovery, commercial troll, and by local sport fishing. During the month of August, NSRAA staff have agreed to work with the troll fleet to delay the start of cost-recovery operations as long as possible, especially if significant troll effort in the area is observed and catch rates look good. It is NSRAA's goal to facilitate the increase of troll harvest of HFH coho salmon. However, should sufficiently large numbers of fish show up, and increased sea lion predation occurs, NSRAA may begin aggressively harvesting coho salmon within the SHA. The entire coho salmon SHA may be closed to commercial fishing when coho salmon are present if necessary to facilitate cost recovery or broodstock.

The HFH SHA for coho salmon is defined as the waters of Kasnyku Bay west of a line from 57°13.33′N lat, 134°50.93′W long to the northernmost tip of an unnamed island locate at 57°12.93′N lat, 134°51.40′W long then due south to the Baranof Island shoreline (Figure 2).

In 2015, the Alaska Board of Fisheries adopted a regulation to close the inner portion of the HFH SHA to sport and commercial salmon fishing to facilitate coho salmon broodstock collection, cost recovery, and protect NSRAA equipment and property. The closed area is defined as the waters north and west of a line between a point at 57°13.17′N lat, 134°51.86′W long and a point at 57°13.08′N lat, 134°52.02′W long, and the waters north of a line from 57°13.05′N lat, 134°52.24′W long and a point at 57°13.06′N lat, 134°52.20′W long (Figure 4).

Sport fisheries will be managed as described in regional codified regulations for those waters defined in each SHA. The department may use EO authority to close area if broodstock are projected to be below goals.

**Mist Cove SHA**

Cost recovery will occur in the Mist Cove SHA by seine and gillnet as follows:
The SHA consists of all waters of Mist Cove west of a line from 56°31.70′N lat, 134°39.97′W long to a point at 56°31.27′N lat, 134°39.85′W long (Figure 5). The SHA will be open for harvest by hatchery permit holder from 12:01 a.m., August 1 until 11:59 p.m., October 31 (5 AAC 40.042(a)(8)).

The Mist Cove SHA will remain open to sport salmon fishing and to commercial trolling during the summer troll fishery except for a small portion of the Mist Cove SHA that is closed by regulation. The closed area is defined as the waters south of a line from 56°31.07′N lat, 134°40.20′W long to 56°31.07′N lat, 134°40.12′W long (Figure 5). Sport fisheries will be managed as described by regional codified regulations for those waters defined in each SHA. The department may use EO authority to address conflicts between common property fisheries and cost recovery harvest within the SHA if issues arise in season.

Chinook salmon

If large numbers of Chinook salmon are available for cost recovery, then a targeted harvest in the inner bay will be performed. This will likely be a purse seine effort but may involve beach seine efforts as well.

## 5.0 MARK/TAG/RECOVERY PROGRAM FOR 2025

All chum salmon production is otolith-marked (there is no CWT program for chum salmon). Otolith marks on chum salmon will be used to evaluate different rearing strategies and the comparative survival and catch distribution of fish released from Kasnyku, Takatz, Thomas Bay, and Southeast Cove. Marks also assist National Marine Fishery Service (NMFS) research on ocean carrying capacity.

Chum salmon adult returns will be sampled for age distribution by scale and otolith analysis. Two hundred scales will be collected each week from fisheries in Kasnyku Bay, as well as at the hatchery rack. Approximately 96 pairs of otoliths will be collected each week from commercial fisheries and at the hatchery rack.

A portion of all Chinook and coho salmon released at HFH are marked with coded wire tags. All Chinook and coho salmon returning to the hatchery rack will be examined for marks and tags. Tag-recovery data will be used for stock and release-strategy survival information. Coho salmon harvested in cost-recovery fisheries will also be sampled for CWT at HFH and Mist Cove. See the table in Section 1.5 for additional detail.

## 6.0 APPROVAL

**Recommendation for Approval: Hidden Falls Hatchery Annual Management Plan, 2025**

Adam Olson, Operations Manager, NSRAA 6/9/2025

Troy Tydingco, Area Management Biologist, Division of Sport Fish 6/10/2025

Jeff Rice, Area Management Biologist, Division of Sport Fish 6/13/2025

Aaron Dupuis, Area Management Biologist, Division of Commercial Fisheries 6/9/2025

Katie Taylor, Area Management Biologist, Division of Commercial Fisheries 6/13/2025

Judy Lum, Regional Supervisor, Division of Sport Fish 6/18/2025

Anne Reynolds-Manney, Regional Supervisor, Division of Commercial Fisheries 6/10/2025

Lorna Wilson, PNP Program Assistant Coordinator, Div. of Commercial Fisheries 6/18/2025

**Approval:**

**The 2025 Hidden Falls Hatchery Annual Management Plan is hereby approved:**

Jason Dye, Deputy Director, Division of Sport Fish 6/22/2025

Forrest Bowers, Operations Manager, Division of Commercial Fisheries 6/20/2025

Table 1. Projected 2025 Returns to Hidden Falls Projects

| Run | Species | First Brood year | Last Brood Year | Release Site | Forecast | Forecast Min | Forecast Max |
|---|---|---|---|---|---|---|---|
| Summer | Chinook | 2019 | 2019 | Kasnyku Bay 112-11 | 15 | - | 50 |
| Summer | Chinook | 2019 | 2021 | Gunnuk Creek 109-42 | 850 | 400 | 1,300 |
| Summer | Chinook | 2020 | 2021 | SE Cove 109-42 | 550 | 250 | 1,050 |
| Summer | Chum | 2019 | 2022 | Kasnyku Bay 112-11 | 2,666,000 | 1,923,000 | 4,769,000 |
| Summer | Chum | 2019 | 2022 | SE Cove 109-42 | 587,000 | 416,000 | 1,057,000 |
| Summer | Chum | 2019 | 2022 | Thomas Bay 110-12 | 379,000 | 212,000 | 568,000 |
| Fall | Coho | 2022 | 2022 | Deer Lake 109-10 | 48,000 | 15,000 | 116,000 |
| Fall | Coho | 2022 | 2022 | Kasnyku Bay 112-11 | 51,000 | 26,000 | 59,000 |

Table 2a. Chum Salmon Release and Survival Data for Hidden Falls Hatchery and Remote Release Sites.

| Brood Year | Egg Source [1] | Release Site | Number Fry Released [2] | Size (g) | Size (g) Weighted Avg. | Release Dates | % Marine Survival | Total Return |
|---|---|---|---|---|---|---|---|---|
| **KASNYKU BAY & TAKATZ BAY & EAST CHATHAM** | | | | | | | | |
| 1977 | K,C (unknown) | KAS | 212,551 | 0.84 | 0.85 | 5/18/78 | 1.57% | 3,340 |
| 1978 | K,C | KAS | 1,889,184 | 1.01-1.65 | 1.13 | 5/20,22,23/79 | 2.36% | 44,540 |
| 1979 | K,C | KAS | 3,599,384 | 1.5-2.7 | 1.76 | 4/18,5/16,18, 20/80 | 4.50% | 161,884 |
| 1980 | K,S | KAS | 9,013,938 | 1.6-2.4 | 1.54 | 4/15,5/8,9,10, 11,12,15,16,1 7,18/81 | 8.19% | 738,628 |
| 1981 | K,S,HF(K) | KAS | 10,291,351 | 1.1-1.2 | 1.34 | 4/21,5/21/82 | 4.33% | 445,910 |
| 1982 | HF | KAS | 18,909,761 | 0.4-1.0 | 0.94 | 4/27/1983 | 3.27% | 618,539 |
| 1983 | HF | KAS | 20,100,000 | 0.4-1.0 | 1.01 | 5/2/1984 | 3.34% | 671,469 |
| 1984 | HF | KAS | 21,530,000 | 0.4-0.75 | 0.82 | 5/19/1985 | 1.27% | 273,967 |
| 1985 | HF | KAS | 19,680,000 | 0.4-0.7 | 0.63 | 5/12/1986 | 1.03% | 201,730 |
| 1986 | HF | KAS, TAK | 40,390,000 | 1.1-1.5 | 1.23 | 5/14,20/87 | 1.54% | 620,857 |
| 1987 | HF | KAS, TAK | 50,755,717 | 1.68 | 1.61 | 5/18,20,21/88 | 1.78% | 901,881 |
| 1988 | HF | KAS, TAK | 60,300,600 | 1.5 | 1.57 | 5/15,16/89 | 2.48% | 1,494,332 |
| 1989 | HF | KAS, TAK | 62,506,791 | 1.6-1.9 | 1.75 | 5/12,19/90 | 4.70% | 2,940,331 |
| 1990 | HF | KAS, TAK | 64,275,400 | 1.4-1.6 | 1.55 | 5/23,24/91 | 4.38% | 2,812,054 |
| 1991 | HF | KAS, TAK | 56,129,200 | 1.4-1.5 | 1.50 | 5/13,15/92 | 5.13% | 2,879,438 |
| 1992 | HF | KAS, TAK | 62,442,900 | 1.7 | 1.70 | 5/19/93 | 7.36% | 4,596,885 |
| 1993 | HF | KAS, TAK | 60,222,973 | 1.3-1.7 | 1.53 | 5/20,21/94 | 0.95% | 574,853 |
| 1994 | HF | KAS, TAK | 70,889,750 | 1.5-1.9 | 1.71 | 5/21,22/95 | 4.41% | 3,125,145 |
| 1995 | HF | KAS, TAK | 76,671,678 | 1.4-1.9 | 1.59 | 5/21,22/96 | 2.87% | 2,198,109 |
| 1996 | HF | KAS, TAK | 62,565,996 | 1.5-2.0 | 1.72 | 5/21,22/97 | 6.04% | 3,777,135 |
| 1997 | HF | KAS, TAK | 63,691,981 | 1.8-2.5 | 2.10 | 05/18/98 | 1.36% | 867,533 |
| 1998 | HF | KAS, TAK | 74,650,314 | 1.5-1.9 | 1.66 | 5/17,19/99 | 1.71% | 1,276,322 |
| 1999 | HF | KAS, TAK | 74,949,068 | 1.5-2.1 | 1.86 | 5/19,21/00 | 3.83% | 2,873,891 |
| 2000 | HF | KAS, TAK | 80,844,732 | 1.7-2.3 | 1.99 | 5/19,22/01 | 1.65% | 1,337,415 |
| 2001 | HF | KAS, TAK | 72,820,877 | 1.4-1.6 | 1.50 | 5/21,22/02 | 1.53% | 1,116,972 |
| 2002 | HF | KAS, TAK | 75,415,683 | 1.8-2.3 | 1.94 | 5/6,10,21/03 | 2.39% | 1,803,004 |
| 2003 | HF | KAS, TAK | 88,598,169 | 2.0-3.5 | 2.26 | 5/18,21,6/5/04 | 1.65% | 1,458,159 |
| 2004 | HF | KAS, TAK | 88,800,300 | 2.0-3.3 | 2.16 | 5/16,19,20,22 ,24,6/3/05 | 2.94% | 2,614,584 |
| 2005 | HF | KAS, TAK | 86,198,298 | 2.0-3.3 | 2.18 | 5/17,21,22,26 ,28,30/06 | 2.12% | 1,830,789 |
| 2006 | HF | KAS, TAK | 88,301,824 | 2.1-3.9 | 2.38 | 5/07 | 0.81% | 714,090 |
| 2007 | HF | KAS, TAK | 84,482,754 | 2.2-3.6 | 2.44 | 08 | 0.44% | 368,385 |
| 2008 | HF | KAS, TAK | 81,597,511 | 2.1-2.4 | 2.27 | 6/1,5,8/09 | 2.38% | 1,938,582 |
| 2009 | HF | KAS, TAK | 79,307,655 | 2.0-2.1 | 2.05 | 17,20-22 (TAK) 5/24-30/10[4] | 1.19% | 945,057 |
| 2010 | HF | KAS, TAK | 76,438,022 | 2.1-3.8 | 2.32 | (TAK) 5/29-6/13/11[4] | 0.14% | 109,796 |

(Continued on next page)

Table 2a. Chum Salmon Release and Survival Data for Hidden Falls Hatchery and Remote Release Sites.

| Brood Year | Egg Source [1] | Release Site | Number Fry Released [2] | Size (g) | Size (g) Weighted Avg. | Release Dates | % Marine Survival | Total Return | |
|---|---|---|---|---|---|---|---|---|---|
| 2011 | HF | KAS, TAK | 80,990,646 | 1.9-3.7 | 2.39 | (KAS) 5/18-23, 6/1,2/12 (TAK) 5/24-26,30,31, 6/2,9,10/12[4] | 0.36% | 295,485 | |
| 2012 | HF | KAS, TAK | 74,521,716 | 2.1-4.2 | 2.55 | (KAS) 5/24, 6/3 (TAK) 5/23-26/13[4] | 0.37% | 274,410 | |
| 2013 | HF | KAS, TAK | 74,815,037 | 2.1-4.3 | 2.59 | (KAS) 5/21-27, 6/6-7 (TAK) 5/23-27,6/5-7/14[4] | 0.70% | 526,645 | |
| 2014 | HF | KAS, TAK | 73,605,540 | 2.1-4.3 | 2.63 | (KAS) 5/12-18,25,28-29/15 (TAK) 5/17-21,27-28/15[4] | 0.20% | 150,204 | |
| 2015 | HF | KAS, TAK | 84,397,127 | 2.2-4.5 | 2.68 | (KAS) 4/27,28,5/2,3,4, 5/12-16/16 (TAK) 4/30, 5/2, 5/12-16/16 | 0.32% | 272,199 | |
| 2016 | HF | KAS/ EAST CHATHAM | 64,602,663 | 1.7-3.7 | 2.11 | (KAS) 5/10-14, 5/30-6/1/17 (E CHAT) 5/10-13, 5/30-31/17 | 0.21% | 132,500 | |
| 2017 | HF | KAS/ EAST CHATHAM | 43,725,791 | 2.2-4.5 | 2.88 | (KAS) 5/20, 22, 6/2-3/18 (E CHAT) 5/17-20, 6/2/18 | 0.69% | 302,663 | |
| 2018 | HF | KAS/ EAST CHATHAM | 47,623,744 | 1.82-3.81 | 2.53 | (KAS) 5/6, 9, 27/19 (E CHAT) 5/6-7, 9, 22-24/19 | 1.16% | 551,609 | |
| 2019 | HF | KAS/ EAST CHATHAM | 48,589,947 | 1.72-4.96 | 3.23 | (KAS) 5/5-8, 6/2-3/20 (ECHAT) 5/5-7, 5/30-6/1/20 | 2.58% | 1,254,291 | [3] |
| 2020 | HF | KAS/ EAST CHATHAM | 48,895,105 | 1.55-3.08 | 2.32 | (KAS)5/19,21,22/21, 6/2/21 (ECHAT) 5/17-18/21, 5/30-31/21 | 2.26% | 1,106,299 | [3] |
| 2021 | HF | KAS/ EAST CHATHAM | 50,982,098 | 1.97-3.97 | 2.96 | (KAS)5/15-16/22, 6/2,4/22 (ECHAT) 5/12-14/22, 5/31,6/1-2/22 | 0.53% | 268,987 | [3] |
| 2022 | HF | KAS | 45,592,387 | 2.16-4.17 | 3.18 | (Kas earlies)4/20/23 (Kas regs)5/20/23 (Kas LL)6/5,6/6/23 | | | |
| 2023 | HF | KAS/ CATHERINE I., TAK | 87,693,386 | 1.99-4.27 | 3.12 | (TAK regs) 4/21/24 (KAS/CATH regs) 5/11/24 (TAK LL) 5/12/24 (KAS LL) 5/26/24 (CATH LL) 5/27/24 | | | [5] |

(Continued on next page)

Table 2a. Continued

| Brood Year | Egg Source [1] | Release Site | Number Fry Released [2] | Size (g) | Size (g) Weighted Avg. | Release Dates | % Marine Survival | Total Return | |
|---|---|---|---|---|---|---|---|---|---|
| **SOUTHEAST COVE** | | | | | | | | | |
| 2012 | HF | SE COVE | 8,712,136 | 4.01 | 4.01 | 6/8/2013 | 2.20% | 191,518 | |
| 2013 | HF | SE COVE | 9,142,373 | 3.89 | 3.89 | 6/7/2014 | 0.39% | 35,794 | |
| 2014 | HF | SE COVE | 17,478,583 | 4.15 | 4.15 | 5/30/2015 | 0.46% | 80,447 | |
| 2015 | HF | SE COVE | 42,758,270 | 2.3-4.1 | 2.87 | 5/8-13, 5/23-27/16 | 2.58% | 1,101,995 | |
| 2016 | HF | SE COVE | 46,749,525 | 2.0-4.2 | 2.87 | 5/8, 10, 11, 14, 15, 17, 19, 21, 29-31, 6/1, 3, 4/17 | 0.20% | 91,812 | |
| 2017 | HF | SE COVE | 43,109,082 | 2.1-4.1 | 2.83 | 5/18, 19, 20, 21, 23, 24, 26, 6/8, 9 10/18 | 0.17% | 72,420 | |
| 2018 | HF | SE COVE | 36,644,291 | 2.3-4.3 | 3.34 | 5/19, 21, 22, 23, 25-30/19 | 0.41% | 148,881 | |
| 2019 | HF | SE COVE | 40,951,776 | 2.12-4.09 | 3.10 | 5/19/20, 5/25,26,27,28,30,31,6/2/20 | 1.18% | 482,277 | [3] |
| 2020 | HF | SE COVE | 35,357,207 | 2.01-3.44 | 3.06 | 5/27-29/21, 6/8-10/21 | 0.69% | 243,072 | [3] |
| 2021 | HF | SE COVE | 36,087,907 | 2.0-4.12 | 3.08 | 5/6-18/22, 5/29-6/5/22 | 0.28% | 102,603 | [3] |
| 2022 | HF | SE COVE | 41,895,230 | 2.06-4.19 | 3.14 | 5/22/23, 6/6/23 | | | |
| 2023 | HF | SE COVE | 42,050,244 | 1.92-4.27 | 3.10 | 5/2/24, 5/30/24 | | | |
| **THOMAS BAY** | | | | | | | | | |
| 2016 | HF | THOMAS BAY | 21,899,063 | 2.2-4.2 | 2.85 | 5/4,8,23,26/17 | 0.23% | 49,743 | |
| 2017 | HF | THOMAS BAY | 22,255,897 | 2.2-4.8 | 3.32 | 5/22, 23, 24, 6/7, 8, 9/18 | 0.53% | 116,850 | |
| 2018 | MC | THOMAS BAY | 15,350,544 | 2.1-4.7 | 3.50 | 5/10-11, 27-29/19 | 0.50% | 77,012 | |
| 2019 | HF | THOMAS BAY | 21,398,311 | 2.11-4.91 | 3.51 | 5/12-14/20, 5/30,31,6/1,2/20 | 0.40% | 84,812 | [3] |
| 2020 | HF | THOMAS BAY | 11,691,221 | 4.34 | 4.34 | 5/31/21-6/3/21 | 4.30% | 503,181 | [3] |
| 2021 | HF | THOMAS BAY | 14,846,799 | 2.31-4.15 | 3.23 | 5/19,31/22, 6/2/22 | 0.07% | 9,693 | [3] |
| 2022 | HF | THOMAS BAY | 19,918,363 | 2.34-4.05 | 3.36 | 5/22,5/31/23 | | | |
| 2023 | HF | THOMAS BAY | 22,532,009 | 2.10-3.36 | 2.76 | 6/2/2024 | | | |
| **GUNNUK CREEK** | | | | | | | | | |
| 2017 | HF | GUNNUK GREEK | 8,866,586 | 4.39 | 4.39 | 5/30, 31, 6/1, 2/18 | 0.57% | 50,932 | |
| 2018 | HF | GUNNUK GREEK | 15,857,078 | 2.5-4.2 | 3.40 | 5/17, 25, 29-30/19 | 0.16% | 24,580 | |
| 2019 | HF | GUNNUK GREEK | 16,142,492 | 2.3-4.24 | 3.27 | 5/7-9, 6/3/20 | 0.10% | 15,723 | [3] |
| 2020 | HF | GUNNUK GREEK | 17,566,539 | 2.3-4.44 | 3.33 | 5/10/2021, 6/1/21 | 0.44% | 76,805 | [3] |
| 2021 | GCH+HF | GUNNUK GREEK | 16,747,099 | 1.98-4.84 | 3.27 | 5/6-20/22, 5/29-6/5/22 | 0.005% | 770 | [3] |
| 2022 | GCH+MCIF | GUNNUK GREEK | 12,799,791 | 2.19-4.21 | 3.20 | 5/22/23, 6/2/23 | | | |
| 2023 | GCH+HF | GUNNUK GREEK | 14,267,627 | 2.01-4.40 | 3.29 | 4/29/24, 5/24.25/24 | | | |

[1] MC= Macaulay Returns, K= Kadashan River, C= Clear River, S= Seal Bay, HF= Hidden Falls Returns
BY77 (unknown) and BY81 (K) are entries in ADF&G database (M. McNair 5/98)

[2] This table contains data for fed fry only.

[3] Incomplete Returns.

[4] Daily releases for periods shown; staggered to reduce potential of whale predation

[5] Cooperative agreement with AKI for additional release of up to 40 million (30 million at Takatz, 10 million at Kas)

Table 2b. Chum Salmon Release Data for Hidden Falls Hatchery.
Release Site/ Fed or Unfed Status / Late-Large

| BY | KAS/TENDER Fed Fry Regular | KAS/TENDER Fed Fry Late - Large | TAKATZ Fed Fry Regular | TAKATZ Fed Fry Late - Large | Total Fed Fry | Release Biomass (kg) | Kasnyku Unfed Fry | Baranof Unfed Fry | Total Unfed Fry | Grand Totals Fed+Unfed |
|---|---|---|---|---|---|---|---|---|---|---|
| 1977 | 212,551 | | | | 212,551 | 180 | | | | 212,551 |
| 1978 | 1,889,184 | | | | 1,889,184 | 2,141 | | | | 1,889,184 |
| 1979 | 3,599,384 | | | | 3,599,384 | 6,341 | | | | 3,599,384 |
| 1980 | 9,013,938 | | | | 9,013,938 | 13,907 | | | | 9,013,938 |
| 1981 | 10,291,351 | | | | 10,291,351 | 13,769 | | | | 10,291,351 |
| 1982 | 18,909,761 | | | | 18,909,761 | 17,775 | 2,726,310 | | 2,726,310 | 21,636,071 |
| 1983 | 20,100,000 | | | | 20,100,000 | 20,301 | 8,400,000 | | 8,400,000 | 28,500,000 |
| 1984 | 21,530,000 | | | | 21,530,000 | 17,661 | 8,550,000 | | 8,550,000 | 30,080,000 |
| 1985 | 19,680,000 | | | | 19,680,000 | 12,406 | 24,060,000 | 1,560,000 | 25,620,000 | 45,300,000 |
| 1986 | 21,140,000 | | 19,250,000 | | 40,390,000 | 49,841 | | | | 40,390,000 |
| 1987 | 29,181,000 | | 21,574,717 | | 50,755,717 | 81,894 | | | | 50,755,717 |
| 1988 | 34,249,000 | | 26,051,600 | | 60,300,600 | 94,793 | | | | 60,300,600 |
| 1989 | 36,371,500 | | 26,135,291 | | 62,506,791 | 109,412 | | | | 62,506,791 |
| 1990 | 37,686,000 | | 26,589,400 | | 64,275,400 | 99,453 | | | | 64,275,400 |
| 1991 | 36,479,100 | | 19,650,100 | | 56,129,200 | 83,913 | | | | 56,129,200 |
| 1992 | 36,530,800 | | 25,912,100 | | 62,442,900 | 106,153 | | | | 62,442,900 |
| 1993 | 33,155,175 | | 27,067,798 | | 60,222,973 | 92,388 | | | | 60,222,973 |
| 1994 | 37,035,400 | | 33,854,350 | | 70,889,750 | 121,009 | | | | 70,889,750 |
| 1995 | 49,715,678 | | 26,956,000 | | 76,671,678 | 121,732 | | | | 76,671,678 |
| 1996 | 37,544,876 | | 25,021,120 | | 62,565,996 | 107,782 | | | | 62,565,996 |
| 1997 | 37,809,253 | | 25,882,728 | | 63,691,981 | 133,753 | | | | 63,691,981 |
| 1998 | 48,905,343 | | 25,744,971 | | 74,650,314 | 123,920 | | | | 74,650,314 |
| 1999 | 38,689,735 | | 36,259,333 | | 74,949,068 | 139,405 | | | | 74,949,068 |
| 2000 | 41,925,974 | | 38,918,758 | | 80,844,732 | 160,881 | | | | 80,844,732 |
| 2001 | 36,503,940 | | 36,316,937 | | 72,820,877 | 109,231 | | | | 72,820,877 |
| 2002 | 38,788,889 | | 36,626,794 | | 75,415,683 | 146,306 | | | | 75,415,683 |
| 2003 | 29,881,079 | 13,662,435 | 45,054,655 | | 88,598,169 | 200,232 | | | | 88,598,169 |
| 2004 | 33,897,948 | 9,917,604 | 44,984,748 | | 88,800,300 | 191,809 | | | | 88,800,300 |
| 2005 | 34,971,120 | 9,300,684 | 41,926,494 | | 86,198,298 | 187,912 | | | | 86,198,298 |
| 2006 | 34,654,534 | 9,252,243 | 44,395,047 | | 88,301,824 | 209,904 | | | | 88,301,824 |
| 2007 | 31,966,262 | 9,688,433 | 42,828,059 | | 84,482,754 | 206,138 | | | | 84,482,754 |
| 2008 | 41,302,992 | | 40,294,519 | | 81,597,511 | 185,095 | | | | 81,597,511 |
| 2009 | 40,268,478 | | 39,039,177 | | 79,307,655 | 164,923 | | | | 79,307,655 |
| 2010 | 37,630,694 | | 30,212,170 | 8,595,158 | 76,438,022 | 177,508 | | | | 76,438,022 |
| 2011 | 31,283,930 | 7,048,558 | 29,204,857 | 13,453,301 | 80,990,646 | 193,392 | | | | 80,990,646 |
| 2012 | 28,358,647 | 6,508,719 | 29,681,749 | 9,972,601 | 74,521,716 | 190,030 | | | | 74,521,716 |
| 2013 | 25,970,400 | 6,395,064 | 32,028,756 | 10,420,817 | 74,815,037 | 194,117 | | | | 74,815,037 |
| 2014 | 23,868,519 | 6,513,515 | 31,396,973 | 11,826,533 | 73,605,540 | 193,460 | | | | 73,605,540 |
| 2015 | 35,599,703 | 10,419,637 | 31,032,302 | 7,345,485 | 84,397,127 | 226,391 | | | | 84,397,127 |
| 2016 | 53,311,753 | 11,290,910 | | | 64,602,663 | 136,503 | | | | 64,602,663 |
| 2017 | 30,183,284 | 13,542,507 | | | 43,725,791 | 126,114 | | | | 43,725,791 |
| 2018 | 32,092,646 | 15,531,098 | | | 47,623,744 | 120,575 | | | | 47,623,744 |
| 2019 | 23,537,892 | 25,052,055 | | | 48,589,947 | 159,427 | | | | 48,589,947 |
| 2020 | 23,922,415 | 24,972,690 | | | 48,895,105 | 113,816 | | | | 48,895,105 |
| 2021 | 25,030,977 | 25,951,121 | | | 50,982,098 | 150,979 | | | | 50,982,098 |
| 2022 | 22,759,617 | 22,832,770 | | | 45,592,387 | 144,917 | | | | 45,592,387 |
| * 2023 | 29,240,969 | 30,831,110 | 13,849,810 | 13,771,498 | 87,693,386 | 273,293 | | | | 87,693,386 |

Table 2b. Chum Salmon Release Data for Hidden Falls Hatchery. (cont.)
Release Site/ Fed or Unfed Status / Late-Large

| BY | Southeast Cove Fed Fry Regular | Southeast Cove Fed Fry Late - Large | Total Fed Fry | Release Biomass (kg) | | |
|---|---|---|---|---|---|---|
| 2012 | | 8,712,136 | 8,712,136 | 34,936 | | 8,712,136 |
| 2013 | | 9,142,373 | 9,142,373 | 35,564 | | 9,142,373 |
| 2014 | | 17,478,583 | 17,478,583 | 72,536 | | 17,478,583 |
| 2015 | 29,441,527 | 13,316,743 | 42,758,270 | 122,826 | | 42,758,270 |
| 2016 | 29,183,809 | 17,565,716 | 46,749,525 | 134,014 | | 46,749,525 |
| 2017 | 27,367,140 | 15,741,942 | 43,109,082 | 121,897 | | 43,109,082 |
| 2018 | 17,074,771 | 19,569,520 | 36,644,291 | 122,567 | | 36,644,291 |
| 2019 | 20,068,712 | 20,883,064 | 40,951,776 | 127,958 | | 40,951,776 |
| 2020 | 9,198,802 | 26,158,405 | 35,357,207 | 107,441 | | 35,357,207 |
| 2021 | 17,710,505 | 18,377,402 | 36,087,907 | 111,151 | | 36,087,907 |
| 2022 | 20,727,576 | 21,167,654 | 41,895,230 | 131,272 | | 41,895,230 |
| 2023 | 20,880,991 | 21,169,253 | 42,050,244 | 130,428 | | 42,050,244 |
| BY | Thomas Bay Fed Fry Regular | Thomas Bay Fed Fry Late - Large | Total Fed Fry | Release Biomass (kg) | | |
| 2016 | 14,749,497 | 7,149,566 | 21,899,063 | 62,334 | | 21,899,063 |
| 2017 | 12,952,470 | 9,303,427 | 22,255,897 | 73,820 | | 22,255,897 |
| 2018 | 6,881,163 | 8,469,381 | 15,350,544 | 53,780 | | 15,350,544 |
| 2019 | 10,835,469 | 10,562,842 | 21,398,311 | 74,727 | | 21,398,311 |
| 2020 | | 11,691,221 | 11,691,221 | 50,741 | | 11,691,221 |
| 2021 | 7,443,023 | 7,403,776 | 14,846,799 | 47,919 | | 14,846,799 |
| 2022 | 7,963,718 | 11,954,645 | 19,918,363 | 67,015 | | 19,918,363 |
| 2023 | 10,674,664 | 11,857,345 | 22,532,009 | 62,198 | | 22,532,009 |
| BY | Gunnuk Creek Fed Fry Regular | Gunnuk Creek Fed Fry Late - Large | Total Fed Fry | Release Biomass (kg) | | |
| 2017 | | 8,866,586 | 8,866,586 | 38,924 | | 8,866,586 |
| 2018 | 7,071,823 | 8,785,255 | 15,857,078 | 53,943 | | 15,857,078 |
| 2019 | 6,475,719 | 9,666,773 | 16,142,492 | 55,881 | | 16,142,492 |
| 2020 | 8,344,163 | 9,222,376 | 17,566,539 | 59,554 | | 17,566,539 |
| 2021 | 8,484,195 | 8,262,904 | 16,747,099 | 54,763 | | 16,747,099 |
| 2022 | 6,378,447 | 6,421,344 | 12,799,791 | 40,927 | | 12,799,791 |
| 2023 | 6,229,022 | 8,038,605 | 14,267,627 | 46,884 | | 14,267,627 |

* Beginning with BY 2023 - cooperative agreement with AKI for additional release of up to 40 million (30 million at Takatz, 10 million at Kas)

Table 2c. Annual Chum Salmon Returns to Hidden Falls Hatchery.

Return Utilization

| Return Year | Commercial | Percent | Broodstock | Percent | Surplus/ Egg Sales | Percent | Cost Recovery | Percent | Total Return |
|---|---|---|---|---|---|---|---|---|---|
| 1980 | 0 | | 0 | | 5 | | | | 5 |
| 1981 | ND | | ND | | | | | | 3,431 |
| 1982 | ND | | ND | | | | | | 58,030 |
| 1983 | 73,334 | 62% | 45,253 | 38% | | | | | 118,587 |
| 1984 | 561,793 | 91% | 32,000 | 5% | 22,400 | 4% | | | 616,193 |
| 1985 | 380,567 | 84% | 65,000 | 14% | 5,020 | 1% | | | 450,587 |
| 1986 | 594,819 | 89% | 55,000 | 8% | 15,000 | 2% | | | 664,819 |
| 1987 | 434,453 | 80% | 85,095 | 16% | 2,000 | 0% | 22,091 | 4% | 543,639 |
| 1988 | 205,594 | 49% | 75,149 | 18% | 2,200 | 1% | 139,028 | 33% | 421,971 |
| 1989 | 50,184 | 32% | 72,576 | 47% | 1,500 | 1% | 30,703 | 20% | 154,963 |
| 1990 | 257,587 | 54% | 81,373 | 17% | 8,500 | 2% | 132,258 | 28% | 479,718 |
| 1991 | 579,329 | 67% | 71,985 | 8% | 16,067 | 2% | 202,522 | 23% | 869,903 |
| 1992 | 738,121 | 72% | 83,932 | 8% | 18,894 | 2% | 186,037 | 18% | 1,026,984 |
| 1993 | 1,437,282 | 80% | 112,153 | 6% | 49,759 | 3% | 192,011 | 11% | 1,791,205 |
| 1994 | 2,855,275 | 89% | 88,290 | 3% | 60,264 | 2% | 204,043 | 6% | 3,207,872 |
| 1995 | 3,216,855 | 90% | 82,729 | 2% | 45,526 | 1% | 212,643 | 6% | 3,557,753 |
| 1996 | 3,370,728 | 83% | 72,636 | 2% | 130,499 | 3% | 481,479 | 12% | 4,055,342 |
| 1997 | 1,377,400 | 81% | 71,247 | 4% | 41,153 | 2% | 220,064 | 13% | 1,709,864 |
| 1998 | 1,837,515 | 82% | 80,582 | 4% | 31,390 | 1% | 302,981 | 13% | 2,252,468 |
| 1999 | 2,336,207 | 86% | 79,599 | 3% | 19,655 | 1% | 279,238 | 10% | 2,714,699 |
| 2000 | 2,737,324 | 88% | 75,377 | 2% | 20,845 | 1% | 266,903 | 9% | 3,100,449 |
| 2001 | 1,177,019 | 74% | 93,256 | 6% | 32,806 | 2% | 278,466 | 18% | 1,581,547 |
| 2002 | 1,230,535 | 76% | 88,569 | 5% | 23,824 | 1% | 277,562 | 17% | 1,620,490 |
| 2003 | 1,351,523 | 63% | 123,833 | 6% | 69,260 | 3% | 604,325 | 28% | 2,148,941 |
| 2004 | 1,154,761 | 60% | 118,420 | 6% | 17,148 | 1% | 622,887 | 33% | 1,913,216 |
| 2005 | 342,258 | 42% | 110,904 | 14% | 27,414 | 3% | 325,985 | 40% | 806,561 |
| 2006 | 1,761,483 | 81% | 104,562 | 5% | 34,231 | 2% | 284,803 | 13% | 2,185,079 |
| 2007 | 500,931 | 41% | 99,137 | 8% | 32,334 | 3% | 594,692 | 48% | 1,227,094 |
| 2008 | 1,747,811 | 78% | 79,510 | 4% | 52,515 | 2% | 371,721 | 17% | 2,251,557 |
| 2009 | 1,889,975 | 82% | 88,283 | 4% | 23,326 | 1% | 303,385 | 13% | 2,304,969 |
| 2010 | 659,437 | 66% | 91,180 | 9% | 25,131 | 3% | 217,808 | 22% | 993,556 |
| 2011 | 132,228 | 36% | 95,113 | 26% | 48,062 | 13% | 96,538 | 26% | 371,941 |
| 2012 | 1,084,357 | 87% | 104,102 | 8% | 43,680 | 4% | 7,948 | 1% | 1,240,087 |
| 2013 | 1,239,914 | 89% | 113,334 | 8% | 33,376 | 2% | 27 | 0% | 1,386,651 |
| 2014 | 252,007 | 54% | 106,974 | 23% | 60,248 | 13% | 51,117 | 11% | 470,346 |
| 2015 | 36,988 | 13% | 149,132 | 54% | 89,748 | 33% | 191 | 0% | 276,059 |
| 2016 | 11,928 | 5% | 146,932 | 58% | 63,285 | 25% | 32,875 | 13% | 255,020 |
| 2017 | 192,787 | 45% | 148,125 | 35% | 63,067 | 15% | 20,187 | 5% | 424,165 |
| 2018 | 229,742 | 68% | 86,557 | 26% | 19,759 | 6% | 95 | 0% | 336,154 |
| 2019 | 23,913 | 10% | 151,170 | 63% | 62,439 | 26% | 1,186 | 0% | 238,708 |
| 2020 | 11,288 | 6% | 115,792 | 60% | 67,512 | 35% | | 0% | 194,591 |
| 2021 | 15,268 | 7% | 113,026 | 50% | 72,064 | 32% | 24,232 | 11% | 224,590 |
| 2022 | 194,669 | 40% | 140,590 | 29% | 93,253 | 19% | 57,151 | 12% | 485,664 |
| 2023 | 922,314 | 74% | 165,220 | 13% | 159,621 | 13% | 1,749 | 0% | 1,248,904 |
| 2024 | 967,992 | 66% | 159,241 | 11% | 92,508 | 6% | 248,548 | 17% | 1,468,288 |

1977-1988 = Hidden Falls Returns, 1989 and later = Hidden Falls & Takatz Bay (during Takatz operational years).

1996 Cost Recovery includes 200,873 regular cost recovery and 280,606 Joint Venture Roe fish.

1998 Cost Recovery includes 239,227 regular cost recovery and 63,754 surplus fish harvested in August.

Broodstock included eggs for Gunnuk Creek Hatchery: 2009-2010, 2012, 2017-2023

Table 2d. Annual Chum Salmon Returns to Southeast Cove.

Return Utilization

| Return Year | Commercial | Percent | Broodstock | Percent | Surplus/ Egg Sales | Percent | Cost Recovery | Percent | Total Return |
|---|---|---|---|---|---|---|---|---|---|
| 2015 | 0 | 0% | 0 | | 0 | 0.0% | 14,273 | 100% | 14,273 |
| 2016 | 311 | 0% | 0 | | 2,246 | 1.5% | 149,409 | 98% | 151,966 |
| 2017 | 198 | 0% | 0 | | 1,139 | 2.3% | 52,434 | 106% | 49,502 |
| 2018 | 5,569 | 3% | 0 | | 278 | 0.1% | 184,680 | 97% | 190,527 |
| 2019 | 99,788 | 11% | 0 | | 1,395 | 0.1% | 847,237 | 89% | 948,420 |
| 2020 | 124,667 | 93% | 0 | | 5,280 | 3.9% | 4,481 | 3% | 134,428 |
| 2021 | 53,256 | 97% | 0 | | 999 | 1.8% | 365 | 1% | 54,679 |
| 2022 | 218,055 | 99% | 0 | | 1,302 | 0.6% | 1,210 | 1% | 220,567 |
| 2023 | 19,678 | 5% | 0 | | 1,592 | 0.4% | 362,305 | 94% | 383,575 |
| 2024 | 284,944 | 71% | 0 | | 1,019 | 0.3% | 112,709 | 28% | 398,672 |

Surplus/egg sale estimates for Southeast Cove chum from both Hidden Falls and Gunnuk Creek hatcheries, per otolith sampling

Table 3a. Chinook Salmon Release and Survival Data for Hidden Falls Hatchery by Ancestral Stock

| Brood Year | Stock /1 | Release Site | Smolt Released | Size (gm) | Release Date | % Marine Survival | Adult Return | |
|---|---|---|---|---|---|---|---|---|
| 1981 | AC | Kasnyku Bay | 80,460 | 12.3 | 5/17-22/83 | 0.12% | 93 | |
| 1982 | AC | Kasnyku Bay | 70,002 | 23.5 | 5/17&24/84 | 1.30% | 910 | |
| 1983 | AC | Kasnyku Bay | 50,211 | 18.8 | 05/21/85 | 0.75% | 375 | |
| 1984 | CL | Kasnyku Bay | 45,583 | 15.2 | 05/22/86 | 0.47% | 215 | |
| 1985 | CL | Kasnyku Bay | 46,137 | 15.7 | 05/22/87 | 0.61% | 283 | |
| 1986 | CL | Kasnyku Bay | 101,571 | 20.7 | 05/28/88 | 2.17% | 2,204 | |
| 1987 | CL,HF | Kasnyku Bay | 284,132 | 21.5 | 05/28/89 | 0.95% | 2,698 | |
| 1988 | CL,HF | Kasnyku Bay | 310,783 | 26.9 | 05/29/90 | 0.57% | 1,276 | /5 |
| 1989 | HF | Kasnyku Bay | 169,379 | 26.6 | 06/04/91 | 1.59% | 2,697 | |
| 1990 | HF,CL,MH | Kasnyku Bay | 1,554,021 | 19.6,28.1 | 5/28-6/4/92 | 1.63% | 25,403 | |
| 1991 | HF,MH | Kasnyku Bay | 1,754,956 | 23.7,34.0 | 6/2&5/93 | 2.89% | 50,779 | |
| 1992 | HF | Kasnyku Bay | 1,053,038 | 28.8,37.2 | 5/28&29/94 | 2.69% | 28,363 | |
| 1993 | HF | Kasnyku Bay | 923,506 | 36.5 | 06/06/95 | 1.06% | 9,808 | |
| 1994 | HF | Kasnyku Bay | 888,538 | 27.5,28.4 | 06/05/96 | 0.92% | 8,217 | |
| 1995 | HF | Kasnyku Bay | 944,457 | 38.3 | 05/27/97 | 4.52% | 42,706 | |
| 1996 | HF | Kasnyku Bay | 1,070,885 | 39.2 | 05/29/98 | 4.53% | 48,496 | |
| 1997 | HF | Kasnyku Bay | 1,104,403 | 35.1 | 06/01/99 | 1.38% | 15,285 | |
| 1998 | HF | Kasnyku Bay | 1,232,716 | 36.7 | 5/19&24/00 | 2.75% | 33,905 | |
| 1999 | HF | Kasnyku Bay | 1,214,625 | 24.3,40.5 | 5/30&6/5/01 | 1.94% | 23,582 | |
| 2000 | HF | Kasnyku Bay | 1,145,835 | 42.7 | 06/03/02 | 1.74% | 19,957 | |
| 2001 | HF | Kasnyku Bay | 1,248,290 | 39.7 | 06/01/03 | 1.18% | 14,671 | |
| 2002 | HF | Kasnyku Bay | 922,407 | 25.5,39.6 | 4/28,6/2,3,4/04 | 0.43% | 3,969 | |
| 2003 | HF | Kasnyku Bay | 1,249,354 | 42.0 | 06/04/05 | 1.50% | 18,708 | |
| 2004 | HF | Kasnyku Bay | 1,052,892 | 18.6,35.8 | 4/16-21,5/9/06 /7 | 0.46% | 4,807 | |
| 2005 | HF | Kasnyku Bay | 604,149 | 46.3 | 5/11,13/07 | 1.20% | 7,245 | |
| 2006 | HF | Kasnyku Bay | 498,136 | 46.3 | 5/27,6/5,6/08 | 1.24% | 6,160 | |
| 2007 | HF | Kasnyku Bay | 908,118 | 40.3 | 06/04/09 | 1.30% | 11,821 | |
| 2008 | HF | Kasnyku Bay | 939,962 | 69.8 | 5/28-6/1/10 | 1.12% | 10,546 | |
| 2009 | HF | Kasnyku Bay | 598,284 | 53.2 | 5/10-16/11 | 0.16% | 987 | |
| 2010 | HF | Kasnyku Bay | 480,642 | 59.3 | 5/7-10/12 | 0.52% | 2,477 | |
| 2011 | HF | Kasnyku Bay | 518,277 | 66.2 | 4/26-5/7/13 | 0.48% | 2,462 | |
| 2012 | HF | Kasnyku Bay | 558,227 | 66.8 | 5/1-4/14 | 0.15% | 865 | |
| 2013 | HF | Kasnyku Bay | 674,433 | 65.0 | 4/16-17,5/15/15 | 0.15% | 989 | |
| 2014 | HF | Kasnyku Bay | 588,842 | 59.1 | 5/5-10/16 | 0.11% | 636 | |
| 2015 | HF | Kasnyku Bay | 552,298 | 55.8 | 4/26-28, 5/16-17 | 0.12% | 636 | |
| 2016 | HF | Kasnyku Bay | 442,436 | 20.5 | 05/14/18 | 0.06% | 247 | |
| 2016 | HF | Gunnuk Creek | 160,234 | 18.4 | 05/10/19 | 0.55% | 879 | |
| 2017 | HF | Kasnyku Bay | 433,213 | 23.3 | 5/7,8/19 | 0.02% | 96 | |
| 2017 | HF | Gunnuk Creek | 108,625 | 24.5 | 06/08/19 | 0.20% | 215 | |
| 2018 | HF | Kasnyku Bay | 315,266 | 18.55,20.32 | 5/5-6/20 | 0.39% | 1,222 | |
| 2018 | HF | Gunnuk Creek | 179,754 | 22.1 | 06/09/20 | 0.72% | 1,289 | |
| 2019 | HF | Kasnyku Bay | 442,196 | 20.73, 22.49 | 06/14/21 | 0.63% | 2,764 | /2 |
| 2019 | HF | Gunnuk Creek | 194,231 | 18.9 | 06/13/21 | 0.37% | 720 | /2 |
| 2020 | HF | SE Cove | 312,054 | 17.1 | 05/25/22 | 0.06% | 202 | /2 |
| 2020 | HF | Gunnuk Creek | 186,704 | 17.3 | 05/30/25 | 0.16% | 300 | /2 |
| 2021 | HF | SE Cove | 347,658 | 19.1 | 05/24/23 | | | |
| 2021 | HF | Gunnuk Creek | 154,649 | 17.3 | 05/30/23 | | | |
| 2022 | HF | SE Cove | 322,440 | 23.4 | 05/31/24 | | | |
| 2022 | HF | Gunnuk Creek | 167,847 | 20.8 | 05/31/24 | | | |

(Part 1 of 2, continued on next page)

(Part 2 of 2)

Table 3a. Chinook Salmon Release and Survival Data for Hidden Falls Hatchery by Ancestral Stock

| Brood Year | Stock /1 | Release Site | Smolt Released | Size (gm) | Release Date | | % Marine Survival | Adult Return |
|---|---|---|---|---|---|---|---|---|
| 2002 | HF | Kasnyku Bay | 246,895 | 10.1 | 07/17/03 | /6 | 0.00% | 0 |
| 2006 | HF | Kasnyku Bay | 252,825 | 8.9 | 08/03/07 | /6 | 0.00% | 0 |
| 2007 | HF | Kasnyku Bay | 264,676 | 8.0 | 07/28/08 | /6 | 0.00% | 0 |
| 2008 | HF | Kasnyku Bay | 289,236 | 10.7 | 07/13/09 | /6 | 0.00% | 0 |
| 2009 | HF | Kasnyku Bay | 367,460 | 13.3 | 07/16/10 | /6 | 0.00% | 0 |
| 1983 | TR | Kasnyku Bay | 46,750 | 18.8 | 05/21/85 | | 0.25% | 115 |
| 1984 | TR | Kasnyku Bay | 46,518 | 16.7 | 05/22/86 | | 0.15% | 72 |
| 1985 | TR | Kasnyku Bay | 51,847 | 16.6 | 05/22/87 | | 0.23% | 118 |
| 1986 | TR | Kasnyku Bay | 57,460 | 17.2 | 05/28/88 | | 0.53% | 302 |
| 1987 | TR | Kasnyku Bay | 53,768 | 23.0 | 05/28/89 | | 0.71% | 382 |
| 1988 | TR | Lutak Bay | 38,660 | 38.0 | 05/21/90 | /3 | NA | NA |
| 1989 | TR | Kasnyku Bay | 14,750 | 27.3 | 06/04/91 | | 1.53% | 226 |
| 1990 | TR | Taiya Inlet | 30,223 | 15.3 | 05/20/92 | /4 | NA | NA |
| 1991 | TR | Taiya Inlet | 56,415 | 21.2 | 05/22/93 | /4 | NA | NA |
| 1992 | TR | Taiya Inlet | 38,789 | ND | 05/20/94 | /4 | NA | NA |
| 1993 | TR | | 0 | | | | | |
| 2007 | PC(TR) | | 164,865 | 11.0 | 07/24/08 | /6,3 | 0.08% | 138 |
| 2008 | PC(TR) | | 222,151 | 11.5 | 07/16/09 | /6,3 | 0.04% | 88 |
| 2009 | PC(TR) | | 80,672 | 18.7 | 07/15/10 | /6,3 | 0.18% | 147 |

/1 AC= Andrew Creek,CL=Crystal Lake Hatchery, HF=Hidden Falls Hatchery, PC=Pullen Creek TR=Tahini River, MH=Medvejie Hatchery

/2 Incomplete Returns

/3 Lutak Bay Release Site

/4 Taiya Inlet Release Site

/5 Only 222,573 BY88 smolts were represented by a tag code. Marine survival shown reflects this. No contribution has been estimated for the 88,210 smolts not represented by a code.

/6 Zero-check smolt release.

/7 Accidental early release (4/16-21/2006) 126,304 smolts

Table 3b. Annual Chinook Salmon Returns to Hidden Falls Hatchery
Catch & Escapement Combined
(Ages 4,5,6,7)

| Andrew Creek | | Tahini River | |
|---|---|---|---|
| Return | Number | Return | Number |
| 1985 | 35 | | |
| 1986 | 199 | | |
| 1987 | 613 | 1987 | 17 |
| 1988 | 475 | 1988 | 83 |
| 1989 | 350 | 1989 | 107 |
| 1990 | 669 | 1990 | 153 |
| 1991 | 1,874 | 1991 | 402 |
| 1992 | 2,075 | 1992 | 348 |
| 1993 | 1,988 | 1993 | 75 |
| 1994 | 8,191 | 1994 | 184 |
| 1995 | 35,369 | 1995 | 59 |
| 1996 | 41,458 | | |
| 1997 | 25,492 | | |
| 1998 | 11,409 | | |
| 1999 | 23,072 | | |
| 2000 | 39,304 | | |
| 2001 | 36,178 | | |
| 2002 | 23,453 | | |
| 2003 | 27,913 | | |
| 2004 | 28,898 | | |
| 2005 | 18,901 | | |
| 2006 | 10,013 | | |
| 2007 | 10,549 | | |
| 2008 | 12,274 | | |
| 2009 | 6,288 | | |
| 2010 | 6,858 | | |
| 2011 | 10,872 | | |
| 2012 | 9,577 | | |
| 2013 | 7,208 | | |
| 2014 | 1,841 | | |
| 2015 | 2,734 | | |
| 2016 | 1,386 | | |
| 2017 | 624 | | |
| 2018 | 1,059 | | |
| 2019 | 561 | | |
| 2020 | 380 | | |
| 2021 | 168 | | |
| 2022 | 232 | | |
| 2023 | 1,661 | | |
| 2024 | 2,104 | | |

Table 4. Coho Salmon Release and Survival Data for Hidden Falls Hatchery

| Brood Year | Brood Source | Ancestral Stock | Smolt Released | Size (g) | Release Date | Survival | Adult Return |
|---|---|---|---|---|---|---|---|
| 1988 | Blanchard Lake | Deep Cove | 62,595 | 17.2 | 05/25/90 | 16.2% | 10,153 |
| 1989 | Deer Lake | Sashin Creek | 64,155 | 28.5 | 05/25/91 | 29.1% | 18,661 |
| 1990 | Deer Lake | Sashin Creek | 168,862 | 21.4 | 06/02/92 | 19.6% | 33,166 |
| 1991 | Deer Lake | Deep Cove | 404,069 | 19.7,24.7 | 06/07/93 | 22.9% | 92,400 |
| 1992 | Hidden Falls | Sashin Creek | 1,651,071 | 24.1 | 6/4&6/94 | 14.2% | 233,650 |
| 1993 | Hidden Falls | Sashin Creek | 1,458,657 | 18-21 | 5/31&6/6/95 | 13.2% | 192,045 |
| 1994 | Hidden Falls | Deep Cove | 1,554,122 | 18-23 | 5/30&6/3,6/96 | 6.3% | 98,199 |
| 1995 | Hidden Falls | Sashin Creek | 1,501,428 | 15-19 | 06/02/97 | 11.8% | 177,425 |
| 1996 | Hidden Falls | Sashin Creek | 1,489,644 | 22-26 | 06/03/98 | 16.9% | 251,096 |
| 1997 | Hidden Falls | Deep Cove | 1,657,809 | 20-22 | 06/07/99 | 10.3% | 170,082 |
| 1998 | Hidden Falls | Sashin Creek | 1,599,069 | 20.5 | 06/02/00 | 12.2% | 195,359 |
| 1999 | Hidden Falls | Sashin Creek | 1,758,775 | 22.6 | 5/29&30/01 | 23.5% | 412,992 |
| 2000 | Hidden Falls | Deep Cove | 1,954,204 | 22.1 | 6/1&5/02 | 10.3% | 201,652 |
| 2001 | Hidden Falls | Sashin Creek | 2,023,849 | 21.9 | 06/02/03 | 10.2% | 206,819 |
| 2002 | Hidden Falls | Sashin Creek | 2,251,020 | 18.9 | 6/1,3,6/04 | 8.6% | 194,657 |
| 2003 | Hidden Falls | Deep Cove | 2,199,914 | 20.8 | 5/26,31,6/6/05 | 10.3% | 226,205 |
| 2004 | Hidden Falls | Sashin Creek | 2,802,729 | 18.9 | 5/19,24,6/8/2006 | 1.9% | 53,703 |
| 2005 | Hidden Falls | Sashin Creek | 2,487,823 | 19.0 | 5/21,22,23,6/8/07 | 9.8% | 243,544 |
| 2006 | Hidden Falls | Deep Cove | 2,274,731 | 18.7 | 5/22,26,30/08 | 4.8% | 109,749 |
| 2007 | Hidden Falls | Sashin Creek | 2,797,375 | 18.9 | 5/17,22,29,30,6/5/09 | 7.2% | 201,890 |
| 2008 | Hidden Falls | Sashin Creek | 2,560,498 | 20-23 | 5/5-11,5/25-26/10 | 9.9% | 254,307 |
| 2009 | Hidden Falls | Deep Cove | 3,185,142 | 20.1-21.7 | 5/6-27/2011 | 1.1% | 36,476 |
| 2010 | Hidden Falls | Sashin Creek | 2,569,138 | 22.2 | 5/4,5,12,13,14,15,25,26/2012 | 4.9% | 124,923 |
| 2011 | Hidden Falls | Sashin Creek | 3,136,431 | 24.4 | 5/4-6/7/2013 | 2.6% | 81,465 |
| 2012 | Hidden Falls | Deep Cove | 3,119,963 | 22.9 | 3/14 & 5/5,16,20,27/14 | 1.8% | 56,323 |
| 2013 | Hidden Falls | Sashin Creek | 3,236,886 | 23.8 | 5/4,11,14,19,28/15 | 0.9% | 30,505 |
| 2014 | Hidden Falls | Sashin Creek | 3,321,349 | 21.4 | 4/25,5/1,14,19,20/16 | 1.2% | 38,345 |
| 2015 | Hidden Falls | Deep Cove | 3,176,580 | 22.4 | 5/5-6/2/17 | 0.9% | 28,773 |
| 2016 | Hidden Falls | Sashin Creek | 2,779,922 | 24.0 | 5/1,2,14,15,31,6/1/18 | 1.4% | 37,686 |
| 2017 | Hidden Falls | Sashin Creek | 2,254,425 | 22.0 | 5/1,8,21,29/19 | 1.5% | 34,364 |
| 2018 | Hidden Falls | Deep Cove | 3,101,589 | 20.44-30.71 | 5/5,6,18/20 , 6/2,4/20 | 1.3% | 39,580 |
| 2019 | Hidden Falls | Sashin Creek | 3,413,179 | 17.79-21.41 | 6/2,14,19/21 | 1.4% | 47,248 |
| 2020 | Hidden Falls | Sashin Creek | 3,375,361 | 18.29-26.63 | 6/15,16,17,21/22 | 1.3% | 42,774 |
| 2021 | Hidden Falls | Deep Cove | 2,964,242 | 22.75-25.30 | 5/13,14,28,6/1,3,5/23 | 1.8% | 53,727 |
| 2022 | Hidden Falls | Sashin Creek | 3,228,363 | 14.36-31.30 | 5/27,28,30/24 | | |
| **Total** | | | **77,584,969** | | | | **4,229,943** |

Table 5. Coho salmon egg take, release and return data for the NSRAA lake stocking program, BY 1981-2021.

| Brood Year | Broodstock Source | /1 | Number Eggs | Release Location | Rearing | Number Fry Release | Age FW | Number Smolts | Average Weight | Number Adults | Marine Survival % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1981 | Sea Lion Cove | | 48,684 | Sealion L. | Lake | 15,174 | I | 11,762 | 13 | 400 | 3 |
| | | | | Sealion R. | Stream | 9,508 | II | 31 | 86 | | |
| 1981 | Sashin Creek | /2 | 90,110 | Banner L. | Lake | | I | 66,850 | 16 | 12,500 | 19 |
| | Deep Cove | | 18,881 | Banner L. | Lake | 97,512 | II | 724 | 52 | 55 | 8 |
| 1982 | Falls Creek | | 226,440 | Elfendahl | Lake | 115,335 | I | 7,750 | 11 | 615 | 8 |
| | | | | | | | II | ND | | 100 | |
| 1983 | Sashin Creek | | 236,000 | L. Rostislaf L. | Lake | 188,603 | I | 107,659 | 9 | 1,872 | 2 |
| | | | | | | | II | 10,769 | 20 | 272 | 3 |
| 1984 | Sealion Cove | | 146,500 | Sealion L. | Lake | 30,000 | I | 18,870 | 10 | 1,075 | 6 |
| | | | | Surprise L. | Lake | 75,163 | I | 20,911 | 11 | 1,250 | 5 |
| | | | | Surprise R. | Stream | 26,487 | I | 2,155 | 5 | | |
| | | | | | | | | 381186 | | | |
| 1984 | Banner Lake | | 1,306,700 | Deer Lake | Lake | 780,800 | I | 317,200 | 13 | 18,750 | 6 |
| | (Sashin ) | | | | | | II | 32,400 | 21 | 1,550 | 5 |
| | | | | Blanchard L. | Lake | 74,961 | I | 18,000 | 15 | 594 | 3 |
| | | | | | | | II | 440 | 24 | ND | |
| | | | | Finger Lake | Lake | 49,958 | I | 900 | 13 | 0 | 0 |
| | | | | Fiddle Lake | Lake | 29,977 | I | 3,150 | 13 | 162 | 5 |
| | | | | Osprey Lake | Lake | 600 | I | 0 | | | |
| 1985 | Deep Cove | | 75,104 | Blanchard L. | Lake | 69,974 | I | 35,383 | 17 | 1,648 | 5 |
| | | | | | | | II | 149 | 65 | | |
| 1986 | L. Rostislaf | | 988,000 | Deer Lake | Lake | 842,900 | I | 370,500 | 13 | 26,050 | 7 |
| | (Sashin) | | | | | | II | 9,100 | 35 | 650 | 7 |
| 1987 | Deer Lake | | 1,026,300 | Deer Lake | Lake-Fert | 475,000 | I | 306,000 | 18 | 52,700 | 17 |
| | (Sashin) | | | | | | II | 1,000 | 32 | 700 | 70 |
| | | | | Blanchard L. | Lake | 90,000 | I | 49,518 | 9 | 2,150 | 4 |
| | | | | | | | II | 6,588 | 34 | 565 | 9 |
| | | | | Banner L. | Lake | 100,000 | I | 47,600 | 10 | 4,390 | 9 |
| | | | | | | | II | 14,746 | 22 | 1,650 | 11 |
| | | | | L. Rostislaf L. | Lake | 200,000 | I | 83,586 | 10 | 2,050 | 2 |
| | | | | Cliff Lake | Lake | 50,269 | I | ND | ND | 290 | ND |
| 1988 | Blanchard L. | | 1,500,000 | Deer Lake | Lake-Fert | 1,443,500 | I | 680,000 | 22 | 165,700 | 24 |
| | (Deep C.) | | | | | | II | 450 | 46 | ND | ND |
| 1989 | Deer Lake | | 2,000,000 | Deer Lake | Lake-Fert | 1,741,500 | I | 737,100 | 17 | 143,650 | 19 |
| | (Sashin) | | | | | | II | 925 | 30 | ND | ND |
| 1990 | Deer Lake | | 2,396,000 | Deer Lake | Lake-Fert | 1,875,000 | I | 591,800 | 12 | 75,800 | 13 |
| | (Sashin) | | | | | | II | 61,300 | 28 | 24,200 | 39 |
| 1991 | Deer Lake | /3 | 2,329,600 | Deer Lake | Lake-Fert | 2,055,000 | I | 1,031,500 | 16 | 239,200 | 23 |
| | (Deep Cove) | | | | | | II | 34,600 | 29 | 5,900 | 17 |
| | | | | U. Deer Lake | Lake | 218,000 | I | | | | |
| | | | | | | | II | | | | |

(Part 1 of 3, continued on next page)

Table 5. Coho salmon egg take, release and return data for the NSRAA lake stocking program, BY 1981-2021. (Cont.)

| Brood Year | Broodstock Source | /1 | Number Eggs | Release Location | Rearing | Number Fry Release | Age FW | Number Smolts | Average Weight | Number Adults | Marine Survival % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1992 | Deer Lake (Sashin) | | 2,458,000 | Deer Lake | Lake-Fert | 2,330,000 | I | 1,132,000 | 16 | 153,500 | 14 |
| | | | | | | | II | 4,650 | 29 | 500 | 11 |
| 1993 | Deer Lake (Sashin) | /4 | 2,256,700 | Deer Lake | Lake-Fert | 2,076,000 | I | 1,490,000 | 18 | 168,300 | 11 |
| | | | | | | | II | 2,675 | 28 | 175 | 7 |
| 1994 | Hidden Falls (Deep Cove) | | 2,573,600 | Deer Lake | Lake-Fert | 2,425,000 | I | 1,665,000 | 16 | 99,100 | 6 |
| | | | | | | | II | 2,950 | 34 | 540 | 18 |
| 1995 | Hidden Falls (Sashin) | | 2,626,100 | Deer Lake | Lake-Fert | 2,505,000 | I | 1,812,000 | 17 | 88,950 | 5 |
| | | | | | | | II | 10,900 | 30 | 6,418 | 59 |
| 1996 | Hidden Falls | | 2,927,000 | Deer Lake | Lake-Fert | 2,714,500 | I | 1,709,000 | 17 | 286,657 | 17 |
| | (Sashin) | | | | | | II | 22,850 | 22 | 623 | 3 |
| 1997 | Hidden Falls (Deep Cove) | | 3,015,600 | Deer Lake | Lake-Fert | 2,829,000 | I | 1,518,000 | 10 | 17,858 | 1 |
| | | | | | | | II | 202,600 | 18 | 60,906 | 30 |
| 1998 | Hidden Falls (Sashin) | | 2,832,150 | Deer Lake | Lake-Fert | 2,525,000 | I | 408,550 | 7 | 27,538 | 7 |
| | | | | | | | II | 350,300 | 29 | 103,613 | 30 |
| 1999 | Hidden Falls (Sashin) | | 315,000 | Banner Lake | Lake | 300,063 | I | 209,734 | ND | 17,038 | 8 |
| | | | | | | | II | 16,139 | ND | 843 | 5 |
| 2000 | Hidden Falls (Deep Cove) | | 2,837,000 | Deer Lake | Lake-Fert | 2,408,500 | I | 951,300 | 10 | 52,365 | 6 |
| | | | | | | | II | 144,800 | 28 | 31,757 | 22 |
| 2001 | Hidden Falls (Sashin) | | 0 | Deer Lake | Lake-Fert | 0 | I | 0 | | | |
| | | | | | | | II | | | | |
| 2002 | Hidden Falls (Sashin) | | 2,600,000 | Deer Lake | Lake-Fert | 2,326,500 | I | 1,031,681 | 17 | 133,501 | 13 |
| | | | | | | | II | 26,610 | 19 | 1,363 | 5 |
| 2003 | Hidden Falls (Deep Cove) | | 2,700,000 | Deer Lake | Lake-Fert | 1,755,085 | I | 693,827 | 17 | 86,507 | 12 |
| | | | | | | | II | 18,482 | 43 | 7,914 | 43 |
| 2004 | Hidden Falls (Sashin) | | 675,550 | Deer Lake | Lake-Netpen | 581,923 | I | 264,290 | 19 | 27,198 | 10 |
| | | | | | | | II | 0 | | | |
| 2005 | Hidden Falls (Sashin) | | 1,110,795 | Deer Lake | Lake-Netpen | 1,002,438 | I | 533,248 | 16 | 18,468 | 3 |
| | | | | | | | II | 0 | | | |
| 2006 | Hidden Falls (Deep Cove) | | 1,537,642 | Deer Lake | Lake-Netpen | 1,056,903 | I | 675,462 | 14 | 50,883 | 8 |
| | | | | | | | II | 12,025 | | 611 | 5 |
| 2007 | Hidden Falls (Sashin) | | 1,558,136 | Deer Lake | Lake-Netpen | 1,110,882 | I | 826,158 | 13 | 41,966 | 5 |
| | | | | | | | II | 12,958 | 33 | 259 | 2 |
| 2008 | Hidden Falls (Sashin) | | 2,403,037 | Deer Lake | Lake-Netpen | 2,037,104 | I | 1,063,381 | 16 | 81,845 | 8 |
| | | | | | | | II | 13,000 | 32 | 825 | 6 |

(Part 2 of 3, continued on next page)

Table 5. Coho salmon egg take, release and return data for the NSRAA lake stocking program, BY 1981-2022. (Cont.)

| Brood Year | Broodstock Source /1 | Number Eggs | Release Location | Rearing | Number Fry Release | Age FW | Number Smolts | Average Weight | Number Adults | Marine Survival % |
|---|---|---|---|---|---|---|---|---|---|---|
| 2009 | Hidden Falls | 2,498,400 | Deer Lake | Lake-Netpen | 2,123,950 | I | 647,000 | 23 | 41,042 | 6.3 |
| | (Deep Cove) | | | | | II | 354,622 | 25 | 42,370 | 11.9 |
| 2010 | Hidden Falls | 2,511,040 | Deer Lake | Lake-Netpen | 2,000,300 | I | 1,711,170 | 19 | 204,396 | 11.9 |
| | (Sashin) | | | | | II | 112,330 | 28 | - | 0.0 |
| 2011 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,801,419 | I | 2,314,224 | 21 | 239,417 | 10.3 |
| | (Sashin) | | | | | II | 52,395 | 46 | ND | |
| 2012 | Hidden Falls | 3,132,330 | Deer Lake | Lake-Netpen | 2,802,628 | I | 2,364,473 | 25 | 143,183 | 6.1 |
| | (Deep Cove) | | | | | II | 2,521 | 63 | - | 0.0 |
| | | | Cliff Lake [5] | Lake | 50,003 | I&II | 37,502 | 2 | 862 | 2.3 |
| 2013 | Hidden Falls | 3,217,500 | Deer Lake | Lake-Netpen | 2,800,536 | I | 2,495,732 | 25 | 56,885 | 2.3 |
| | (Sashin) | | | | | II | 0 | | | |
| | | | Banner Lake [5] | Lake | 100,819 | I&II | 75,614 | 2 | 1,127 | 1.5 |
| 2014 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,814,430 | I | 2,427,271 | 22 | 125,719 | 5.2 |
| | (Sashin) | | | | | II | | | | |
| | | | Parry Lake [5] | Lake | 128,158 | I&II | 96,119 | 2 | 783 | 0.8 |
| 2015 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,900,000 | I | 2,557,538 | 25 | 43,441 | 1.7 |
| | (Deep Cove) | | | | | II | | | | |
| | | | Cliff Lake [5] | Lake | 29,789 | I&II | 22,342 | 3 | 116 | 0.5 |
| 2016 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,800,385 | I | 2,379,970 | 23 | 51,814 | 2.2 |
| | (Sashin) | | | | | II | | | | |
| | | | Banner Lake [5] | Lake | 118,000 | I&II | 59,000 | 4 | 239 | 0.4 |
| | | | Blanchard Lake [5] | Lake | 47,203 | I&II | 23,602 | 4 | 130 | 0.6 |
| 2017 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,800,000 | I | 2,102,566 | 26 | 63,164 | 3.0 |
| | (Sashin) | | | | | | | | | |
| 2018 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,841,000 | I | 2,073,028 | 26 | 42,031 | 2.0 |
| | (Deep Cove) | | | | | | | | | |
| | | | Banner Lake [5] | Lake | 278,920 | I&II | 139,460 | 1.77 | 3,804 | 2.7 |
| 2019 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,852,089 | I | 2,001,846 | 22 | 141,954 | 7.1 |
| | (Sashin) | | | | | | | | | |
| | | | Blanchard Lake [5] | Lake | 94,733 | I&II | 47,367 | 1.98 | 489 | 1.0 |
| 2020 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,961,067 | I | 1,413,417 | 23.4 | 31,828 | 2.3 |
| | (Sashin) | | | | | | | | | |
| 2021 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 3,011,863 | I | 1,261,409 | 22.3 | 11,505 | 0.9 |
| | (Deep Cove) | | | | | | | | | |
| 2022 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,793,455 | I | 1,660,631 | 21.4 | | |
| | (Sashin) | | | | | | | | | |
| 2023 | Hidden Falls | 3,200,000 | Deer Lake | Lake-Netpen | 2,737,127 | | | | | |
| | (Sashin) | | | | | | | | | |

/1 The ancestral origin of the stock is given in parentheses.
/2 Sashin Creek fish were untagged and Deep Cove were tagged before planting into Banner lake.
/3 Smolt and adult data for Deer and Upper Deer Lakes are combined.
/4 Broodstock source: 1,780,100 eggs from Deer Lake (Sashin); 476,600 from Hidden Falls (Sashin).
/5 Lake stocking with no enumeration at emmigration. Smolt are estimated at 50% of fry plant and are assumed to be split between Age I and Age II. Adults are total adults for all years.

In 1984 only Sashin Creek fish were used for brood.
Beginning with BY2004, eggs are kept at Hidden Falls for enire incubation and initial rearing. Fry are transported directly from Hidden Falls to Deer Lake. (Previous incubation was at Medvejie.)

(Part 3 of 3)

Table 6. Numbers of Fish, Eggs, and Fry Associated with the 2025 Chum Salmon Egg Take At Hidden Falls Hatchery by Release Location

| Release Location | Egg Take (millions) | Females Required | Brood Required | Eyed Eggs (millions) | Ponded Fry (millions) | Fry Released (millions) |
|---|---|---|---|---|---|---|
| Kasnyku/4 | 66.0 | 33,000 | 66,000 | 61.7 | 61.7 | 59.9 |
| Takatz/4 | 30.0 | 15,000 | 30,000 | 28.1 | 28.1 | 27.2 |
| Southeast Cove | 45.0 | 22,500 | 45,000 | 42.1 | 42.1 | 40.8 |
| Gunnuk Creek | 0.0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Thomas Bay | 25.0 | 12,500 | 25,000 | 23.4 | 23.4 | 22.7 |
| **H.F. Subtotal/1** | **166** | **83,000** | **166,000** | **155** | **155** | **151** |
| Deep Inlet/2 | 0.0 | 0 | 0 | 23.0 | 23.0 | 22.3 |
| Bear Cove/2 | 20.0 | 10,000 | 20,000 | 23.0 | 23.0 | 22.3 |
| Offsite/3 | 10.0 | 5,000 | 10,000 | 9.4 | 9.4 | 9.1 |
| **Overall Total** | **196.0** | **98,000** | **196,000** | **210.6** | **210.6** | **204.2** |

1/ Hidden Falls Hatchery

2/ Medvejie permit allows for 44 million chum eggs to be taken at HFH: 24 million for Deep Inlet and 20 million for Bear Cove.

3/ Unspecified Destination. DIPAC and Port Armstrong permits allow for up to 40 million chum eggs (combined) to be taken at HFH.

/4 Utilization of AKI permit - 40 m eggs (10m at Kas / 30 m at Tak)

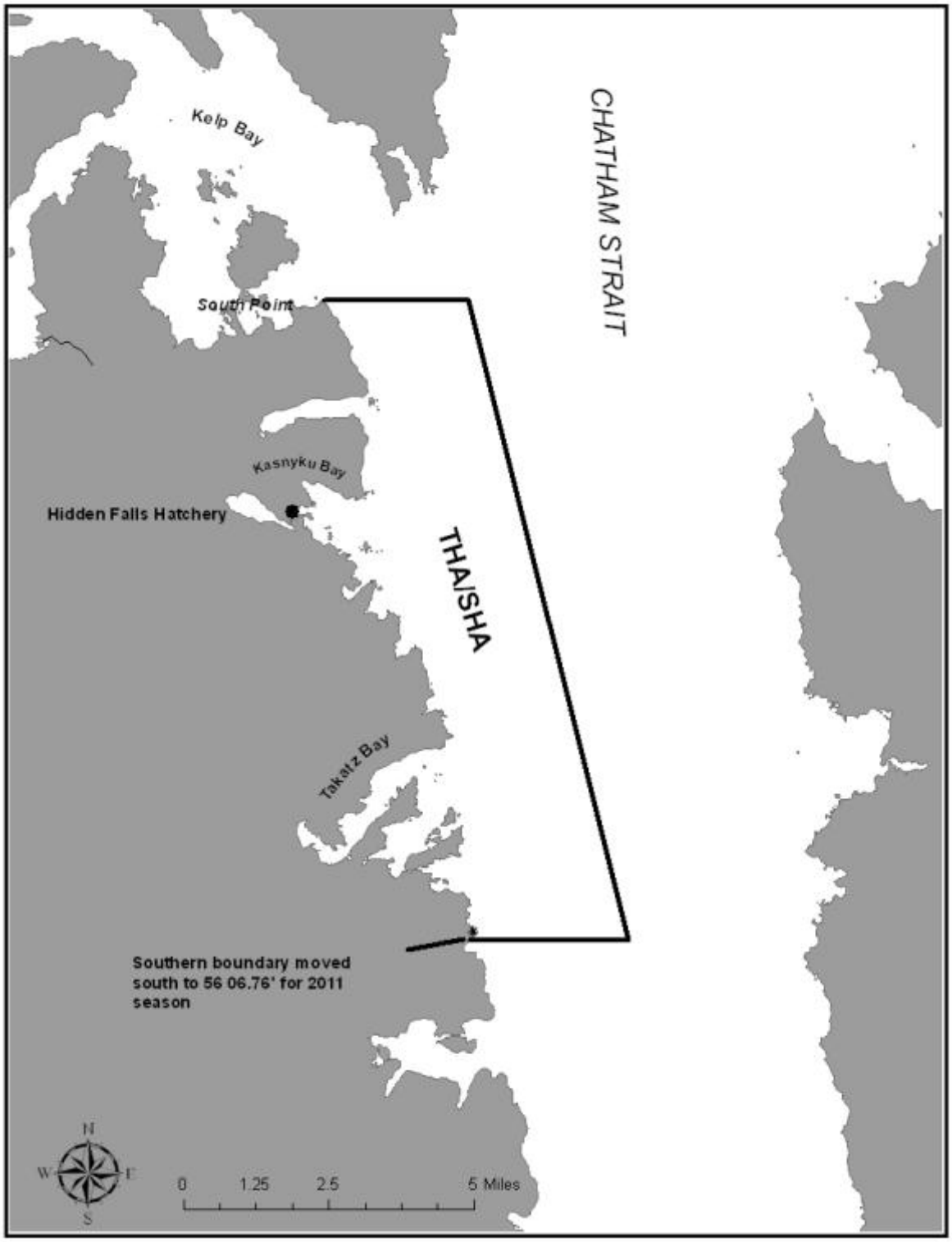



Figure 1.–Hidden Falls Hatchery THA and SHA for chum and Chinook salmon.

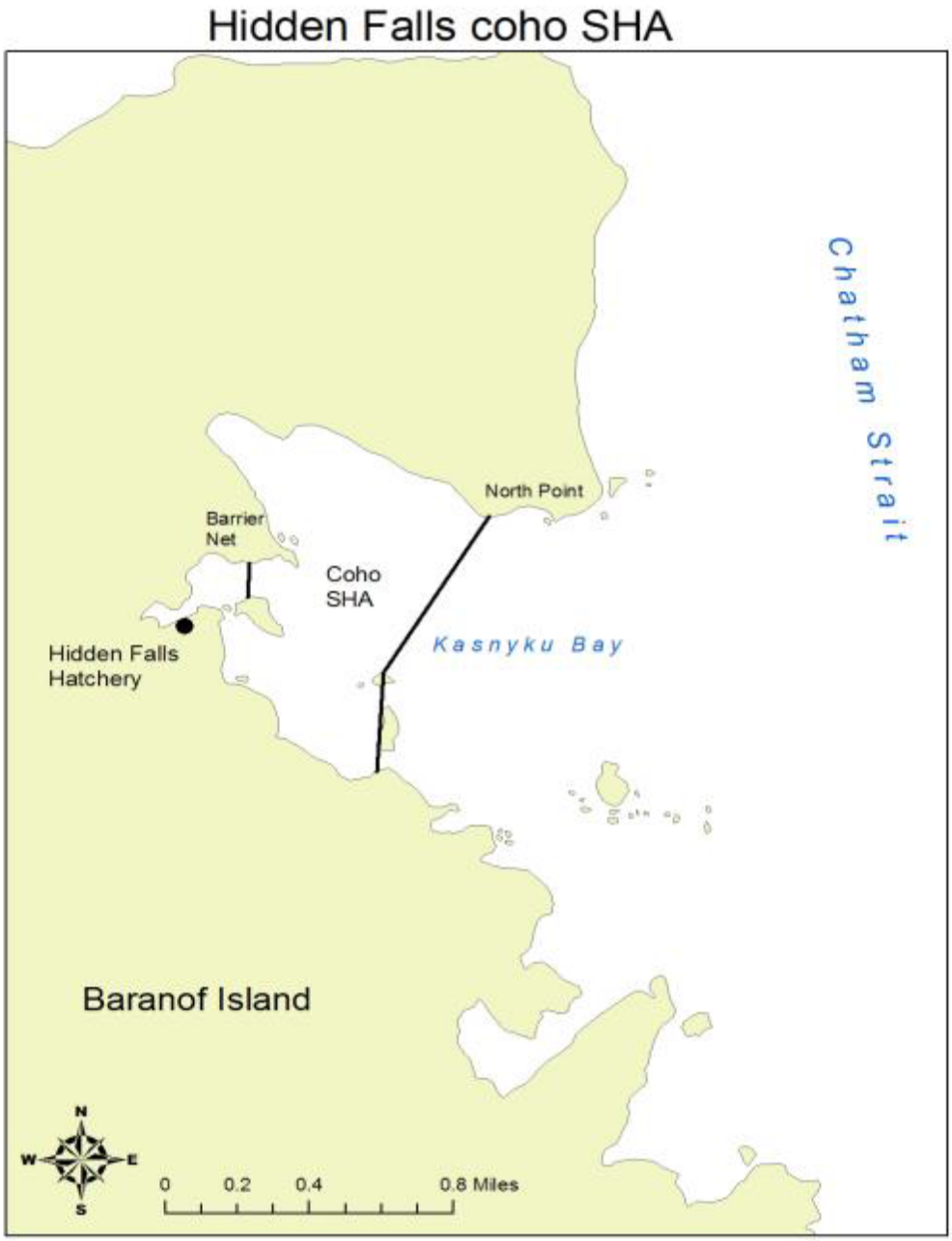



Figure 2.–Hidden Falls Hatchery SHA for coho salmon.

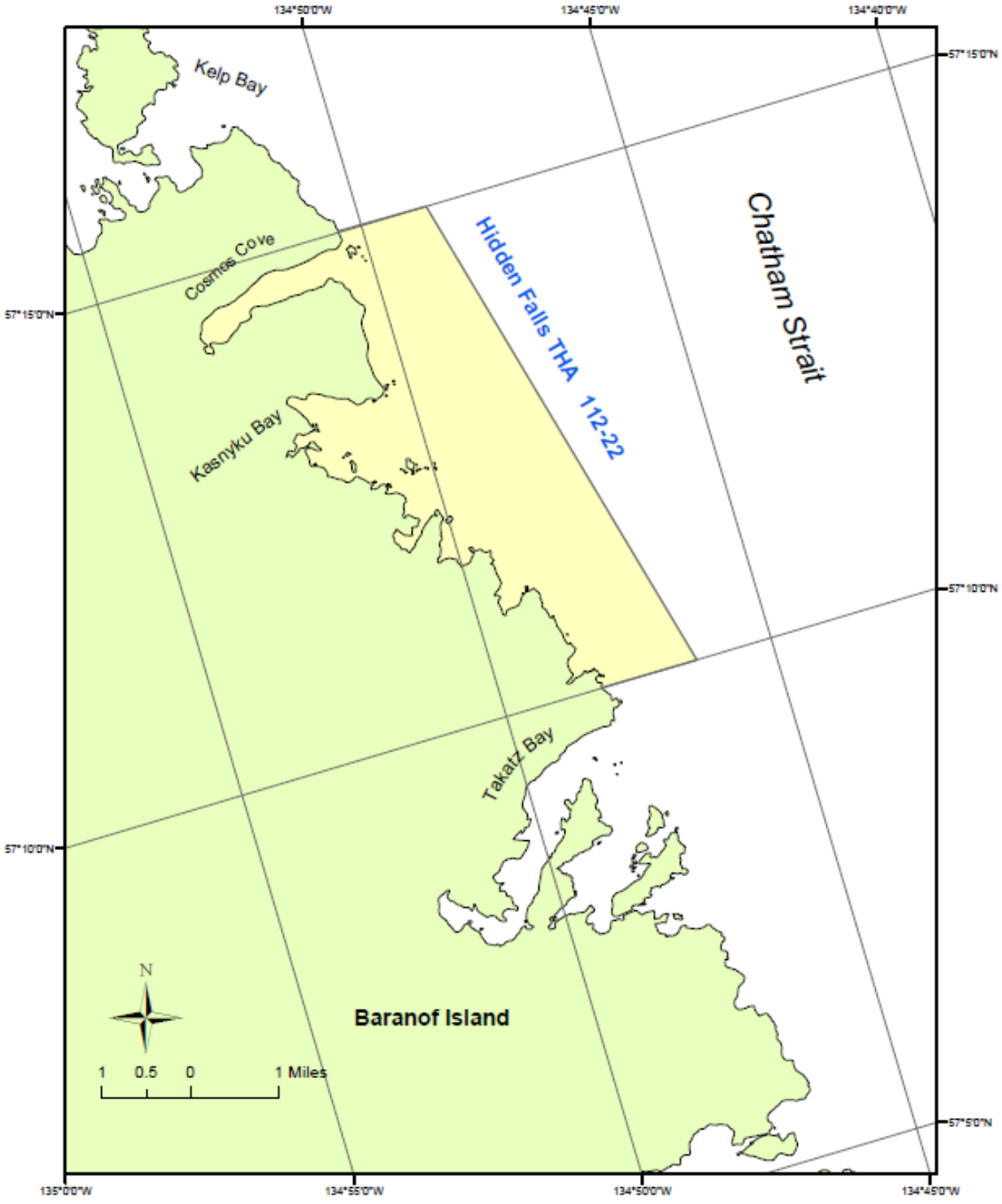



Figure 3.–Modified Hidden Falls Hatchery THA for coho salmon during the summer troll closure.

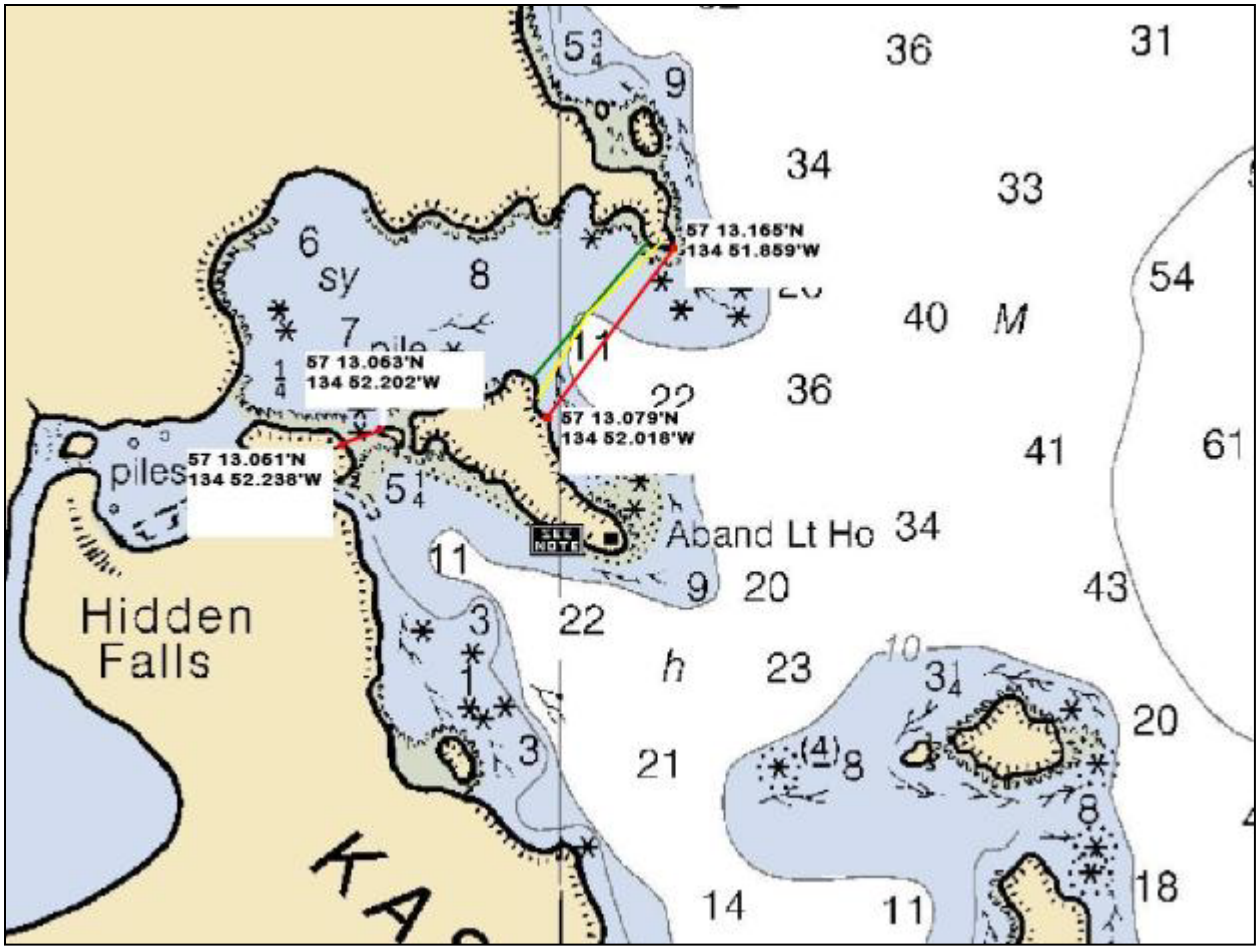
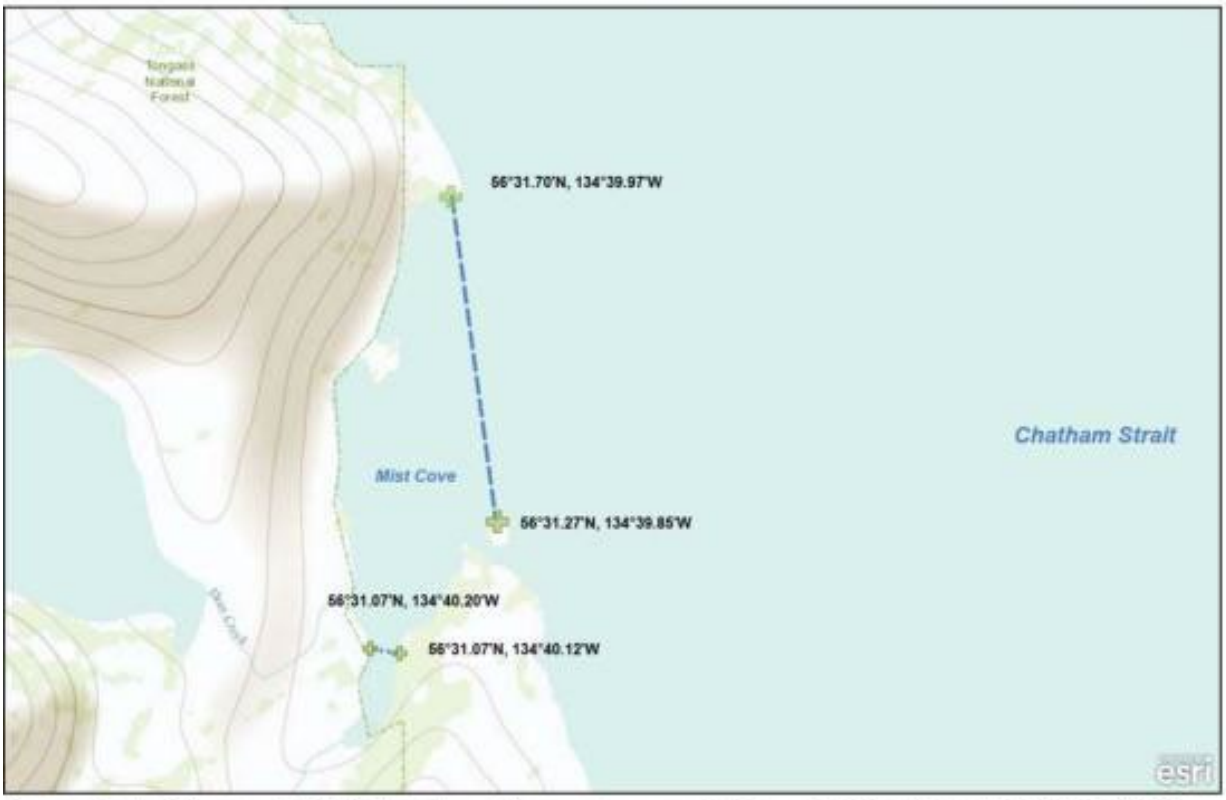



Figure 4.–Hidden Falls inner Kasnyku Bay closure line (RED). Green and yellow lines represent barrier nets.

The inner portion of Kasnyku Bay is closed by regulation to common property commercial fishing. The closed portion is defined as the waters north and west of a line between a point at 57°13.17′N lat, 134°51.86′W long and a point at 57°13.08′N lat, 134°52.02′W long, and the waters north of a line from 57°13.05′N lat, 134°52.24′W long and a point at 57°13.06′N lat, 134°52.20′W long. Department regulatory markers have been posted. These regulatory markers close the inner portion of Kasnyku Bay to sport fishing.

**Mist Cove - with coordinates**

Mist Cove SHA




Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

Figure 5.– Mist Cove SHA, consisting of all waters of Mist Cove west of a line from 56º31.70′N lat, 134º39.97′W long to 56º31.27′N lat, 134º39.85′W long; Waters closed to common property fishing with the Mist Cove SHA are south of a line from 56°31.07′N lat, 134°40.20′W long to 56°31.07′N lat, 134°40.12′W long.

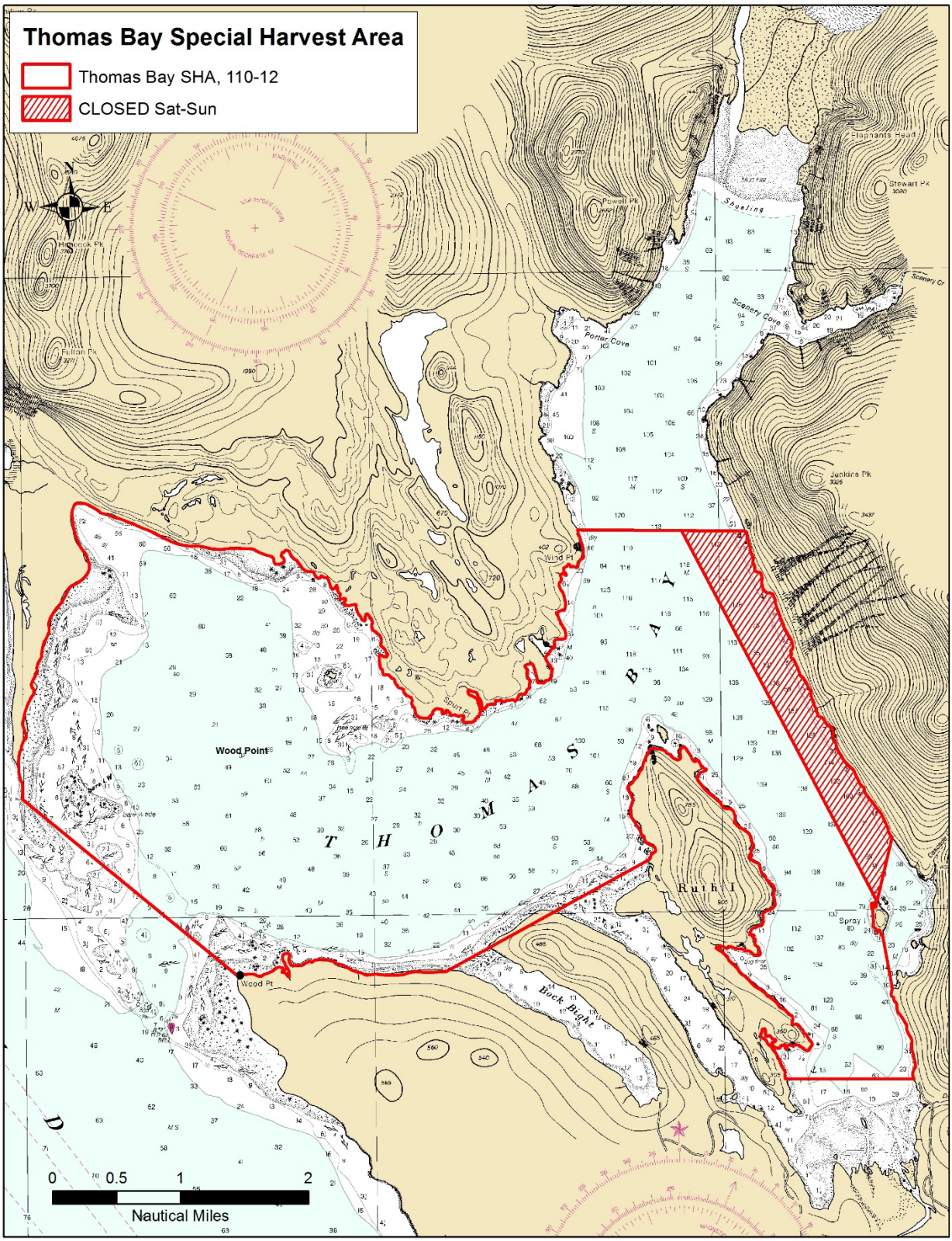
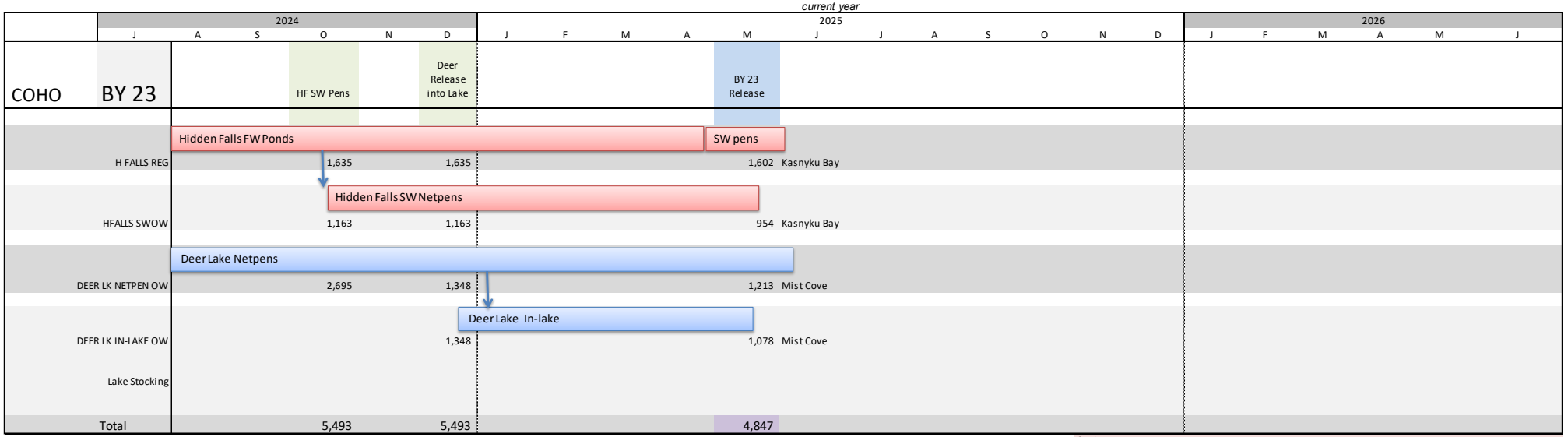



Figure 6. Thomas Bay SHA.

Production summary.

PRODUCTION SUMMARY

Organization or Hatchery NSRAA: HIDDEN FALLS




Deer Lake: a portion of fish are released into the lake after turnover; these emigrate volitionally in the spring
The remainder stay in netpens over-winter and are pumped out of pens - a "forced" release in the spring

**HIDDEN FALLS/ DEER LAKE COHO BY 23**

Thousands

| BS SOURCE | STOCK ORIGIN | AGENCY | GREEN EGGS | GROUP | EYED EGGS | FRY | FEB POP | SPLIT PCNT | REL SITE | REL EST |
|---|---|---|---|---|---|---|---|---|---|---|
| H FALLS | SASHIN | NSRA | 2,341 | HF | 1,861 | 1,810 | 1,635 | | KAS | 1,602 |
| H FALLS | SASHIN | NSRA | 1,968 | HF SWOW | 1,802 | 1,636 | 1,163 | | KAS | 954 |
| H FALLS | SASHIN | NSRA | 3,200 | DL PEN | 3,122 | 3,075 | 2,695 | 50% | MIST | 1,213 |
| | | | | DL LAKE | | | | 50% | MIST | 1,078 |
| | | | | BLANCHARD LK | | - | | | Lake Outlet | - |
| | | | | | | | | | | |
| **Total** | | | **7,509** | | **6,785** | **6,521** | **5,493** | **100%** | | **4,847** |
| survival from green egg: | | | 100% | | 90% | 87% | 73% | | | 65% |
| | | | | | | 7532.401 | 0.87 | | | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | (HF SWOW) | (DL IN-LAKE OW) |
| incremental survival (for planning) | 90% | 92% (HF) | 98% | 82% | 90% | 80% |
| | | 94% (DL) | (HF REG) | (DL PEN OW) | |

TOTALS by SITE

| | | | |
|---|---|---|---|
| **Hidden Falls** | **4,309** | **3,663** | **3,446** | **2,798** | **Kasnyku Bay** | **2,556** |
| **Deer Lake** | **3,200** | **3,122** | **3,075** | **2,695** | **Mist Cove** | **2,291** |

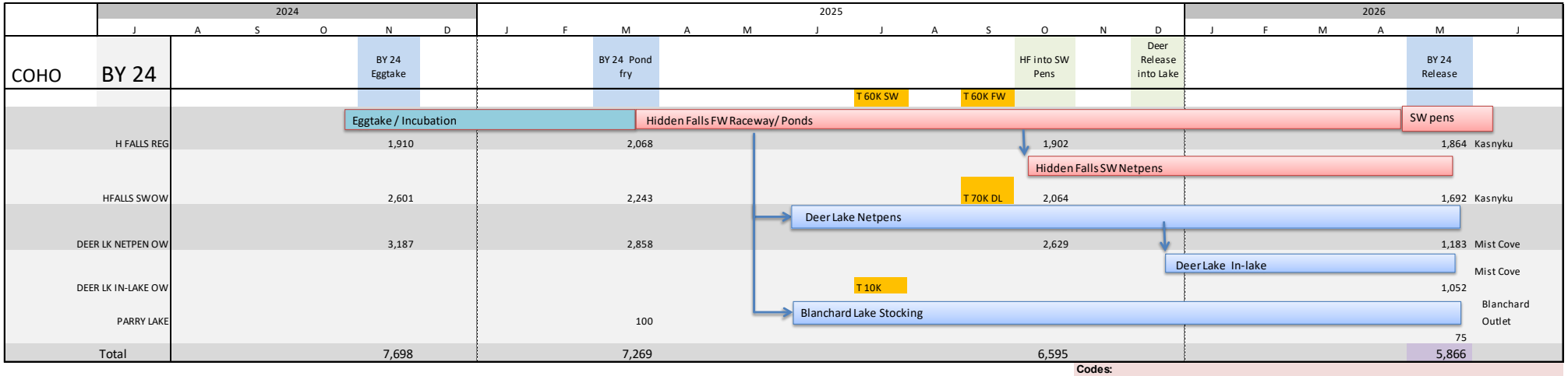
**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| DeerLake | DL | |
| Hidden Falls | HF | |
| Sashin Creek stock | SASHIN | |
| Deep Cove stock | DEEP CV | |
| Kasnyku Bay | KAS | |
| Mist Cove | MIST | |
| Port Malmesbury | MALM | |
| Satwater over-winter | SWOW | |

PRODUCTION SUMMARY

Organization or Hatchery NSRAA: HIDDEN FALLS

*current year*




**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| DeerLake | DL | |
| Hidden Falls | HF | |
| Sashin Creek stock | SASHIN | |
| Deep Cove stock | DEEP CV | |
| Kasnyku Bay | KAS | |
| Mist Cove | MIST | |
| Port Malmesbury | MALM | |
| Satwater over-winter | SWOW | |

**HIDDEN FALLS/ DEER LAKE COHO BY 24**

Thousands

| BS SOURCE | STOCK ORIGIN | AGENCY | GREEN EGGS | GROUP | EYED EGGS | FRY | OCT POP | SPLIT PCNT | REL SITE | REL EST |
|---|---|---|---|---|---|---|---|---|---|---|
| H FALLS | SASHIN | NSRA | 1,910 | HF | 2,110 | 2,068 | 1,902 | | KAS | 1,864 |
| H FALLS | SASHIN | NSRA | 2,601 | HF SWOW | 2,289 | 2,243 | 2,064 | | KAS | 1,692 |
| H FALLS | SASHIN | NSRA | 3,187 | DL PEN | 3,018 | 2,858 | 2,629 | 50% | MIST | 1,183 |
| | | | | DL LAKE | | | | 50% | MIST | 1,052 |
| | | | | BANNER LK | | 100 | | | Lake Outlet | 75 |
| **Total** | | | **7,698** | | **7,417** | **7,269** | **6,595** | **100%** | | **5,866** |
| | survival from green egg: | | 100% | | 96% | 94% | 86% | | | 76% (HF SWOW) (DL IN-LAKE OW) |
| | incremental survival (for planning) | | | | | 90% | 92% (HF) 94% (DL) | | (HF REG) | 98% 82% 90% 80% (DL PEN OW) |

TOTALS by SITE

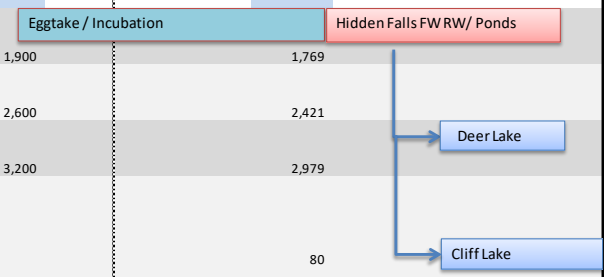
| | | | |
|---|---|---|---|
| **Hidden Falls** | **4,511** | **4,399** | **4,311** | **3,966** | **Kasnyku Bay** | **3,557** |
| **Deer Lake** | **3,187** | **(3,018)** | **2,858** | **2,629** | **Mist Cove** | **2,235** |

PRODUCTION SUMMARY

Organization or Hatchery: NSRAA: HIDDEN FALLS

*current year*

| | 2024 J | A | S | O | N | D | 2025 J | F | M | A | M | J | J | A | S | O | N | D | 2026 J | F | M | A | M | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COHO | BY 25 | | | | | | | | | | | | | | | | BY 25 Eggtake | | | | BY 25 Pond fry | | | |
| H FALLS REG | | | | | | | | | | | | | | | | | 1,900 | | | | 1,769 | | | |
| HFALLS SWOW | | | | | | | | | | | | | | | | | 2,600 | | | | 2,421 | | | |
| DEER LK NETPEN OW | | | | | | | | | | | | | | | | | 3,200 | | | | 2,979 | | | |
| DEER LK IN-LAKE OW | | | | | | | | | | | | | | | | | | | | | | | | |
| CLIFF LAKE | | | | | | | | | | | | | | | | | | | | | 80 | | | |
| Total | | | | | | | | | | | | | | | | | 7,700 | | | | 7,249 | | | |




**HIDDEN FALLS/ DEER LAKE COHO BY 25**

Thousands

| BS SOURCE | STOCK ORIGIN | AGENCY | GREEN EGGS | GROUP | EYED EGGS | FRY | OCT POP | SPLIT PCNT | REL SITE | REL EST |
|---|---|---|---|---|---|---|---|---|---|---|
| H FALLS | SASHIN | NSRA | 1,900 | HF | 1,805 | 1,769 | 1,627 | | KAS | 1,595 |
| H FALLS | SASHIN | NSRA | 2,600 | HF SWOW | 2,470 | 2,421 | 2,227 | | KAS | 1,826 |
| H FALLS | SASHIN | NSRA | 3,200 | DL PEN | 3,040 | 2,979 | 2,741 | 50% | MIST | 1,096 |
| | | | | DL LAKE | | | | 50% | MIST | 1,096 |
| | | | | CLIFF LAKE | | 80 | | | Lake Outlet | 60 |
| **Total** | | | **7,700** | | **7,417** | **7,249** | **6,595** | **100%** | | **5,674** |
| | survival from green egg: | | 100% | | 96% | 94% | 86% | | | 74% (HF SWOW) (DL IN-LAKE OW) |
| | incremental survival (for planning) | | | | | 98% | 92% (HF) 92% (DL) | | | 98% 82% 80% 80% (HF REG) (DL PEN OW) |

TOTALS by SITE

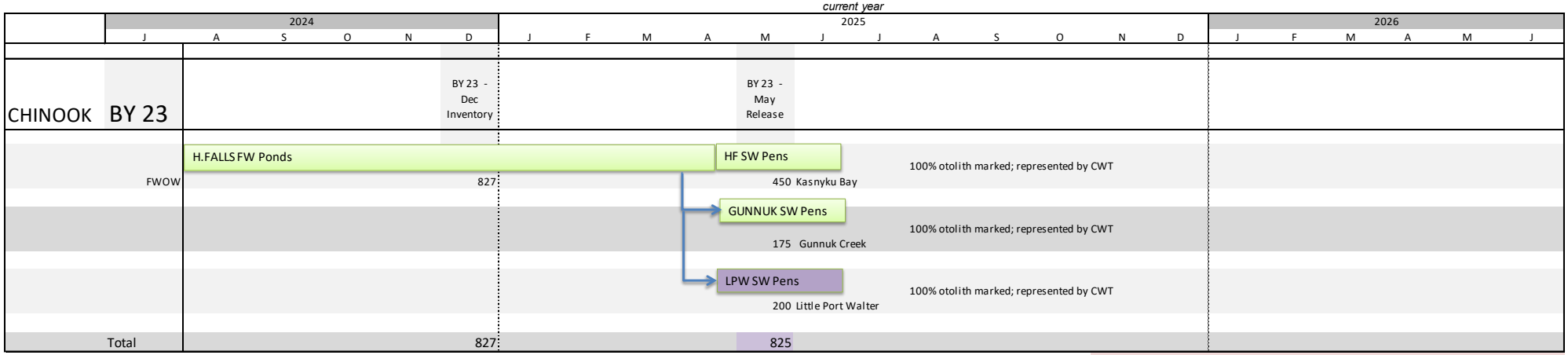
| | | | |
|---|---|---|---|
| **Hidden Falls** | **4,511** | **4,399** | **4,190** | **3,854** | **Kasnyku Bay** | **3,421** |
| **Deer Lake** | **3,200** | **3,040** | **2,979** | **2,741** | **Mist Cove** | **2,193** |

**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| DeerLake | DL | |
| Hidden Falls | HF | |
| Sashin Creek stock | SASHIN | |
| Deep Cove stock | DEEP CV | |
| Kasnyku Bay | KAS | |
| Mist Cove | MIST | |
| Port Malmesbury | MALM | |
| Satwater over-winter | SWOW | |

PRODUCTION SUMMARY

Organization or Hatchery NSRAA: HIDDEN FALLS




**HIDDEN FALLS CHINOOK BY 23**

Thousands

| BS SOURCE | AGENCY | SITE | GREEN EGGS | TRX IN | EYED EGGS | FRY | GROUP | DEC POP | REL SITE | REL EST |
|---|---|---|---|---|---|---|---|---|---|---|
| HF (AC) | NSRA | HF | 732 | | 209.5 | 209.5 | FWOW | 175.0 | SE COVE | |
| GCH (AC) | NSRA | HF | | 169.2 | | | | | GUNNUK | 175.0 |
| LPW (Keta) | NSRA | HF | | 1536.3 | 1013.4 | 950.0 | FWOW | 652.0 | LPW | 200.0 |
| | | | | | | | | | HF | 450.0 |
| | | | | | | | ZERO | 187.0 | LPW | 160.0 |
| **Total** | | | **731.5** | **1705.5** | **1222.9** | **1159.5** | | **1014.0** | | **985.0** |
| Survival from green eggs:: | | | 100% | | 50% | 48% | | 42% | | 40% |
| | | | | | | gr egg>fry | | fry>fall | | fall>rel |
| | | | Incremental for planning | | | 94% | | 95% | | 85% (SW) |

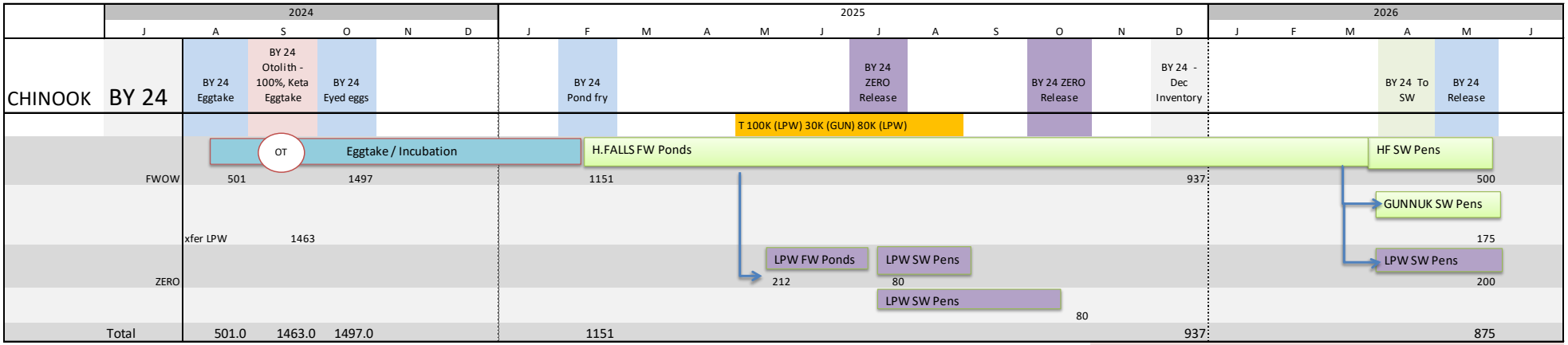
**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| MCH | Medvejie | |
| HF | Hidden Falls | |
| SWOW | Saltwater over-winter | |
| AC | Andrew Creek stock | |

PRODUCTION SUMMARY

Organization or Hatchery NSRAA: HIDDEN FALLS

*current year*




**HIDDEN FALLS CHINOOK BY 24**

Thousands

| BS SOURCE | AGENCY | SITE | GREEN EGGS | TRX IN | EYED EGGS | FRY | GROUP | DEC POP | REL SITE | REL EST |
|---|---|---|---|---|---|---|---|---|---|---|
| HF (AC) | NSRA | HF | 501 | | 199.0 | 199.0 | FWOW | 197.0 | GUNNUK | 175.0 |
| LPW (Keta) | NSRA | HF | | 1463.0 | 1298.0 | 952.0 | FWOW | 740.0 | LPW | 200.0 |
| | | | | | | | | | HF | 500.0 |
| | | | | | | | ZERO | 212.0 | LPW | 160.0 |
| **Total** | | | **501.0** | **1463.0** | **1497.0** | **1151.0** | | **1149.0** | | **1035.0** |
| Survival from green eggs:: | | | 100% | | 76% | 59% | | 59% | | 53% |
| | | | | | | | gr egg>fry | | fry>fall | fall>rel |
| | | | Incremental for planning | | | | 94% | | 95% | 85% (SW) |

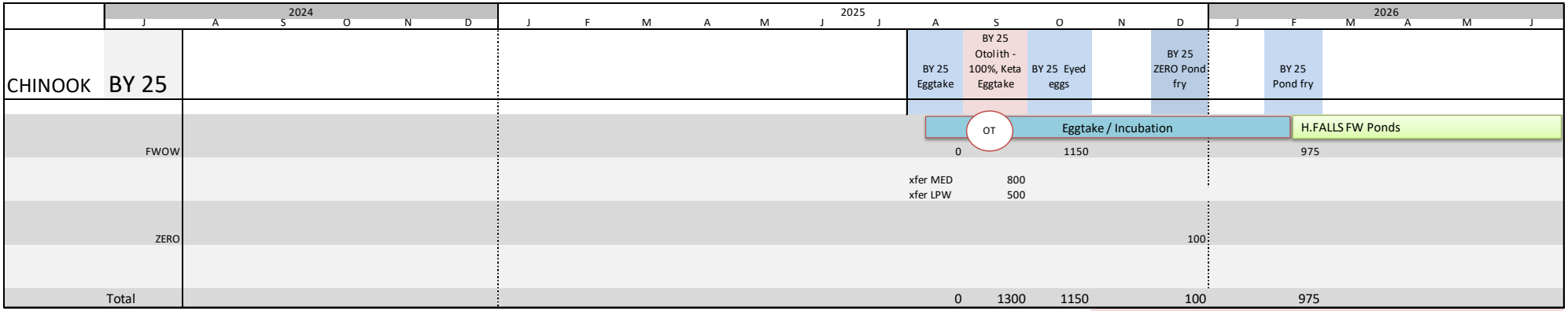
**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| MCH | Medvejie | |
| HF | Hidden Falls | |
| SWOW | Saltwater over-winter | |
| AC | Andrew Creek stock | |

PRODUCTION SUMMARY

Organization or Hatchery NSRAA: HIDDEN FALLS

*current year*




**HIDDEN FALLS CHINOOK BY 25**

Thousands

| BS SOURCE | AGENCY | SITE | GREEN EGGS | TRX IN | EYED EGGS | FRY | GROUP | DEC POP | REL SITE | REL EST |
|---|---|---|---|---|---|---|---|---|---|---|
| HF (AC) | NSRA | HF | 0.0 | | 0.0 | 0.0 | | | SE COVE | 400.0 |
| MED (AC) | NSRA | MED | | 800.0 | 700.0 | 675.0 | FWOW | 650.0 | GUNNUK | 200.0 |
| LPW (Keta) | NSRA | HF | | 500.0 | 450.0 | 400.0 | FWOW | 350.0 | LPW | 200.0 |
| | | | | | | | | | HF | 100.0 |
| **Total** | | | **0.0** | **1300.0** | **1150.0** | **1075.0** | | **1000.0** | | **900.0** |

Survival from green eggs:: #DIV/0! 88% 83% 77% 69%

gr egg>fry fry>fall fall>rel

Incremental for planning 94% 95% 90% (SW)

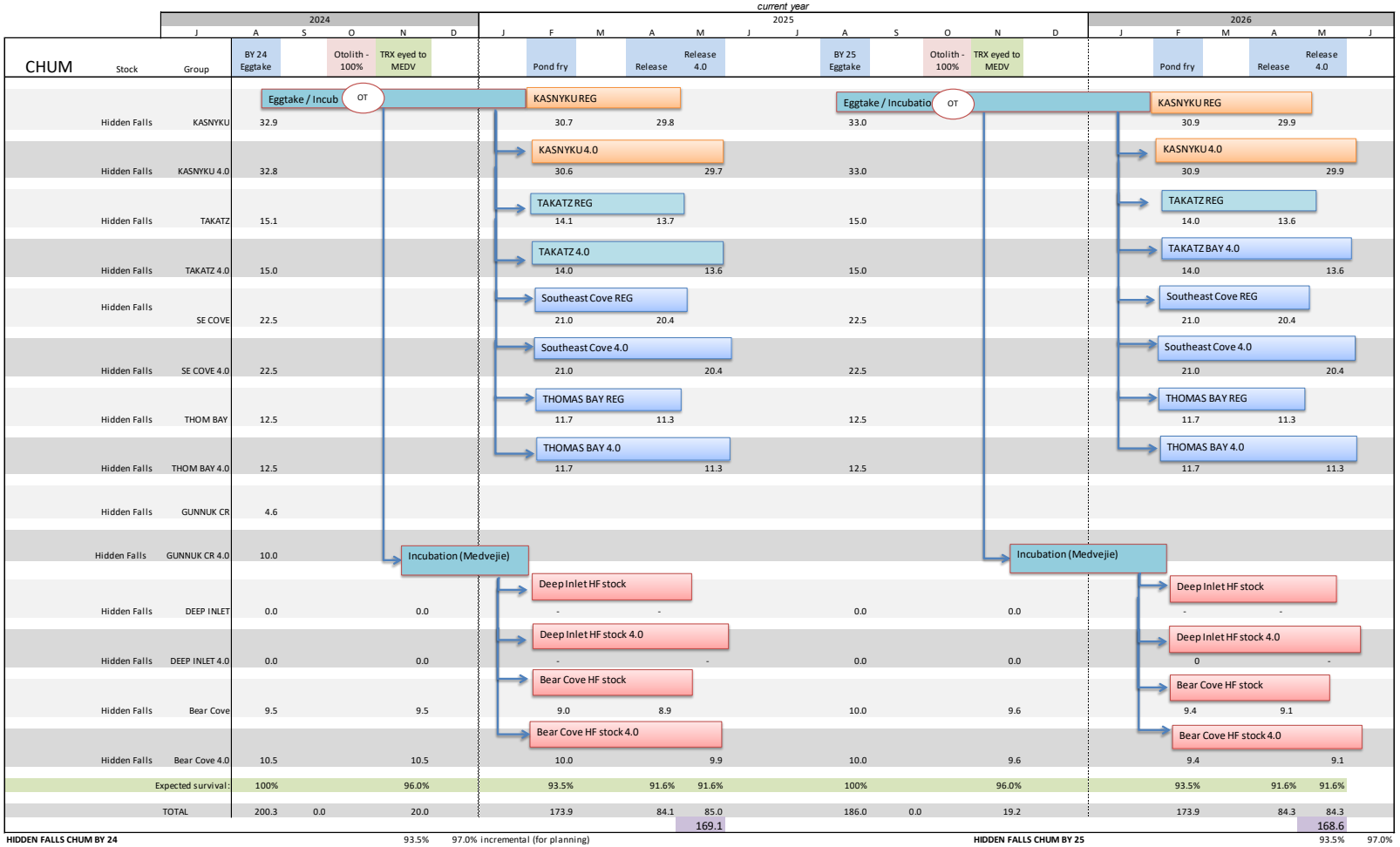
**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| MCH | Medvejie | |
| HF | Hidden Falls | |
| SWOW | Saltwater over-winter | |
| AC | Andrew Creek stock | |

PRODUCTION SUMMARY

Organization or Hatchery

NSRAA: HIDDEN FALLS




**HIDDEN FALLS CHUM BY 24**

Millions

93.5% 97.0% incremental (for planning)

100.0% 93.5% 90.7% cumulative

| STOCK | REL SITE | AGENCY | GROUP | GREEN EGGS | TRX-OUT | FRY | REL GOAL |
|---|---|---|---|---|---|---|---|
| H Falls | KAS | NSRA | REG | 32.9 | | 30.7 | 29.8 |
| H Falls | KAS | NSRA | LL4.0 | 32.8 | | 30.6 | 29.7 |
| **Subtotal** | | | | **65.6** | | **61.3** | **59.5** |
| H Falls | TAK | NSRA | REG | 15.1 | | 14.1 | 13.7 |
| H Falls | TAK | NSRA | LL4.0 | 15.0 | | 14.0 | 13.6 |
| **Subtotal** | | | | **30.1** | | **28.1** | **27.3** |
| H Falls | THOMAS | NSRA | REG | 12.5 | | 11.7 | 11.3 |
| H Falls | THOMAS | NSRA | LL4.0 | 12.5 | | 11.7 | 11.3 |
| **Subtotal** | | | | **25.0** | | **23.4** | **22.7** |
| H Falls | SE COVE | NSRA | REG | 22.5 | | 21.0 | 20.4 |
| H Falls | SE COVE | NSRA | LL4.0 | 22.5 | | 21.0 | 20.4 |
| **Subtotal** | | | | **45.0** | | **42.1** | **40.8** |
| H Falls | GUNNUK CR | NSRA | REG | 4.6 | 4.6 | 4.3 | 4.1 |
| H Falls | GUNNUK CR | NSRA | LL4.0 | 10.0 | 10.0 | 9.4 | 9.1 |
| **Subtotal** | | | | **14.6** | **14.6** | **13.6** | **13.2** |
| H Falls | DI | NSRA | REG | - | - | - | - |
| H Falls | DI | NSRA | LL 4.0 | - | - | - | - |
| H Falls | Bear Cove | NSRA | REG | 9.5 | 9.5 | 9.0 | 8.9 |
| H Falls | Bear Cove | NSRA | LL4.0 | 10.5 | 10.5 | 10.0 | 9.9 |
| **Subtotal** | | | | **20.0** | **20.0** | **19.0** | **18.8** |
| GRAND TOTAL | | | | **200.3** | **34.6** | **187.5** | **182.3** |

| | | | |
|---|---|---|---|
| HIDDEN FALLS | 65.6 | DEEP INLET | 0.0 |
| TAKATZ | 30.1 | BEAR COVE | 20.0 |
| SE COVE | 45.0 | | |
| GUNNUK CREEK | 14.6 | | |
| THOMAS BAY | 25.0 | | |

NSRAA TOTALS 200.3 34.6 187.5 182.3

**Codes:**

| | | |
|---|---|---|
| Egg take | ET | *number & site* |
| Tagging | T | *number* |
| Release | R | *number & site* |
| transfers | "to ___" | |
| Otolith | OT | |
| KAS | Kasnyku Bay | |
| TAK | Takatz Bay | |
| THOM BAY | Thomas bay | |
| SE COVE | Southeast Cove | |
| KAKE | Gunnuk Creek Hatchery | |
| LL4.0 or 4.0 | Late Large (4.0 g target size) | |

**HIDDEN FALLS CHUM BY 25**

Millions

93.5% 97.0%

100.0% 93.5% 90.7%

| STOCK | REL SITE | AGENCY | GROUP | GREEN EGGS | TRX-OUT | FRY | REL GOAL |
|---|---|---|---|---|---|---|---|
| H Falls | KAS | NSRA | REG | 33.0 | | 30.9 | 29.9 |
| H Falls | KAS | NSRA | LL4.0 | 33.0 | | 30.9 | 29.9 |
| **Subtotal** | | | | **66.0** | | **61.7** | **59.9** |
| H Falls | TAK | NSRA | REG | 15.0 | | 14.0 | 13.6 |
| H Falls | TAK | NSRA | LL4.0 | 15.0 | | 14.0 | 13.6 |
| **Subtotal** | | | | **30.0** | | **28.1** | **27.2** |
| H Falls | THOMAS | NSRA | REG | 12.5 | | 11.7 | 11.3 |
| H Falls | THOMAS | NSRA | LL4.0 | 12.5 | | 11.7 | 11.3 |
| **Subtotal** | | | | **25.0** | | **23.4** | **22.6** |
| H Falls | SE COVE | NSRA | REG | 22.5 | | 21.0 | 20.4 |
| H Falls | SE COVE | NSRA | LL4.0 | 22.5 | | 21.0 | 20.4 |
| **Subtotal** | | | | **45.0** | | **42.1** | **40.8** |
| H Falls | DI | NSRA | REG | 0.0 | - | - | - |
| H Falls | DI | NSRA | LL 4.0 | 0.0 | - | - | - |
| H Falls | Bear Cove | NSRA | REG | 10.0 | 9.6 | 9.4 | 9.1 |
| H Falls | Bear Cove | NSRA | LL4.0 | 10.0 | 9.6 | 9.4 | 9.1 |
| **Subtotal** | | | | **20.0** | **19.2** | **18.7** | **18.1** |
| GRAND TOTAL | | | | **186.0** | **19.2** | **173.9** | **168.6** |

| | | | |
|---|---|---|---|
| HIDDEN FALLS | 66.0 | DEEP INLET | 0.0 |
| TAKATZ | 30.0 | BEAR COVE | 20.0 |
| SE COVE | 45.0 | | |
| GUNNUK CREEK | BY 24 Gunnuk Cr egg takes planned for on site | | |
| THOMAS BAY | 25.0 | | |

NSRAA TOTALS 186.0 19.2 173.9 168.6

Fish Transport Permits

| Species | Ancestral Stock | FTP | ET, trans, or release? | Transfer from To | Maximum Number, Life Stage | Expires |
|---|---|---|---|---|---|---|
| Coho salmon | Sashin Creek | 92J-1042 | All | HFH to Kasnyku Bay | 4,500,000 eggs | 12/31/2032 |
| Coho salmon | Sashin Creek | 07J-1019 | All | HFH to Deer Lake/Mist Cove | 3,200,000 eggs | 8/30/2031 |
| Coho salmon | Sashin Creek | 13J-1008 | Transfer, release | HFH to Cliff Lake | 50,000 fry | 12/31/2033 |
| Coho salmon | Sashin Creek | 13J-1017 | Transfer, release | HFH to Banner Lake | 300,000 fry | 12/31/2033 |
| Coho salmon | Sashin Creek | 15J-1009 | Transfer, release | HFH to Parry Lake | 150,000 fry or 75,0000 smolt | 12/31/2025 |
| Coho salmon | Sashin Creek | 17J-1014 | Transfer, release | HFH to Blanchard Lake | 150,000 fry or 75,000 smolt | 12/31/2027 |
| Coho salmon | Sashin Creek | 18J-1001 | Egg take, transfer | PAH to HFH (backup) | 7,700,000 eggs | 12/31/2027 |
| Coho salmon | Sashin Creek | 21J-1015 | Transfer, release | Mist Cove to up to 3 nm offshore | 3,200,000 | 12/31/2026 |
| Coho salmon | Deep Cove | 03J-1004 | All | HFH to Kasnyku Bay | 4,500,000 eggs | 12/31/2032 |
| Coho salmon | Deep Cove | 11J-1022 | All | HFH to Deer Lake | 3,200,000 eggs | 6/30/2031 |
| Coho salmon | Deep Cove | 13J-1007 | Transfer, release | HFH to Cliff Lake | 50,000 fry | 12/31/2033 |
| Coho salmon | Deep Cove | 13J-1016 | Transfer, release | HFH to Banner Lake | 300,000 fry or smolt | 12/31/2033 |
| Coho salmon | Deep Cove | 15J-1008 | Transfer, release | HFH to Parry Lake | 150,000 fry or 75,000 smolt | 12/31/2025 |
| Coho salmon | Deep Cove | 17J-1015 | Transfer, release | HFH to Blanchard Lake | 150,000 fry or 75,000 smolt | 12/31/2027 |
| Coho salmon | Deep Cove | 18J-1002 | Egg take, transfer | PAH to HFH (backup) | 7,700,000 eggs | 12/31/2027 |
| Coho salmon | Deep Cove | 21J-1014 | Transfer, release | Mist Cove to up to 3 nm offshore | 3,200,000 | 12/31/2026 |
| Chinook salmon | Andrew Creek | 92J-1019 | All | HFH to Kasnyku Bay | 3,500,000 eggs | 12/31/2032 |
| Chinook salmon | Andrew Creek | 16J-1018 | Egg take, transfer | CLH to HFH (backup) | 3,500,000 eggs | 12/31/2026 |
| Chinook salmon | Andrew Creek | 16J-1020 | Egg take, transfer | MSH to HFH (backup) | 3,500,000 eggs | 12/31/2026 |
| Chinook salmon | Andrew Creek | 18J-1005 | Transfer, release | HFH to Gunnuk Creek | 200,000 smolt | 12/31/2028 |
| Chinook salmon | Andrew Creek | 19J-1018 | Egg take, Transfer | MCH to HFH (backup) | 1,000,000 eggs | 8/31/2029 |
| Chinook salmon | Andrew Creek | 21J-1021 | Transfer, release | HFH to SE Cove | 700,000 smolt | 12/31/2032 |
| Chinook salmon | Andrew Creek | 23J-1003 | Transfer | HFH to LPWH | 10,0000 fry | 12/31/2027 |
| Chinook salmon | Andrew Creek | 23J-1005 | Egg take, transfer | GCH to HFH | 1,000,000 eggs | 12/31/2032 |
| Chinook salmon | Keta River | 18J-1015 | All | LPW to HFH to Kasnyku Bay | 3,500,000 eggs | 12/31/2028 |
| Chinook salmon | Keta River | 22J-1013 | Transfer, release | HFH to Little Port Walter | 1,000,000 smolt | 12/31/2032 |
| Chinook salmon | Keta River | 22J-1014 | Transfer, egg take | LPW to HFH | 3,000 adults | 12/31/2032 |
| Chum salmon | Kadashan River | 95J-1010 | All | HFH to Kasnyku Bay | 101,000,000 eggs | 12/31/2025 |
| Chum salmon | Kadashan River | 95J-1009 | All | HFH to Takatz Bay | 101,000,000 eggs | 12/31/2025 |
| Chum salmon | Kadashan River | 12J-1022 | Transfer, release | HFH to SE Cove[a] | 55,000,000 eggs | 12/31/2032 |
| Chum salmon | Kadashan River | 11J-1023 | Egg take, Transfer | PAH to HFH (backup) | 50,000,000 eggs | 6/30/2030 |
| Chum salmon | Kadashan River | 16J-1004 | Egg take, transfer | Gunnuk Creek SHA to HFH (backup) | 55,000,000 eggs | 12/31/2025 |
| Chum salmon | Kadashan River | 16J-1005 | Egg take, transfer | SE Cove SHA to HFH (backup) | 55,000,000 eggs | 12/31/2025 |
| Chum salmon | Kadashan River | 17J-1003 | Transfer, release | HFH to Thomas Bay | 40,000,000 fry | 12/31/2026 |

| Species | Ancestral Stock | FTP | ET, trans, or release? | Transfer from To | Maximum Number, Life Stage | Expires |
|---|---|---|---|---|---|---|
| Chum salmon | Kadashan River | 17J-1011 | Release | Kasnyku Bay to 10 mi. north | 50,500,000 fed fry | 12/31/2026 |
| Chum salmon | Kadashan River | 17J-1019 | Transfer, release | HFH to GCH | 20,000,000 fry | 12/31/2032 |
| Chum salmon | Kadashan River | 20J-1013 | Egg take, transfer | MCH to HFH | 101,000,000 eggs | 3/31/2030 |
| Chum Salmon | Kadashan River | 20J-1026 | Transfer | Gunnuk Creek SHA to HFH | 55,000 adults | 12/31/2025 |
| Chum Salmon | Kadashan River | 20J-1034 | Egg take, transfer | GCH to HFH | 101,000,000 eggs | 12/31/2030 |
| Chum Salmon | Kadashan River | 20J-1036 | Egg take, transfer | MCH to SCH (rearing), eyed eggs to HFH | 101,000,000 eggs | 12/31/2030 |
| Chum salmon | Kadashan River | 22J-1001 | Transfer, release | HFH to Port Malmesbury | 40,000,000 fry | 12/31/2031 |
| Chum salmon | Kadashan River | 23J-1009 | Egg take | HFH to permitted release sites | 40,000,000 eggs | 12/31/2032 |
| Chum salmon | Macaulay (Gastineau) | 19J-1005 | All | MSH to HFH to Thomas Bay | 40,000,000 eggs | 12/31/2029 |

[a]On behalf of Gunnuk Creek Hatchery.

LIST OF MANAGEMENT CONTACTS:

Following are Division of Commercial Fisheries contacts regarding this management plan:

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