**2023 ANNUAL MANAGEMENT PLAN**
**Macaulay Salmon Hatchery**
Douglas Island Pink & Chum, Inc.

This Annual Management Plan (AMP) plan is prepared to fulfill the requirements of 5 AAC 40.840. This plan must organize and guide the hatchery's operations, for each calendar year, regarding production goals, broodstock development, and harvest management of hatchery returns. Egg take through release details are included in planning for succeeding calendar years. Inseason assessments and project alterations by the Douglas Island Pink and Chum (DIPAC) or Alaska Department of Fish and Game (ADF&G) may result in changes to this AMP in order to reach or maintain program objectives. DIPAC 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 DIPAC. This policy applies to all hatchery operations covered under the AMP.

## 1.0 EXECUTIVE SUMMARY

### 1.1 *Introduction*

In 1987, DIPAC was issued PNP Hatchery Permit #25 to operate Macaulay Salmon Hatchery (MSH) along Gastineau Channel. The current permitted incubation capacity of this facility is 135 million chum, 1.5 million coho, and 1.25 million Chinook salmon green eggs, plus 50,000 rainbow trout eyed eggs. Salmon enhancement projects operated by the PNP corporation contribute to commercial, sport, and personal use fisheries in Juneau, Haines, Skagway, Petersburg, and Wrangell areas, and along salmon migratory routes in northern Southeast Alaska.

### 1.2 *New This Year (production, harvest management, culture techniques, etc.)*

No additional programs or production changes are planned for this year.

### 1.3 *New permits or permit amendments*

The following fish transport permit (FTP) and cooperative agreement renewals may be needed this year:

1. FTP #99J-1001 allows for the transport and release of up to 54,000,000 fed MSH stock chum salmon fry at Amalga Harbor; it will expire on December 31, 2023 and require renewal.

2. FTP #04J-1003 allows for the transport and release of up to 200,000 Andrew Creek stock Chinook salmon smolt at the Thane Net Pens; it will expire on December 31, 2023 and require renewal.

3. FTP #10J-1016 allows for the release of up to 300,000 Tahini River stock Chinook salmon smolt into Pullen Creek (Skagway) and expires on June 15, 2023. This program and production of this stock at MSH was discontinued in 2015. There are no renewal plans.

4. The cooperative agreement between DIPAC and ADF&G Division of Sport Fisheries to enhance the Juneau area recreational Chinook salmon fishery at Fish Creek Pond (Contract IHP-23-001) will need to be amended (renewed) prior to the beginning of fiscal year 2024. The current agreement expires June 30, 2023.

5. FTP #23J-1002 was issued for the collection of coho salmon broodstock and taking of up to 300,000 eggs at Fish Creek (111-32-10320-2052), an Alaska tributary of the Taku River. This is the ancestral stock of the coho salmon currently in production at MSH. This FTP would be for one year only and its use would only occur if it is apparent that the coho salmon return to the MSH rack will be short of achieving the collection of at least 500,000 green eggs.

## 1.4 *Expected Returns:* 2023 FORECAST

| Species | Return Site/District | Common Property Harvest[1] | Hatchery Terminal Area[2] | Total Return |
|---|---|---|---|---|
| Chum salmon | Gastineau Channel | 361,300 | 445,000 | 806,300 |
| | Amalga Harbor | 724,000 | 553,900 | 1,277,900 |
| | Limestone Inlet | 127,400 | - | 127,400 |
| | Boat Harbor | 587,900 | - | 587,900 |
| Chinook salmon | Gastineau Channel | 2,060 | 1,040 | 3,100 |
| | Auke Bay | 60 | 50 | 110 |
| | Fish Creek | 1,300 | 100 | 1,400 |
| | Lena Cove | 60 | 30 | 90 |
| Coho salmon | Gastineau Channel | 4,100 | 2,300 | 6,400 |

[1]Includes commercial catch, marine boat sport harvest, and remote-release site terminal sport harvest.
[2]Includes cost recovery, broodstock, escapement, and terminal recreational harvest.

## 1.5 *Planned releases this calendar year*

| Program Name | Brood Year | Number to Release | Life Stage | Type of Mark, Percent Marked |
|---|---|---|---|---|
| Macaulay chum salmon | 2022 | 12,000,000 | Fed fry | 100% TM |
| Thane Net Pens chum salmon | 2022 | 24,000,000 | Fed fry | 100% TM |
| Amalga Harbor chum salmon | 2022 | 48,000,000 | Fed fry | 100% TM |
| Boat Harbor chum salmon | 2022 | 24,000,000 | Fed fry | 100% TM |
| Limestone Inlet chum salmon | 2022 | 15,000,000 | Fed fry | 100% TM |
| Gastineau Channel Chinook salmon[1] | 2021 | 315,800 | Smolt | 66,000 CWT |
| Fish Creek Chinook salmon | 2021 | 250,000 | Smolt | 57,000 CWT |
| Lena Cove Chinook salmon | 2021 | 200,000 | Smolt | 43,000 CWT |
| Gastineau Channel coho salmon[1] | 2021 | 1,355,000 | Smolt | 103,000 CWT |

[1]Includes MSH and Thane Net Pens.

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

| Program Name | Brood Year | Number Live (Jan. 1) | Number to Release | Release Date | Life Stage |
|---|---|---|---|---|---|
| MSH Chinook | 2022 | 1,005,000 | 965,200 | Spring 2024 | Alevin |
| MSH Coho | 2022 | 1,396,000 | 1,200,000 | Spring 2024 | Alevin |

1.7 *Current Permitting*

| Facility | Species | Egg Number |
|---|---|---|
| MSH | Chum salmon | 135,000,000 |
| | Chinook salmon | 1,250,000 |
| | Coho salmon | 1,500,000 |
| | Rainbow trout | 50,000 |

1.8 *Egg take, Incubation, Rearing, and Release Plans*

**Chum Salmon**

In 2023, the 135 million chum salmon egg take goal is expected to be met using broodstock returning to MSH. Additional eggs may be available from Northern Southeast Regional Aquaculture Association's (NSRAA's) Hidden Falls Hatchery (HFH). Incubation will occur during the fall and winter of 2023–2024. All chum salmon (100%) will be otolith thermal marked.

Short-term rearing will occur in the spring of 2024 in saltwater net pens at the five approved chum salmon release sites. Each site was selected to meet at least one of three harvest goals: broodstock, cost recovery (CR), or common property (CP) contribution. The following table shows DIPAC's currently approved chum salmon production levels by release site.

Brood year 2023 Chum Salmon Production Levels by Release Site

| Release Site | Egg take Goal | Fry Release Goal | Harvest Goals |
|---|---|---|---|
| Macaulay Salmon Hatchery | 14,100,000 | 12,000,000 | Broodstock/CP/CR |
| Thane Net Pens | 28,200,000 | 24,000,000 | Broodstock/CP/CR |
| Amalga Harbor | 46,900,000 | 45,000,000 | CP/CR |
| Boat Harbor | 28,200,000 | 24,000,000 | CP |
| Limestone Inlet | 17,600,000 | 15,000,000 | CP |
| Total | 135,000,000 | 120,000,000 | |

If prioritization of releases between Boat Harbor and Limestone Inlet is necessary, it will be based on input from the drift gillnet fleet and the DIPAC board.

**Chinook Salmon**

In 1994, the department transferred its Juneau recreational fisheries Chinook salmon enhancement program from Snettisham Hatchery to MSH. The program has been funded through a cooperative agreement between ADF&G and DIPAC. Under terms of the current agreement, general production goals call for DIPAC to produce 250,000 25-gram smolt for release at Fish Creek (N. Douglas). The last release at Auke Bay occurred in 2019, and due to program changes releases at this location are unlikely to occur in the future.

In recent years, DIPAC reinstituted releasing a portion of Chinook salmon Gastineau Channel production at Thane Net Pens as well as developed a new release site at Lena Cove. Production at these two sites has been funded directly by DIPAC or by a cooperative agreement through the Pacific Salmon Treaty's *Southeast Alaska Chinook Fishery Mitigation Program*.

Chinook salmon production for the Juneau program will continue to utilize Andrew Creek stock. In 2023, the up to 1,250,000 MSH Chinook salmon egg take goal is expected to be met using broodstock returning to MSH. Crystal Lake Hatchery (CLH), Medvejie Creek Hatchery (MCH), and Hidden Falls Hatchery (HFH) may be used as backup egg sources.

Brood year 2023 Chinook Salmon Production Levels, by Release Site

| Stock | Release Site | Release Goal |
|---|---|---|
| Andrew Creek | Gastineau Channel[1] | 500,000 |
| | Fish Creek | 250,000 |
| | Lena Cove | 250,000 |

[1]Includes MSH and Thane Net Pens.

In 2023 MSH will mark 100% of its Chinook salmon production with adipose fin clips and a minimum of 20% with coded wire tags.

**Coho Salmon**

In 2023, the 1.5 million coho salmon egg take goal may not be met using broodstock returning to MSH. Broodstock requirements will be based on inseason fecundity estimates. Smolt will be released at MSH and the Thane Net Pens. Because the parent brood release (BY20) was small, and with a significant region-wide downturn in coho salmon marine survival, a one-year Fish Transport Permit application was approved to take green eggs from the ancestral stock now in production at MSH. This permit will only be used if it is clear that the rack return will produce less than 500,000 green eggs.

An estimated 7% of the total BY23 coho salmon production will be marked with coded wire tags.

**Rainbow Trout**

No rainbow trout will be incubated, reared, or released in 2023.

## 2.0 HATCHERY RETURN MANAGEMENT

### 2.1 *2023 DIPAC Hatchery Return Projections*

Expected 2023 adult salmon returns from DIPAC releases are shown in Table 1 at the end of this plan. Total returns are expected to be 2,800,000 chum, 6,400 coho, and 4,700 Chinook salmon. A complete accounting of common property harvest of adult Chinook and coho salmon will be obtained from analysis of coded wire tag data. Accounting of common property harvest of chum salmon will be limited to fisheries for which thermal-mark sampling is conducted.

## 2.2 *Management in Common Property Fisheries*

DIPAC hatchery returns will contribute to the troll, purse seine, drift gillnet, and sport fisheries along their migration routes back to release sites in the Juneau area. DIPAC Chinook and coho salmon are coded wire tagged to provide estimates of contribution to common property fisheries. Thermal otolith mark and recovery programs have provided contribution estimates for DIPAC chum salmon in the Districts 11 and 15 commercial drift gillnet fisheries, Districts 12 and 14 purse seine fisheries, and in developing troll fisheries in some Districts 12 and 14 spring troll areas.

DIPAC chum salmon returns are harvested in purse seine fisheries in both Icy Strait and northern Chatham Strait. The nearshore waters between Funter Bay and Point Marsden in Chatham Strait is known as the Hawk Inlet shoreline. Fishing is sometimes allowed in this area to harvest pink salmon migrating northward into Lynn Canal and Upper Stephens Passage. During July, ADF&G manages the Hawk Inlet shoreline in accordance with 5 AAC 33.366, *Northern Southeast Seine Fishery Management Plans.* In 2023, any purse seine fishing opportunities along the Hawk Inlet shoreline in July will be based on observed pink salmon abundance and potential conservation concerns for other salmon stocks. Provided pink salmon abundance surplus to escapement needs is observed during July, seine opportunities may occur along the Hawk Inlet shoreline if northbound pink salmon runs are strong. Conversely, if northbound runs are poor during July and southbound runs are strong, seining may be allowed only south of Point Marsden. Pink salmon parent-year escapements were generally within or above management target ranges for all Juneau management area stock groups, however, the NOAA SECM survey investigating outbound juvenile salmon abundance had weak results in 2022, anticipating a weak 2023 adult pink salmon return to northern inside waters.

Chum salmon returning to DIPAC facilities are expected to be present in the drift gillnet fisheries in Sections 11-B and 15-C. The District 11 summer gillnet fishery is managed on wild stock sockeye salmon abundance. ADF&G may allow additional harvest opportunities in Stephens Passage for chum salmon returning to the Limestone Inlet remote-release site by allowing additional fishing time. A minimum 6-inch mesh size may be required during some weeks from mid-July to mid-August in the area south of Circle Point to protect Port Snettisham wild sockeye salmon stocks transiting the area. This mesh size has been shown to maximize chum salmon harvests while minimizing sockeye salmon interceptions. In 2020, the northern portion of the Bishop Point to Point Arden line in Section 11-B was shifted slightly to the east for three openings (SWs 29-31) to close waters where hatchery fish stage before entering Gastineau Channel in an attempt to preserve DIPAC chum salmon broodstock. Portions of Section 15-C are managed to harvest both wild and hatchery chum salmon runs, and additional fishing time is expected adjacent to Boat Harbor. Fishery sampling for otolith marks provides estimates of the proportions of hatchery chum salmon in the Districts 11 and 15 drift gillnet fisheries to aid wild stock management and assessment of hatchery returns. In 2023, this sampling program is expected to continue.

Chinook and coho salmon returns to DIPAC release sites have contributed substantially to commercial fisheries, as determined by recovery and analysis of coded wire tags. No specific commercial fishery management actions pertaining to returning hatchery Chinook or coho salmon is deemed necessary

since historical return levels have been sufficient to provide hatchery broodstock. However, MSH coho salmon abundance in the Districts 11 and 15 drift gillnet fisheries is closely monitored inseason so wild stock strength can be assessed.

The Juneau area sport fishery also harvests substantial DIPAC hatchery returns. The marine sport fishery harvests significant numbers of Chinook and coho salmon. The Juneau shoreline sport fishery harvests Chinook, coho, and chum salmon near the hatchery release sites. In 1991, a public dock was constructed by DIPAC to provide more sport fishing opportunities. This structure has been replaced by a new dock as part of a highway improvement project that also includes uplands development and continues to be a very popular fishery with the community. In 2023, DIPAC staff will estimate catch by anglers fishing from the dock and adjacent beach by using a simplified abundance-based model as well as visual observations on the number of sport anglers and catch. Additionally, ADF&G, Division of Sport Fisheries will conduct a shoreside creel sampling program to estimate Chinook harvest at the Macaulay and Fish Creek terminal areas in 2023. Sport fisheries will be managed by general regulations described in codified regulations or by special regulations issued by emergency order for those waters. Prior to 2015, no sport fishery management actions were necessary to protect hatchery broodstock. From 2015–2018 the terminal sport fishery in a small designated area at MSH was closed in July and August to protect Chinook salmon broodstock. In 2017, an additional 80 Chinook were collected from Fish Creek as a backup broodstock source for MSH (FTP: 17J-1008 and 17J-1009).

### 2.3 *Special Harvest Areas (SHAs)*

**Gastineau Channel SHA**

In 1994, the Alaska Board of Fisheries (BOF) combined and expanded the previously existing Kowee Creek, Sheep Creek, and Macaulay Hatchery special harvest areas (SHAs), located adjacent to each facility, into a common SHA for harvest of cost recovery fish. The revised Gastineau Channel SHA includes all the waters within Gastineau Channel between Salmon Creek and one mile north of the Dupont dock, (all waters east of 134°29.25′ W long and west of 134°17.38′ W long) (Figure 3). Legal gear for cost recovery in the Gastineau Channel SHA includes purse seine, hand purse seine, beach seine, fyke net, drift gillnet, set gillnet, and dip net.

Projected returns in 2023 from Gastineau Channel releases are expected to include a total 806,300 chum salmon. The portion of the return not harvested in common property fisheries will be available for cost recovery harvest in the Gastineau Channel SHA and for broodstock. In 2023, a total of 6,400 DIPAC coho salmon are expected to return. Returns to the SHA not harvested in common property fisheries will be available for cost recovery and broodstock. Tables 6–13 summarize pink, chum, coho, and Chinook salmon returns by SHA.

DIPAC will operate a weir in Salmon Creek to control the number of hatchery chum salmon entering the stream. Beginning July 1, DIPAC will monitor abundance of chum salmon in Salmon Creek. When sufficient numbers of chum salmon are present, the weir will be installed and operated to control escapement of chum salmon into the stream throughout the run. Salmon Creek will be managed for a maximum escapement of 2,500 chum salmon. Appropriate measures will be taken to ensure the weir does not cause substantial delay or mortality in the migration of other salmon and trout species; these measures may include, but are not limited to, opening pickets to pass fish holding below the weir and removing the weir when ADF&G considers chum salmon escapement control measures are no longer necessary. Sport fisheries will be managed as described in codified regulations for these waters. The department may use EO authority to address issues in season. The

department typically liberalizes sport harvest limits for Chinook salmon in a terminal area that includes a portion of the Gastineau Channel SHA.

**Amalga Harbor SHA**

In 1997, the BOF adopted a proposal designating the Amalga Harbor SHA into regulation. The Amalga Harbor SHA has been opened by EO annually since 1994. This SHA includes those waters enclosed by a line from the Shrine of St. Therese to the southernmost tip of Bird Island to the northernmost tip of Gull Island to a point on the eastern mainland shore at the latitude of 58º30.80′ N lat (Figure 4). As stated in the MSH permit, if conflicts with wild stocks become evident during the hatchery cost recovery fishery, restrictions in the harvest area may be necessary or alternative sites may be investigated. DIPAC chum salmon cost recovery primarily takes place at Amalga Harbor; however, in years of large returns to MSH, cost recovery may take place in Gastineau Channel.

Fed chum salmon fry were released from the Amalga Harbor site for the first time in 1991 and the first substantial returns occurred in 1994. In 2023, projected returns from Amalga Harbor fry releases are expected to total approximately 1,278,000 chum salmon. In order to increase the common property share of enhanced chum salmon production, DIPAC will be continuing with common property purse seine openings in a portion of the Amalga SHA, if conditions warrant. This is a step towards the DIPAC goal of providing at least 70% of production to the common property harvest. Purse seine gear is the only net gear type that can legally fish in Section 11-A and is very effective in harvesting a substantial volume of fish in a short period of time, thereby minimizing impact to the Amalga Harbor area. These openings may occur during a nine-hour period (9:00 a.m. – 6:00 p.m.) on Thursdays in July. Decisions about these commercial openings will be based on returning run strength of enhanced chum salmon, progress towards cost recovery goals, expected effort levels, and considerations for nontarget species. The department will sample the catch for sockeye salmon otoliths as part of the normal sampling of commercial salmon harvests.

DIPAC will operate a weir at the outlet of the Petersen Creek lagoon to control the number of hatchery chum salmon entering Peterson Creek. Peterson Creek will be managed for a maximum escapement of 3,000 chum salmon. Appropriate measures will be taken to ensure the weir does not cause substantial delay or mortality in the migration of other salmon and trout species; these measures may include, but are not limited to, opening pickets to pass fish holding above or below the weir and removing the weir when ADF&G considers chum salmon escapement control measures are no longer necessary. ADF&G will require DIPAC to conduct cost recovery fishing in the SHA to remove salmon should a substantial number remain after fisheries have ceased. Sport fisheries will be managed as described in codified regulations for these waters. The department may use EO authority to address issues inseason. For the last eight years (2015–2022), snorkel survey counts have indicated extremely low production of steelhead returning to Peterson Creek. In 2023, a portion of the Amalga Harbor SHA will again be closed to sport fishing as was done in 2019–2022 due to low steelhead returns. The sport fishing closure occurs from the barrier falls on Peterson Creek to the saltwater shoreline within 200 yards of the creek mouth from April 1 through June 30. Due to low coho salmon escapements to Peterson Creek during 6 of the last 7 years (2016–2022), additional sport fishing closures for coho salmon may be implemented in 2023.

**Boat Harbor SHA**

In 1996, the regional planning team (RPT) requested establishment of an SHA near the Boat Harbor remote-release site that could be opened by EO. In 1997, the BOF adopted a proposal designating

an SHA near the Boat Harbor remote-release site into regulation. The Boat Harbor SHA is described as those waters within one mile of the western shoreline of Lynn Canal south of 58°40′ N lat to a point 2.4 miles north of Pt. Whidbey at 58°37.05′ N lat, including the waters inside Boat Harbor (Figure 2). In 2023, the return from Boat Harbor releases is expected to total 588,900 chum salmon. DIPAC does not anticipate using the SHA for cost recovery this year. ADF&G will require DIPAC to conduct cost recovery fishing in the SHA to remove salmon should a substantial number remain after fisheries have ceased. Sport fisheries will be managed as described in codified regulations for these waters. The department may use EO authority to address issues inseason.

**Limestone Inlet SHA**

In 1996, the RPT requested establishment of an SHA near the Limestone Inlet remote-release site that could be opened by EO. The SHA was designated in the MSH PNP Permit in 1996. The area is described as those waters of Limestone Inlet east of a line from 58°01.75′ N lat, 133°59.40′ W long to 58°02.04′ N lat, 133°59.60′ W long (Figure 1). This area is closed to commercial fishing by regulation, although outer portions of the inlet are opened to commercial fishing by EO to increase utilization of returning chum salmon. This management strategy will be followed again in 2023. Cost recovery fishing within this SHA was experimental in nature in 1996 and 1997. No cost recovery fishing has been conducted at Limestone Inlet since 1997 and DIPAC does not anticipate using the SHA for cost recovery in 2023. The 2023 return from Limestone Inlet releases is expected to total approximately 127,400 chum salmon. ADF&G will require DIPAC to conduct cost recovery fishing in the SHA to remove salmon should a substantial number remain after fisheries have ceased. Sport fisheries will be managed as described in codified regulations for these waters. The department may use EO authority to address issues inseason.

2.4 *Carcass Disposal Plans*

**Broodstock**

As in previous years, broodstock carcasses will be sold or disposed of in a manner consistent with Alaska Department of Environmental Conservation wastewater discharge regulations.

**Cost Recovery**

As in prior years, DIPAC intends to fully utilize all cost recovery fish harvested in its SHAs. ADF&G will require DIPAC to conduct cost recovery fishing in the SHAs to remove salmon should a substantial number remain after fisheries have ceased.

## 3.0 SPECIAL STUDIES

DIPAC conducts contract work for the National Marine Fisheries Service at Auke Bay Laboratory in association with the Southeast Coastal Monitoring (SECM) project and for the Alaska Department of Fish and Game's Alaska Hatchery Research Project (Hatchery Wild Interaction Study), which DIPAC has co-funded. The contract work includes processing otolith and scale samples from juvenile pink and chum salmon to determine the presence and abundance of hatchery stocks in Southeast Alaska.

## 4.0 APPROVAL

**Recommendation for Approval**

Katie Harms, Executive Director 3/28/2023

Scott Forbes, Area Management Biologist, Division of Commercial Fisheries 4/7/2023

Dan Teske, Area Management Biologist, Division of Sport Fish 4/7/2023

Lowell Fair, Regional Supervisor, Division of Commercial Fisheries 4/7/2023

Matt Catterson for Judy Lum, Regional Supervisor, Division of Sport Fish 4/7/2023

Lorraine Vercessi, PNP Hatchery Program Coordinator, Div. of Commercial Fisheries 4/13/2023

**Approval:**

The 2023 Macaulay Salmon Hatchery Annual Management Plan is hereby approved:

Tom Taube, Deputy Director, Division of Sport Fish 4/21/2023

Peter Bangs, Assistant Director, Division of Commercial Fisheries 4/21/2023

## 5.0 ATTACHMENTS

### *Tables*



### *Figures*

Table 1. – Summary of 2023 DIPAC planned releases, returns, and egg take goals.

**Planned Releases by Species and Release Site**

| Species | Stage | Facility | Release Site | No. Released | No. Fish Marked |
|---|---|---|---|---|---|
| Chum salmon | Fed Fry | Macaulay | Macaulay | 12,000,000 | 100% Otolith |
| | | | Thane Net Pens | 24,000,000 | 100% Otolith |
| | | | Amalga | 48,000,000 | 100% Otolith |
| | | | Boat Harbor | 24,000,000 | 100% Otolith |
| | | | Limestone | 15,000,000 | 100% Otolith |
| | | | TOTAL CHUM | 123,000,000 | 100% Otolith |
| Coho salmon | Smolt | Macaulay | Gastineau Channel | 1,355,000 | 103,000 CWT |
| | | | TOTAL COHO | 1,355,000 | 103,000 CWT |
| Chinook salmon | Smolt | Macaulay | Gastineau Channel | 315,800 | 66,000 CWT |
| | | | Fish Cr. | 250,000 | 57,000 CWT |
| | | | Lena Cove | 200,000 | 43,000 CWT |
| | | | TOTAL CHINOOK | 765,800 | 166,000 CWT |
| | | | TOTAL CHINOOK & COHO | 2,120,800 | 269,000 CWT |

continued…

Table 1 continued.

**Expected Adult Returns by Release Site**

| Species | Release Site | Number of Adults | Assumed % Marine Survival |
|---|---|---|---|
| Chum salmon | Gastineau Channel SHA | 806,300 | age and site-specific assumptions |
| | Amalga Harbor SHA | 1,278,000 | age and site-specific assumptions |
| | Boat Harbor (Remote Site) | 587,900 | age and site-specific assumptions |
| | Limestone Inlet (Remote Site) | 127,400 | age and site-specific assumptions |
| | TOTAL | 2,800,000 | |
| Coho salmon | Gastineau Channel SHA | 6,400 | 2.9% |
| Chinook salmon | Gastineau Channel[1] | 3,100 | age and site-specific assumptions |
| | Auke Bay (Remote Site) | 110 | age and site-specific assumptions |
| | Fish Creek (Remote Site) | 1,400 | age and site-specific assumptions |
| | Lena Cove (Remote Site) | 90 | age and site-specific assumptions |
| | TOTAL | 4,700 | |

**Egg Take Goals**

| Species | Facility or Source | Number of Eggs |
|---|---|---|
| Chum salmon | Macaulay | 135 million |
| Coho salmon | Macaulay | 1.5 million |
| Chinook salmon[2,3] | Macaulay | 1.25 million |

[1] Includes MSH and Thane Net Pens.
[2] Crystal Lake, Medvejie Creek, and Hidden Falls hatcheries may be used as backup egg sources for Andrew Creek stock Chinook salmon eggs.
[3] Subject to change following forthcoming discussions between DIPAC and ADF&G.

**Table 2. DIPAC pink salmon releases by release site, brood years 1977 to 2001.**

| Brood Year | Kowee Creek | Sheep Creek | Macaulay Hatchery | Total |
|---|---|---|---|---|
| 1977 | 1,643,586 | | | 1,643,586 |
| 1978 | 2,100,100 | | | 2,100,100 |
| 1979 | 2,087,152 | | | 2,087,152 |
| 1980 | 2,395,200 | 786,480 | | 3,181,680 |
| 1981 | 3,603,368 | 8,416,942 | | 12,020,310 |
| 1982 | 3,276,947 | 14,402,028 | | 17,678,975 |
| 1983 | 6,351,572 | 32,013,322 | | 38,364,894 |
| 1984 | 4,001,642 | 14,931,240 | | 18,932,882 |
| 1985 | 140,662 | 36,754,490 | | 36,895,152 |
| 1986 | 53,333 | 8,423,628 | | 8,476,961 |
| 1987 | - | 29,776,915 | 11,853,385 | 41,630,300 |
| 1988 | - | - | 15,032,297 | 15,032,297 |
| 1989 | - | 17,962,133 | 9,669,565 | 27,631,698 |
| 1990 | - | 16,258,086 | 14,846,296 | 31,104,382 |
| 1991 | - | 31,636,411 | 15,420,179 | 47,056,590 |
| 1992 | - | 32,660,175 | 15,768,972 | 48,429,147 |
| 1993 | - | - | 8,663,682 | 8,663,682 |
| 1994 | - | - | 8,539,515 | 8,539,515 |
| 1995 | - | - | 8,743,899 | 8,743,899 |
| 1996 | - | - | 5,901,486 | 5,901,486 |
| 1997 | - | - | 8,709,149 | 8,709,149 |
| 1998 | - | - | 5,760,018 | 5,760,018 |
| 1999 | - | - | 1,681,918 | 1,681,918 |
| 2000 | - | - | 1,723,910 | 1,723,910 |
| 2001 | - | - | 1,696,762 | 1,696,762 |
| Total | 25,653,562 | 244,021,850 | 134,011,033 | 403,686,445 |

**Table 3. DIPAC chum salmon releases by release site, brood years 1976 to 2021.**

| Brood Year | Kowee Creek | Sheep Creek/ Thane | Macaulay Hatchery | Amalga Harbor | Limestone Inlet | Boat Harbor | Total |
|---|---|---|---|---|---|---|---|
| 1976 | 76,245 | | | | | | 76,245 |
| 1977 | 130,205 | | | | | | 130,205 |
| 1978 | - | | | | | | - |
| 1979 | 224,014 | | | | | | 224,014 |
| 1980 | 921,484 | | | | | | 921,484 |
| 1981 | 515,482 | 104,400 | | | | | 619,882 |
| 1982 | 299,666 | 726,592 | | | | | 1,026,258 |
| 1983 | 297,029 | 920,856 | | | | | 1,217,885 |
| 1984 | - | 4,291,652 | | | | | 4,291,652 |
| 1985 | - | 7,001,628 | | | | | 7,001,628 |
| 1986 | - | 18,868,280 | | | | | 18,868,280 |
| 1987 | - | 10,122,835 | 8,226,934 | | | 5,170,000 | 23,519,769 |
| 1988 | - | 26,697,200 | 8,719,086 | | | 8,508,356 | 43,924,642 |
| 1989 | - | 3,073,538 | 11,586,928 | | | 8,300,782 | 22,961,248 |
| 1990 | - | 38,874,036 | 11,326,584 | 34,744,923 | 9,031,860 | 9,337,000 | 103,314,403 |
| 1991 | - | 27,011,585 | 11,959,076 | 35,918,054 | 8,500,000 | 6,709,659 | 90,098,374 |
| 1992 | - | 27,002,939 | 11,891,265 | 36,147,451 | 10,016,175 | 9,545,177 | 94,603,007 |
| 1993 | - | 14,635,458 | 5,869,938 | 34,817,531 | 5,833,126 | 6,464,450 | 67,620,503 |
| 1994 | - | 44,673,729 | 11,825,076 | 34,472,077 | 11,411,420 | 8,931,491 | 111,313,793 |
| 1995 | - | 44,174,890 | 11,474,457 | 34,979,646 | 15,421,245 | 8,536,780 | 114,587,018 |
| 1996 | - | 39,278,455 | 12,166,444 | 34,535,728 | 12,983,190 | 7,759,020 | 106,722,837 |
| 1997 | - | - | 24,246,804 | 49,155,073 | 13,993,898 | 7,211,676 | 94,607,451 |
| 1998 | - | - | 21,991,640 | 50,783,014 | 14,473,858 | 9,262,694 | 96,511,206 |
| 1999 | - | - | 27,878,900 | 53,218,962 | 15,100,000 | 9,010,000 | 105,207,862 |
| 2000 | - | - | 27,858,929 | 46,028,136 | 15,144,122 | 14,883,720 | 103,914,907 |
| 2001 | - | 13,046,247 | 15,095,772 | 17,452,832 | 14,616,604 | 11,263,498 | 71,474,953 |
| 2002 | - | 23,004,281 | 11,794,325 | 34,878,279 | 14,001,897 | 12,223,213 | 95,901,995 |
| 2003 | - | 23,414,790 | 10,806,816 | 36,042,133 | 14,798,685 | 14,576,139 | 99,638,563 |
| 2004 | - | 24,082,294 | 11,186,653 | 36,791,145 | 15,005,171 | 13,558,987 | 100,624,250 |
| 2005 | - | 23,553,814 | 11,337,816 | 34,718,622 | 14,145,482 | 13,472,501 | 97,228,235 |
| 2006 | - | 24,740,121 | 11,972,504 | 48,098,292 | 15,177,070 | 14,901,861 | 114,889,848 |
| 2007 | - | 24,385,242 | 10,852,489 | 45,334,725 | 15,036,500 | 14,719,447 | 110,328,403 |
| 2008 | - | 23,678,056 | 11,868,990 | 43,970,489 | 15,220,005 | 14,251,927 | 108,989,467 |
| 2009 | - | 15,625,000 | 7,733,000 | 44,104,000 | 14,057,000 | 13,651,000 | 95,170,000 |
| 2010 | - | 21,940,000 | 10,650,000 | 43,420,000 | 13,690,000 | 10,860,000 | 100,560,000 |
| 2011 | - | 24,035,500 | 11,988,300 | 45,145,800 | 14,418,900 | 18,356,500 | 113,945,000 |
| 2012 | - | 23,413,500 | 11,091,900 | 41,961,300 | 14,742,200 | 22,429,500 | 113,638,400 |
| 2013 | - | 23,856,200 | 11,577,300 | 42,390,600 | 14,915,000 | 22,900,100 | 115,639,200 |
| 2014 | - | 21,658,000 | 11,733,000 | 39,562,000 | 13,450,000 | 21,046,000 | 107,449,000 |
| 2015 | - | 19,267,500 | 10,270,700 | 31,617,400 | 13,167,800 | 20,655,900 | 94,979,300 |
| 2016 | - | 21,586,600 | 10,321,900 | 33,655,100 | 13,417,000 | 19,218,700 | 98,199,300 |
| 2017 | - | 20,083,800 | 11,819,700 | 44,429,200 | 11,715,700 | 19,789,600 | 107,838,000 |
| 2018 | - | 18,951,000 | 10,918,000 | 42,069,000 | 11,403,000 | 19,795,000 | 103,136,000 |
| 2019 | - | 20,825,000 | 11,803,000 | 43,875,000 | 12,329,000 | 18,240,000 | 107,072,000 |
| 2020 | - | 21,260,000 | 11,674,000 | 46,294,000 | 11,818,000 | 23,479,000 | 114,525,000 |
| 2021 | - | 22,252,000 | 12,248,000 | 45,914,000 | 14,404,000 | 22,196,000 | 117,014,000 |
| Total | 2,464,000 | 762,117,000 | 445,766,000 | 1,286,525,000 | 423,438,000 | 481,216,000 | 3,401,525,000 |

**Table 4. DIPAC releases of coho salmon smolts by release site, brood years 1985-2020.** [1]

| Brood Year | Number of Fish Released | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Gastineau Channel | | | | | | | |
| | Sheep Creek/Thane | | Macaulay | | Twin Lakes | | Other | |
| | Total | Tagged | Total | Tagged | Total | Tagged | Total[2] | Tagged |
| 1985 | 61,342 | 38,653 | | | | | | |
| 1986 | 100,000 | 48,534 | 49,659 | 20,284 | | | 18,896 | 18,858 |
| 1987 | 44,940 | 20,551 | 36,866 | 19,764 | | | | |
| 1988 | 533,233 | 39,134 | 546,255 | 40,198 | | | 100,763 | 19,883 |
| 1989 | 505,287 | 45,318 | 507,819 | 45,868 | | | | |
| 1990 | 582,739 | 65,983 | 392,508 | 32,550 | 1,719 | - | | |
| 1991 | 562,150 | 55,814 | 477,999 | 37,821 | 4,796 | - | 2,205 | - |
| 1992 | 563,357 | 54,173 | 380,282 | 36,138 | | | 50,574 | 10,130 |
| 1993[3] | 621,235 | 69,825 | 422,482 | 43,353 | 4,370 | - | 128,245 | 22,998 |
| 1994[4] | 518,625 | 58,788 | 347,512 | 34,645 | 12,771 | - | | |
| 1995 | 575,554 | 59,732 | 425,899 | 36,897 | | | | |
| 1996 | | | 823,659 | 83,456 | | | | |
| 1997[5] | 54,251 | 54,251 | 783,622 | 79,846 | | | | |
| 1998[5] | 91,024 | 91,024 | 805,963 | 83,712 | | | | |
| 1999 | | | 770,656 | 75,829 | | | | |
| 2000[5] | 95,746 | 90,671 | 813,225 | 82,177 | | | | |
| 2001 | | | 783,928 | 46,581 | 9,186 | - | | |
| 2002 | | | 567,282 | 41,925 | | | | |
| 2003 | | | 499,616 | 129,603 | | | | |
| 2004 | | | 595,187 | 35,601 | | | | |
| 2005 | | | 565,964 | 41,542 | | | | |
| 2006 | | | 736,511 | 56,735 | | | | |
| 2007 | | | 559,429 | 40,654 | | | | |
| 2008 | | | 328,000 | 24,539 | | | | |
| 2009 | | | 349,000 | 24,587 | | | | |
| 2010 | | | 306,700 | 21,967 | | | | |

**Table - 4 - continued. DIPAC releases of coho salmon smolts by release site, brood years 1985-2020.**

| Brood Year | Number of Fish Released | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Gastineau Channel | | | | | | | |
| | Sheep Creek/Thane | | Macaulay | | Twin Lakes | | Other | |
| | Total | Tagged | Total | Tagged | Total | Tagged | Total[2] | Tagged |
| 2011 | | | 524,900 | 36,901 | | | | |
| 2012 | 837,900 | 57,070 | 343,600 | 34,573 | | | | |
| 2013 | 686,900 | 48,482 | 326,100 | 22,301 | | | | |
| 2014 | 736,600 | 45,957 | 318,100 | 16,897 | | | | |
| 2015 | 784,800 | 54,066 | 233,900 | 15,877 | | | | |
| 2016 | 907,100 | 67,000 | 322,500 | 19,020 | | | 46,800[9] | - |
| 2017 | 767,500 | 51,700 | 300,500 | 19,000 | | | 98,400[9] | - |
| 2018 | 679,200 | 48,700 | 309,400 | 22,500 | | | 95,800[9] | - |
| 2019 | | | 764,600[8] | 53,900 | | | | |
| 2020 | | | 222,900 | 26,900 | | | | |
| Total | 10,309,000 | 1,165,000 | 16,543,000 | 1,484,000 | 32,800 | - | 541,700 | 71,900 |

1/ Shaded cells represent Snettisham Hatchery fish released at Sheep Creek as part of a cooperative agreement between DIPAC and ADF&G.

2/ Releases from "other" areas were made at:

1986 brood released from Auke Rec in 1988.

1988 brood released as pre-smolt into Mendenhall Ponds in December 1989.

1991 brood released as pre-smolt into Picnic Creek at Lena Cove in September 1992.

1992 brood includes 48,574 pre-smolt (10,130 tagged) released into Davidson Creek and 2,000 pre-smolt (unt

3/ Includes 9,874 Pavlof River coho F/W reared at Auke Creek Hatchery and transferred to Sheep Creek Hatchery for S/W rearing and release. (All fish were coded wire tagged.)

4/ Includes 7,229 Pavlof River coho F/W reared at Auke Creek Hatchery and transferred to Sheep Creek Hatchery for S/W rearing and release. (All fish were coded wire tagged.)

5/ Sheep Creek releases from UAF coho outbreeding project.

8/ Early released 466,200 due to loss of water supply (few fish are expected to survive).

The remaining 293,400 were released as normal in May.

9/ Released as 1 gram fed fry as a cooperative venture w/ the USFS

Table 5. DIPAC releases of Chinook salmon smolts by release site, brood years 1984-2020. [1, 2]

| | Number of Fish Released | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gastineau Channel | | | | | | | | | | | | | | | | | |
| Brood | Sheep Creek/Thane | | Macaulay | | Fish Creek | | Auke Bay | | Lena Cove | | Pullen Creek | | Lutak Inlet | | Twin Lakes | | Other | |
| Year | Total | Tagged | Total[4] | Tagged | Total | Tagged | Total | Tagged | Total | Tagged | Total | Tagged | Total | Tagged | Total[5] | Tagged | Total[6] | Tagged |
| 1984 | 30,280 | 28,221 | | | | | | | | | | | | | | | | |
| 1985 | 31,112 | 26,227 | | | | | | | | | | | | | | | | |
| 1986 | 31,556 | 28,527 | | | | | | | | | | | | | | | | |
| 1987 | 120,000 | 57,513 | 11,000 | 10,435 | | | | | | | | | | | | | | |
| 1988 | 122,155 | 31,177 | 101,462 | 30,016 | | | | | | | | | | | | | | |
| 1989[3] | **100,543** | **26,367** | 43,595 | 20,518 | | | | | | | | | | | | | | |
| 1990 | | | 191,765 | 29,894 | | | | | | | | | | | | | | |
| 1991 | | | 207,536 | 29,917 | | | | | | | | | | | 3,379 | - | 107,399 | 103,573 |
| 1992 | | | 241,336 | 38,710 | | | | | | | | | | | 6,216 | - | 23,389 | 21,775 |
| 1993 | 28,458 | 26,483 | 158,681 | 31,365 | 196,549 | 39,817 | 193,464 | 39,683 | | | | | | | 8,713 | - | 28,062 | 26,546 |
| 1994 | 35,423 | 24,523 | 64,360 | 26,030 | 109,274 | 29,177 | 106,255 | 28,929 | | | | | | | 8,265 | - | | |
| 1995 | 44,664 | 9,899 | 171,908 | 19,581 | 179,164 | 19,783 | 176,193 | 20,494 | | | | | | | 12,095 | - | | |
| 1996 | | | 212,285 | 19,959 | 179,059 | 30,207 | 174,230 | 19,498 | | | | | | | 14,182 | - | | |
| 1997 | | | 221,443 | 30,533 | 183,701 | 19,893 | 173,207 | 18,375 | | | | | | | 13,200 | - | | |
| 1998 | | | 208,586 | 31,745 | 166,670 | 27,868 | 56,929 | n/a[7] | | | 91,618 | 27,637 | | | 14,684 | - | | |
| 1999 | | | 213,232 | 29,426 | 183,252 | 19,884 | 157,393 | 16,653 | | | 32,123 | 29,746 | | | 14,277 | - | | |
| 2000 | | | 213,276 | 29,737 | 178,745 | 18,360 | 85,040 | 8,758 | | | 95,386 | 27,835 | | | 14,069 | - | | |
| 2001 | | | 120,891 | 28,766 | 121,670 | 29,094 | | | | | 58,793 | 30,781 | | | | | | |
| 2002 | 70,525 | 9,882 | 177,423 | 19,607 | 171,895 | 16,268 | 104,949 | 9,900 | | | 128,688 | 31,288 | | | 10,830 | - | | |
| 2003 | 101,968 | 9,424 | 222,218 | 24,341 | 178,429 | 20,385 | 86,065 | 10,406 | | | 219,260 | 28,179 | | | 12,801 | - | | |
| 2004 | 104,812 | 9,224 | 211,248 | 19,988 | 184,864 | 16,715 | 95,184 | 9,013 | | | 68,002 | 28,440 | | | 13,814 | - | | |
| 2005 | 101,093 | 11,597 | 147,723 | 23,980 | 183,225 | 23,416 | 90,767 | 11,272 | | | 168,135 | 34,107 | | | 14,210 | - | | |
| 2006 | | | 147,062 | 21,794 | 275,425 | 33,369 | 84,447 | 10,727 | | | 51,495 | 30,416 | | | 15,394 | - | | |
| 2007 | | | 216,639 | 32,194 | 288,579 | 31,572 | 87,190 | 9,964 | | | 276,262 | 31,004 | | | 15,100 | - | | |
| 2008 | | | 223,000 | 30,636 | 282,000 | 30,463 | 89,000 | 10,130 | | | 258,000 | 32,497 | | | 2,200 | - | 1,500 | - |
| 2009 | | | 193,931 | 17,660 | 220,635 | 30,572 | 90,388 | 9,224 | | | 128,619 | 25,494 | 92,785 | 14,011 | 17,900 | - | 1,500 | - |
| 2010 | | | 213,229 | 31,538 | 278,640 | 27,751 | 89,932 | 10,643 | | | 194,603 | 41,423 | | | 9,900 | - | 1,500 | - |

**Table 5 - continued. DIPAC releases of Chinook salmon smolts by release site, brood years 1984-2020.**

| | Number of Fish Released | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gastineau Channel | | | | | | | | | | | | | | | | | |
| Brood | Sheep Creek/Thane | | Macaulay | | Fish Creek | | Auke Bay | | Lena Cove | | Pullen Creek | | Lutak Inlet | | Twin Lakes | | Other | |
| Year | Total | Tagged | Total[4] | Tagged | Total | Tagged | Total | Tagged | Total | Tagged | Total | Tagged | Total | Tagged | Total[5] | Tagged | Total[6] | Tagged |
| 2011 | | | 206,400 | 30,484 | 280,200 | 25,658 | 87,800 | 10,157 | | | 50,100 | 10,375 | | | 11,500 | - | | |
| 2012 | | | 257,300 | 31,988 | 209,700 | 20,534 | 70,000 | 10,949 | 90,000 | 11,058 | | | | | 8,800 | | 2,000 | - |
| 2013 | | | 218,900 | 29,381 | 269,500 | 27,828 | 88,800 | 10,090 | 179,900 | 19,266 | 228,700 | 40,248 | | | 9,230 | | | |
| 2014 | 124,100 | 13,433 | 220,500 | 21,875 | 279,400 | 26,886 | 88,400 | 9,663 | 179,100 | 29,353 | | | | | 6,620 | | | |
| 2015 | 150,100 | 14,176 | 219,500 | 19,342 | 279,300 | 25,930 | 87,000 | 7,557 | 148,900 | 13,554 | | | | | 4,000 | | | |
| 2016 | | | 249,400 | 22,500 | 233,900 | 22,300 | 89,300 | 9,800 | | | | | | | | | | |
| 2017 | 182,800 | 27,900 | 248,800 | 42,800 | 278,700 | 43,500 | 89,600 | 16,100 | 187,500 | 29,100 | | | | | | | | |
| 2018 | | | 325,800 | 63,300 | 272,200 | 58,400 | | | | | | | | | 4,800 | | | |
| 2019 | | | 1,115,600[8] | 223,100 | | | | | | | | | | | | | | |
| 2020 | | | 443,500 | 90,700 | 364,400 | 79,200 | | | 206,500 | 45,900 | | | | | | | | |
| Total | 1,380,000 | 354,600 | 7,640,000 | 1,204,000 | 6,029,000 | 794,800 | 2,542,000 | 318,000 | 991,900 | 148,200 | 2,050,000 | 449,500 | 92,800 | 14,000 | 266,200 | - | 165,400 | 151,900 |

1/ Dark shaded cells represent Snettisham Hatchery fish released at Sheep Creek and Macaulay Hatchery as part of cooperative agreements for sport fishery enhancement and brood stock development, respectively.

2/ Light shaded cells represent releases of King Salmon River stock chinook. All other production releases are Andrew Creek stock.

3/ Numbers in bold are actually age 2.0 BY88 fish released at Sheep Creek in 1991.

4/ Brood year 1987 and 1988 fish are DIPAC fish produced at Snettisham for DIPAC brood stock development.

5/ Twin Lakes BY 1991 fish were released as age 3.0 fish in November 1994.
Twin Lakes BY 1992 fish were released as age 2.0 fish in May 1995.

6/ "Other" BY 1991 releases include 62,579 (60,555 tagged) Tahini River fish and 44,820 (43,018 tagged) Big Boulder Creek fish, released into their respective streams on May 1992.
"Other" BY 1992 fish were released into Big Boulder Creek in May 1993.
"Other" BY 1993 fish were released into Big Boulder Creek in May 1994.
"Other" BY 2008 fish were released (500 each) into Glacier L. (right pelvic fin clip), Moraine L. (left pelvic fin clip), and Crystal L. (upper caudal fin clip) in October 2010.
"Other" BY 2009 fish were released into Glacier L., Moraine L., and Crystal L. in May 2012.

7/ Auke Creek release represented by Fish Creek tags.

8/ Released prior to osmocompetence/smoltification due to loss of water supply.

**Table 6. DIPAC terminal area pink salmon returns by site, 1979 to 2003.**

| Return Year | Kowee Creek | Sheep Creek | Macaulay Hatchery | Total |
|---|---|---|---|---|
| 1979 | 20,000 | | | 20,000 |
| 1980 | 6,000 | | | 6,000 |
| 1981 | 14,000 | | | 14,000 |
| 1982 | 10,624 | 5,713 | | 16,337 |
| 1983 | 10,028 | 95,972 | | 106,000 |
| 1984 | 7,000 | 53,000 | | 60,000 |
| 1985 | 13,654 | 429,077 | | 442,731 |
| 1986 | 1,225 | 21,352 | | 22,577 |
| 1987 | 28,687 | 766,063 | | 794,750 |
| 1988 | 16,620 | 20,489 | | 37,109 |
| 1989 | 5,569 | 65,051 | 13,079 | 83,699 |
| 1990 | 686 | 5,907 | 58,893 | 65,486 |
| 1991 | 2,033 | 259,967 | 82,641 | 344,641 |
| 1992 | 1,111 | 10,340 | 961,474 | 972,925 |
| 1993 | 44 | 1,469 | 27,523 | 29,036 |
| 1994 | 1,658 | 34,128 | 2,742,870 | 2,778,656 |
| 1995 | - | 144 | 82,147 | 82,291 |
| 1996 | - | - | 25,480 | 25,480 |
| 1997 | - | - | 209,427 | 209,427 |
| 1998 | - | - | 171,261 | 171,261 |
| 1999 | - | - | 511,327 | 511,327 |
| 2000 | - | - | 115,124 | 115,124 |
| 2001 | - | - | 106,173 | 106,173 |
| 2002 | - | - | 93,080 | 93,080 |
| 2003 | - | - | 100,497 | 100,497 |
| TOTAL | 138,939 | 1,768,672 | 5,300,996 | 7,208,607 |

**Table 7. DIPAC terminal area chum salmon returns by age class, release site, and year of return.**

**Sheep Creek Hatchery Terminal Area Return by Age Class**

| Return | Estimated Percentage | | | | Total | Estimated Numbers | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Age 3 | Age 4 | Age 5 | Age 6 | Return | Age 3 | Age 4 | Age 5 | Age 6 | Return |
| 1987 | 2.8% | 58.2% | 37.9% | 1.1% | 100% | 115 | 2,386 | 1,554 | 45 | 4,100 |
| 1988 | 0.0% | 94.5% | 5.5% | 0.0% | 100% | - | 35,645 | 2,075 | - | 37,720 |
| 1989 | 4.6% | 81.1% | 14.3% | 0.0% | 100% | 1,545 | 27,243 | 4,804 | - | 33,592 |
| 1990 | 0.2% | 71.5% | 28.2% | 0.1% | 100% | 362 | 129,260 | 50,981 | 181 | 180,784 |
| 1991 | 2.1% | 8.1% | 88.1% | 1.7% | 100% | 3,707 | 14,297 | 155,505 | 3,001 | 176,510 |
| 1992 | 0.9% | 80.0% | 10.5% | 8.6% | 100% | 1,565 | 139,072 | 18,253 | 14,950 | 173,840 |
| 1993 | 1.2% | 9.0% | 89.3% | 0.5% | 100% | 759 | 5,695 | 56,507 | 316 | 63,277 |
| 1994 | 1.5% | 93.1% | 4.6% | 0.8% | 100% | 2,044 | 123,570 | 6,079 | 1,035 | 132,728 |
| 1995[1] | 15.3% | 21.4% | 62.3% | 0.9% | 100% | 15,801 | 21,988 | 64,153 | 947 | 102,941 |
| 1996 | 0.2% | 89.3% | 9.3% | 1.2% | 100% | 1,206 | 440,329 | 45,632 | 5,916 | 493,083 |
| 1997 | 4.9% | 9.3% | 85.2% | 0.6% | 100% | 6,130 | 11,501 | 105,675 | 791 | 124,097 |
| 1998 | 2.9% | 90.6% | 5.0% | 1.4% | 100% | 1,539 | 47,591 | 2,615 | 756 | 52,501 |
| 1999 | 16.5% | 71.2% | 12.0% | 0.3% | 100% | 9,058 | 39,059 | 6,594 | 144 | 54,855 |
| 2000 | 0.3% | 81.5% | 18.1% | 0.1% | 100% | 174 | 52,584 | 11,649 | 76 | 64,483 |
| 2001 | 0.2% | 1.6% | 95.0% | 3.3% | 100% | 50 | 398 | 24,311 | 841 | 25,600 |
| | | | | | ***** No returns from Sheep Creek production since 2001 ***** | | | | | |
| Average | 2.6% | 63.4% | 32.3% | 1.7% | 100% | 2,937 | 72,708 | 37,092 | 1,933 | 114,674 |
| Total | | | | | | 44,054 | 1,090,618 | 556,387 | 29,000 | 1,720,111 |

**Macaulay Salmon Hatchery Chum Terminal Area Return by Age Class**

| **Return** | **Estimated Percentage** | | | | **Total** | **Estimated Numbers** | | | | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|
| **Year** | **Age 3** | **Age 4** | **Age 5** | **Age 6** | **Return** | **Age 3** | **Age 4** | **Age 5** | **Age 6** | **Return** |
| 1989 | 0.9% | 87.9% | 8.4% | 2.8% | 100% | 8 | 737 | 71 | 23 | 839 |
| 1990 | 0.5% | 50.5% | 49.0% | 0.0% | 100% | 28 | 2,796 | 2,713 | - | 5,536 |
| 1991 | 2.2% | 15.6% | 80.0% | 2.2% | 100% | 48 | 342 | 1,754 | 48 | 2,193 |
| 1992 | 1.2% | 60.8% | 29.1% | 8.9% | 100% | 31 | 1,552 | 743 | 227 | 2,552 |
| 1993 | 1.7% | 75.8% | 22.0% | 0.5% | 100% | 308 | 13,745 | 3,989 | 91 | 18,133 |
| 1994 | 1.6% | 76.9% | 21.3% | 0.1% | 100% | 1,479 | 69,778 | 19,343 | 127 | 90,727 |
| 1995[2] | 10.3% | 18.3% | 68.6% | 2.7% | 100% | 7,821 | 13,903 | 52,074 | 2,027 | 75,826 |
| 1996[5] | 0.3% | 89.3% | 8.2% | 2.1% | 100% | 555 | 190,265 | 17,509 | 4,559 | 212,889 |
| 1997 | 0.7% | 61.8% | 37.4% | 0.2% | 100% | 825 | 76,882 | 46,487 | 229 | 124,422 |
| 1998 | 2.3% | 60.4% | 34.7% | 2.6% | 100% | 1,772 | 47,206 | 27,098 | 2,032 | 78,108 |
| 1999 | 3.8% | 83.3% | 11.8% | 1.1% | 100% | 3,969 | 87,459 | 12,408 | 1,153 | 104,989 |
| 2000 | 0.5% | 61.5% | 37.5% | 0.6% | 100% | 676 | 83,913 | 51,193 | 770 | 136,553 |
| 2001 | 1.3% | 49.4% | 47.2% | 2.1% | 100% | 1,130 | 42,858 | 40,993 | 1,814 | 86,795 |
| 2002 | 8.7% | 43.2% | 47.5% | 0.6% | 100% | 9,115 | 45,512 | 50,042 | 615 | 105,283 |
| 2003 | 5.0% | 90.6% | 4.1% | 0.3% | 100% | 10,283 | 185,678 | 8,499 | 514 | 204,973 |
| 2004 | 2.4% | 77.7% | 19.8% | 0.0% | 100% | 4,434 | 142,470 | 36,356 | - | 183,260 |
| 2005 | 33.8% | 39.2% | 25.3% | 1.8% | 100% | 76,102 | 88,267 | 57,019 | 3,954 | 225,342 |
| 2006 | 4.2% | 91.0% | 4.5% | 0.3% | 100% | 23,099 | 496,386 | 24,473 | 1,802 | 545,761 |
| 2007 | 3.2% | 59.9% | 36.2% | 0.7% | 100% | 7,457 | 140,551 | 84,951 | 1,590 | 234,549 |
| 2008 | 2.8% | 76.9% | 18.4% | 1.9% | 100% | 5,730 | 155,052 | 37,109 | 3,850 | 201,742 |
| 2009 | 1.3% | 64.4% | 33.3% | 1.0% | 100% | 2,932 | 141,410 | 72,985 | 2,090 | 219,416 |
| 2010 | 3.8% | 45.1% | 49.4% | 1.7% | 100% | 5,116 | 60,178 | 65,823 | 2,230 | 133,347 |
| 2011 | 4.3% | 90.9% | 4.5% | 0.3% | 100% | 11,824 | 252,894 | 12,551 | 864 | 278,133 |
| 2012 | 0.5% | 65.8% | 33.6% | 0.0% | 100% | 1,318 | 158,145 | 80,735 | - | 240,198 |
| 2013 | 2.2% | 53.1% | 41.7% | 3.0% | 100% | 5,666 | 133,669 | 104,924 | 7,644 | 251,903 |
| 2014 | 4.4% | 35.4% | 58.8% | 1.4% | 100% | 8,046 | 65,052 | 108,057 | 2,647 | 183,802 |
| 2015 | 2.7% | 82.2% | 15.0% | 0.2% | 100% | 7,704 | 238,509 | 43,430 | 640 | 290,283 |
| 2016 | 2.5% | 64.3% | 31.6% | 1.6% | 100% | 5,703 | 147,612 | 72,602 | 3,680 | 229,597 |
| 2017 | 0.8% | 78.1% | 19.5% | 1.6% | 100% | 3,238 | 298,249 | 74,586 | 5,984 | 382,057 |
| 2018 | 6.2% | 25.2% | 67.6% | 1.0% | 100% | 13,016 | 52,970 | 142,426 | 2,126 | 210,538 |
| 2019 | 5.9% | 79.6% | 10.8% | 3.7% | 100% | 8,900 | 119,300 | 16,200 | 5,500 | 149,900 |
| 2020 | 27.0% | 65.6% | 7.2% | 0.3% | 100% | 43,800 | 106,400 | 11,700 | 400 | 162,300 |
| 2021 | 1.4% | 91.2% | 7.4% | 0.0% | 100% | 3,300 | 215,900 | 17,500 | - | 236,700 |
| 2022 | 7.9% | 58.4% | 33.5% | 0.2% | 100% | 19,900 | 146,600 | 84,100 | 500 | 251,100 |
| Average | 4.7% | 63.8% | 30.1% | 1.4% | 100% | 8,700 | 118,300 | 43,600 | 1,800 | 172,300 |
| Total | | | | | | 295,300 | 4,022,000 | 1,482,000 | 59,700 | 5,860,000 |

**Table 7 - continued: DIPAC terminal area chum salmon returns by age class, release site, and year of return.**

**Gastineau Channel SHA Return by Age Class**

| Return | Estimated Percentage | | | | Total | Estimated Numbers | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Age 3 | Age 4 | Age 5 | Age 6 | Return | Age 3 | Age 4 | Age 5 | Age 6 | Return |
| 1987 | 2.8% | 58.2% | 37.9% | 1.1% | 100% | 112 | 2,328 | 1,516 | 44 | 4,000 |
| 1988 | 0.0% | 94.5% | 5.5% | 0.0% | 100% | - | 35,645 | 2,075 | - | 37,720 |
| 1989 | 4.5% | 81.3% | 14.2% | 0.1% | 100% | 1,553 | 27,980 | 4,874 | 23 | 34,431 |
| 1990 | 0.2% | 70.8% | 28.9% | 0.1% | 100% | 353 | 118,931 | 48,517 | 162 | 167,963 |
| 1991 | 2.1% | 8.2% | 88.0% | 1.7% | 100% | 3,359 | 13,112 | 140,647 | 2,728 | 159,846 |
| 1992 | 0.9% | 79.7% | 10.8% | 8.6% | 100% | 1,439 | 126,716 | 17,171 | 13,682 | 159,008 |
| 1993 | 1.3% | 25.1% | 73.1% | 0.5% | 100% | 996 | 18,902 | 55,162 | 377 | 75,437 |
| 1994 | 1.6% | 84.0% | 13.9% | 0.4% | 100% | 4,140 | 218,800 | 36,304 | 1,099 | 260,343 |
| 1995[1,2] | 13.1% | 20.0% | 65.2% | 1.7% | 100% | 22,326 | 34,087 | 110,963 | 2,897 | 170,272 |
| 1996[5] | 0.2% | 89.3% | 9.0% | 1.5% | 100% | 1,825 | 653,883 | 65,555 | 10,788 | 732,050 |
| 1997 | 2.8% | 35.6% | 61.2% | 0.4% | 100% | 6,955 | 88,383 | 152,162 | 1,020 | 248,520 |
| 1998 | 2.8% | 84.1% | 11.5% | 1.7% | 100% | 9,998 | 301,507 | 41,070 | 6,072 | 358,647 |
| 1999 | 7.4% | 77.7% | 14.3% | 0.6% | 100% | 22,610 | 237,827 | 43,921 | 1,895 | 306,253 |
| 2000 | 0.2% | 71.5% | 28.0% | 0.3% | 100% | 948 | 308,483 | 121,064 | 1,140 | 431,636 |
| 2001 | 1.0% | 38.5% | 58.1% | 2.4% | 100% | 1,180 | 43,256 | 65,304 | 2,655 | 112,395 |
| 2002 | 8.7% | 43.2% | 47.5% | 0.6% | 100% | 9,115 | 45,512 | 50,042 | 615 | 105,283 |
| 2003 | 5.0% | 90.6% | 4.1% | 0.3% | 100% | 10,283 | 185,678 | 8,499 | 514 | 204,973 |
| 2004 | 2.4% | 77.7% | 19.8% | 0.0% | 100% | 4,434 | 142,470 | 36,356 | - | 183,260 |
| 2005 | 33.8% | 39.2% | 25.3% | 1.8% | 100% | 76,102 | 88,267 | 57,019 | 3,954 | 225,342 |
| 2006 | 4.3% | 91.0% | 4.4% | 0.3% | 100% | 61,565 | 1,289,496 | 62,500 | 3,928 | 1,417,488 |
| 2007 | 3.8% | 66.4% | 29.5% | 0.3% | 100% | 32,043 | 564,717 | 250,706 | 2,524 | 849,990 |
| 2008 | 1.7% | 74.4% | 22.2% | 1.7% | 100% | 13,499 | 595,710 | 177,506 | 14,006 | 800,721 |
| 2009 | 1.5% | 67.9% | 30.1% | 0.4% | 100% | 9,628 | 436,001 | 193,435 | 2,590 | 641,653 |
| 2010 | 4.2% | 47.6% | 46.9% | 1.4% | 100% | 21,405 | 243,679 | 240,122 | 7,079 | 512,285 |
| 2011 | 3.1% | 91.6% | 5.0% | 0.3% | 100% | 22,630 | 672,126 | 36,539 | 2,214 | 733,509 |
| 2012 | 0.9% | 64.0% | 35.1% | 0.0% | 100% | 6,411 | 479,133 | 263,169 | 340 | 749,052 |
| 2013 | 1.5% | 51.8% | 43.4% | 3.3% | 100% | 5,666 | 198,138 | 166,030 | 12,532 | 382,365 |
| 2014 | 4.0% | 38.1% | 56.6% | 1.4% | 100% | 9,429 | 90,203 | 134,044 | 3,287 | 236,963 |
| 2015 | 2.2% | 81.1% | 16.3% | 0.3% | 100% | 11,935 | 438,723 | 88,392 | 1,697 | 540,747 |
| 2016 | 1.9% | 64.2% | 32.1% | 1.8% | 100% | 7,628 | 260,971 | 130,436 | 7,257 | 406,291 |
| 2017 | 1.3% | 80.4% | 17.1% | 1.2% | 100% | 12,309 | 778,986 | 165,936 | 11,343 | 968,574 |
| 2018 | 2.9% | 21.1% | 74.9% | 1.2% | 100% | 14,720 | 107,220 | 381,313 | 6,088 | 509,342 |
| 2019 | 5.9% | 79.6% | 10.9% | 3.7% | 100% | 9,100 | 124,200 | 17,000 | 5,800 | 156,100 |
| 2020 | 27.0% | 65.6% | 7.2% | 0.3% | 100% | 43,900 | 106,500 | 11,700 | 400 | 162,500 |
| 2021 | 1.4% | 91.2% | 7.4% | 0.0% | 100% | 3,300 | 215,900 | 17,500 | - | 236,700 |
| 2022 | 7.8% | 57.9% | 34.1% | 0.2% | 100% | 20,000 | 147,900 | 87,200 | 570 | 255,700 |
| Average | 4.6% | 64.0% | 30.3% | 1.1% | 100% | 13,400 | 262,300 | 96,700 | 3,600 | 376,000 |
| Total | | | | | | 482,900 | 9,441,000 | 3,482,000 | 131,300 | 13,537,000 |

**Table 7 - continued: DIPAC terminal area chum salmon returns by age class, release site, and year of return.**

**Amalga Harbor Chum Terminal Area Return by Age Class**

| Return | Estimated Percentage | | | | | Estimated Numbers | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Age 3 | Age 4 | Age 5 | Age 6 | Total Return | Age 3 | Age 4 | Age 5 | Age 6 | Total Return |
| 1993[3] | - | | | | | - | | | | |
| 1994 | 1.2% | 98.8% | | | 100% | 1,500 | 123,494 | | | 124,994 |
| 1995[4] | 20.4% | 18.3% | 60.1% | 1.1% | 100% | 54,523 | 48,852 | 160,734 | 2,836 | 267,880 |
| 1996 | 1.2% | 90.9% | 6.8% | 1.1% | 100% | 11,443 | 880,127 | 66,201 | 10,676 | 968,448 |
| 1997 | 0.6% | 54.4% | 44.4% | 0.6% | 100% | 3,930 | 377,003 | 307,544 | 4,116 | 692,593 |
| 1998 | 1.8% | 49.1% | 47.6% | 1.5% | 100% | 8,920 | 250,017 | 242,269 | 7,480 | 508,686 |
| 1999 | 8.1% | 77.9% | 13.0% | 0.9% | 100% | 58,736 | 563,522 | 94,181 | 6,860 | 723,298 |
| 2000 | 0.7% | 78.8% | 20.2% | 0.2% | 100% | 9,891 | 1,057,832 | 271,587 | 2,831 | 1,342,141 |
| 2001 | 6.2% | 40.1% | 51.8% | 1.9% | 100% | 33,479 | 216,653 | 279,743 | 10,249 | 540,124 |
| 2002 | 6.7% | 65.6% | 27.5% | 0.2% | 100% | 76,749 | 755,633 | 317,076 | 1,955 | 1,151,413 |
| 2003 | 2.5% | 85.2% | 11.3% | 1.0% | 100% | 44,766 | 1,556,214 | 206,933 | 19,009 | 1,826,922 |
| 2004 | 0.2% | 60.2% | 39.5% | 0.1% | 100% | 2,339 | 634,521 | 415,663 | 1,002 | 1,053,526 |
| 2005 | 29.5% | 1.6% | 64.6% | 4.3% | 100% | 69,373 | 3,709 | 152,209 | 10,216 | 235,507 |
| 2006 | 2.2% | 96.9% | 0.3% | 0.6% | 100% | 36,432 | 1,617,656 | 4,642 | 10,683 | 1,669,413 |
| 2007 | 2.5% | 46.3% | 51.3% | 0.0% | 100% | 20,393 | 383,236 | 424,813 | - | 828,442 |
| 2008 | 1.7% | 78.3% | 18.5% | 1.5% | 100% | 13,885 | 649,542 | 153,123 | 12,806 | 829,357 |
| 2009 | 2.2% | 70.3% | 27.0% | 0.5% | 100% | 23,699 | 749,466 | 288,122 | 5,311 | 1,066,597 |
| 2010 | 4.6% | 61.5% | 33.4% | 0.5% | 100% | 46,425 | 617,549 | 335,189 | 4,860 | 1,004,023 |
| 2011 | 0.7% | 87.7% | 11.1% | 0.4% | 100% | 10,090 | 1,184,488 | 150,223 | 5,893 | 1,350,695 |
| 2012 | 3.9% | 61.9% | 34.1% | 0.0% | 100% | 49,425 | 776,352 | 427,669 | - | 1,253,447 |
| 2013 | 0.6% | 73.8% | 23.8% | 1.9% | 100% | 12,543 | 1,573,125 | 506,666 | 39,541 | 2,131,875 |
| 2014 | 1.4% | 27.8% | 69.8% | 1.0% | 100% | 10,098 | 200,290 | 501,978 | 7,185 | 719,551 |
| 2015 | 1.3% | 68.0% | 29.2% | 1.6% | 100% | 13,405 | 688,960 | 294,295 | 15,931 | 1,012,591 |
| 2016 | 1.6% | 66.3% | 29.5% | 2.6% | 100% | 15,013 | 624,826 | 278,156 | 24,717 | 942,713 |
| 2017 | 2.9% | 65.1% | 31.4% | 0.7% | 100% | 30,897 | 695,966 | 335,383 | 7,237 | 1,069,483 |
| 2018 | 12.6% | 46.1% | 39.9% | 1.4% | 100% | 85,260 | 311,270 | 269,157 | 9,471 | 675,158 |
| 2019 | 4.2% | 75.1% | 17.8% | 2.9% | 100% | 17,800 | 316,200 | 74,900 | 12,200 | 421,100 |
| 2020 | 23.9% | 60.5% | 14.3% | 1.2% | 100% | 48,900 | 123,500 | 29,200 | 2,500 | 204,100 |
| 2021 | 6.0% | 89.2% | 4.8% | 0.0% | 100% | 27,500 | 408,500 | 22,000 | 100 | 458,100 |
| 2022 | 7.4% | 72.5% | 19.8% | 0.3% | 100% | 55,100 | 536,000 | 146,400 | 2,400 | 739,900 |
| Average | 5.5% | 64.4% | 30.1% | 1.1% | 100% | 30,800 | 618,100 | 241,300 | 8,500 | 890,100 |
| Total | | | | | | 892,500 | 17,925,000 | 6,756,000 | 238,100 | 25,812,000 |

1/ Figures do not include an estimate 52 (.001) age-2 fish.
2/ Figures do not include an estimate 114 (.001) age-2 fish.
3/ No data available for age-3 returns from 1990 brood year releases.
4/ Figures do not include an estimated 589 (.002) age-2 fish.
5/ Figures do not include an estimated 119 (.001) age-7 fish.

**Table 8. DIPAC terminal area chum salmon brood year performance by age class and release site.**

**Sheep Creek Hatchery Terminal Area Brood Year Performance by Age Class**

| Brood | No. of Fry | No. Adults Returned to Terminal Area | | | | Total | Total % | % Terminal Run by Age Class | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Released | Age 3 | Age 4 | Age 5 | Age 6 | Return | Return | Age 3 | Age 4 | Age 5 | Age 6 |
| 1984 | 4,291,652 | 115 | 35,645 | 4,804 | 181 | 40,745 | 0.9% | 0.3% | 87.5% | 11.8% | 0.4% |
| 1985 | 7,001,628 | - | 27,243 | 50,981 | 3,001 | 81,225 | 1.2% | 0.0% | 33.5% | 62.8% | 3.7% |
| 1986 | 18,971,280 | 1,545 | 129,260 | 152,505 | 14,950 | 298,260 | 1.6% | 0.5% | 43.3% | 51.1% | 5.0% |
| 1987 | 10,122,835 | 362 | 14,297 | 18,253 | 316 | 33,228 | 0.3% | 1.1% | 43.0% | 54.9% | 1.0% |
| 1988 | 26,697,200 | 3,707 | 139,072 | 56,507 | 1,035 | 200,321 | 0.8% | 1.9% | 69.4% | 28.2% | 0.5% |
| 1989 | 3,073,538 | 1,565 | 5,695 | 6,079 | 947 | 14,286 | 0.5% | 11.0% | 39.9% | 42.6% | 6.6% |
| 1990 | 37,874,036 | 759 | 123,570 | 64,153 | 5,916 | 194,398 | 0.5% | 0.4% | 63.6% | 33.0% | 3.0% |
| 1991 | 27,011,585 | 2,044 | 21,988 | 45,632 | 791 | 70,455 | 0.3% | 2.9% | 31.2% | 64.8% | 1.1% |
| 1992 | 27,002,939 | 15,801 | 440,329 | 105,675 | 756 | 562,561 | 2.1% | 2.8% | 78.3% | 18.8% | 0.1% |
| 1993 | 14,635,458 | 1,206 | 11,501 | 2,615 | 144 | 15,466 | 0.1% | 7.8% | 74.4% | 16.9% | 0.9% |
| 1994 | 44,673,729 | 6,130 | 47,591 | 6,594 | 76 | 60,391 | 0.1% | 10.2% | 78.8% | 10.9% | 0.1% |
| 1995 | 41,240,126 | 1,539 | 39,059 | 11,649 | 841 | 53,088 | 0.1% | 2.9% | 73.6% | 21.9% | 1.6% |
| 1996 | 39,278,455 | 9,058 | 52,584 | 24,311 | - | 85,953 | 0.2% | 10.5% | 61.2% | 28.3% | 0.0% |
| *** No broodstock collection conducted at Sheep Creek since 1996*** | | | | | | | | | | | |

**Macaulay Salmon Hatchery Chum Terminal Area Brood Year Performance by Age Class**

| Brood | No. of Fry | No. Adults Returned to Terminal Area | | | | Total | Total % | % Terminal Run by Age Class | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Released | Age 3 | Age 4 | Age 5 | Age 6 | Return | Return | Age 3 | Age 4 | Age 5 | Age 6 |
| 1987 | 8,226,934 | 28 | 342 | 743 | 91 | 1,203 | 0.0% | 2.3% | 28.4% | 61.7% | 7.5% |
| 1988 | 8,719,086 | 48 | 1,552 | 3,989 | 127 | 5,716 | 0.1% | 0.8% | 27.1% | 69.8% | 2.2% |
| 1989 | 11,586,928 | 31 | 13,745 | 19,343 | 2,027 | 35,146 | 0.3% | 0.1% | 39.1% | 55.0% | 5.8% |
| 1990 | 11,326,584 | 308 | 69,778 | 52,074 | 4,559 | 126,719 | 1.1% | 0.2% | 55.1% | 41.1% | 3.6% |
| 1991 | 11,959,076 | 1,479 | 13,903 | 17,509 | 229 | 33,120 | 0.3% | 4.5% | 42.0% | 52.9% | 0.7% |
| 1992 | 11,891,265 | 7,821 | 190,265 | 46,487 | 2,032 | 246,605 | 2.1% | 3.2% | 77.2% | 18.9% | 0.8% |
| 1993 | 5,869,938 | 555 | 76,882 | 27,098 | 1,153 | 105,688 | 1.8% | 0.5% | 72.7% | 25.6% | 1.1% |
| 1994 | 11,825,076 | 825 | 47,206 | 12,408 | 768 | 61,206 | 0.5% | 1.3% | 77.1% | 20.3% | 1.3% |
| 1995 | 11,474,457 | 1,772 | 87,459 | 51,065 | 1,814 | 142,111 | 1.2% | 1.2% | 61.5% | 35.9% | 1.3% |
| 1996 | 12,166,444 | 3,969 | 83,703 | 40,993 | 615 | 129,280 | 1.1% | 3.1% | 64.7% | 31.7% | 0.5% |
| 1997 | 24,264,239 | 675 | 42,858 | 50,042 | 514 | 94,088 | 0.4% | 0.7% | 45.6% | 53.2% | 0.5% |
| 1998 | 21,991,640 | 1,130 | 45,512 | 8,499 | - | 55,141 | 0.3% | 2.0% | 82.5% | 15.4% | 0.0% |
| 1999 | 27,878,900 | 9,115 | 185,678 | 37,003 | 3,954 | 235,749 | 0.8% | 3.9% | 78.8% | 15.7% | 1.7% |
| 2000 | 27,858,929 | 10,283 | 145,002 | 57,019 | 1,802 | 214,106 | 0.8% | 4.8% | 67.7% | 26.6% | 0.8% |
| 2001 | 28,142,018 | 4,513 | 88,267 | 24,473 | 1,590 | 118,843 | 0.4% | 3.8% | 74.3% | 20.6% | 1.3% |
| 2002 | 34,798,606 | 76,102 | 496,386 | 84,951 | 3,850 | 661,290 | 1.9% | 11.5% | 75.1% | 12.8% | 0.6% |
| 2003 | 34,221,606 | 23,099 | 140,551 | 37,109 | 2,090 | 202,849 | 0.6% | 11.4% | 69.3% | 18.3% | 1.0% |
| 2004 | 35,268,947 | 7,457 | 155,052 | 72,985 | 2,230 | 237,723 | 0.7% | 3.1% | 65.2% | 30.7% | 0.9% |
| 2005 | 34,891,630 | 5,730 | 141,410 | 65,823 | 864 | 213,827 | 0.6% | 2.7% | 66.1% | 30.8% | 0.4% |
| 2006 | 36,712,625 | 2,932 | 60,178 | 12,551 | - | 75,660 | 0.2% | 3.9% | 79.5% | 16.6% | 0.0% |
| 2007 | 35,327,731 | 5,116 | 252,894 | 80,735 | 7,644 | 346,390 | 1.0% | 1.5% | 73.0% | 23.3% | 2.2% |
| 2008 | 35,547,046 | 11,824 | 158,145 | 104,924 | 2,647 | 277,540 | 0.8% | 4.3% | 57.0% | 37.8% | 1.0% |
| 2009 | 23,141,752 | 1,318 | 133,669 | 108,057 | 640 | 243,683 | 1.1% | 0.5% | 54.9% | 44.3% | 0.3% |
| 2010 | 32,596,088 | 5,666 | 65,052 | 43,430 | 3,680 | 117,827 | 0.4% | 4.8% | 55.2% | 36.9% | 3.1% |
| 2011 | 35,971,566 | 8,046 | 238,509 | 72,602 | 5,984 | 325,142 | 0.9% | 2.5% | 73.4% | 22.3% | 1.8% |
| 2012 | 34,505,488 | 7,704 | 147,612 | 74,586 | 2,126 | 232,028 | 0.7% | 3.3% | 63.6% | 32.1% | 0.9% |
| 2013 | 35,434,000 | 5,700 | 298,200 | 142,400 | 5,500 | 451,800 | 1.3% | 1.3% | 66.0% | 31.5% | 1.2% |
| 2014 | 33,391,000 | 3,200 | 53,000 | 16,200 | 400 | 72,800 | 0.2% | 4.4% | 72.8% | 22.2% | 0.6% |
| 2015 | 29,538,000 | 13,000 | 119,300 | 11,700 | - | 144,000 | 0.5% | 9.0% | 82.9% | 8.1% | 0.0% |
| 2016 | 31,909,000 | 8,900 | 106,400 | 17,500 | 500 | 133,300 | 0.4% | 6.7% | 79.8% | 13.1% | 0.4% |
| 2017 | 31,903,000 | 43,800 | 215,900 | 84,100 | | 343,800 | 1.1% | | | | |
| 2018 | 29,869,000 | 3,300 | 146,600 | | | 149,900 | 0.5% | | | | |
| 2019 | 32,628,000 | 19,900 | | | | 19,900 | 0.1% | | | | |

**Table 8 - continued: DIPAC terminal area chum salmon brood year performance by age class and release site.**

**Gastineau Channel SHA Chum Terminal Area Brood Year Performance by Age Class**

| Brood | No. of Fry | No. Adults Returned to Terminal Area | | | | Total | Total % | % Terminal Run by Age Class | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Released | Age 3 | Age 4 | Age 5 | Age 6 | Return | Return | Age 3 | Age 4 | Age 5 | Age 6 |
| 1984 | 4,291,652 | 112 | 29,778 | 3,479 | 131 | 33,500 | 0.8% | 0.3% | 88.9% | 10.4% | 0.4% |
| 1985 | 7,001,628 | - | 19,731 | 36,872 | 1,926 | 58,528 | 0.8% | 0.0% | 33.7% | 63.0% | 3.3% |
| 1986 | 18,971,280 | 1,119 | 93,488 | 99,789 | 10,687 | 205,082 | 1.1% | 0.5% | 45.6% | 48.7% | 5.2% |
| 1987 | 18,349,769 | 353 | 13,112 | 17,171 | 377 | 31,012 | 0.2% | 1.1% | 42.3% | 55.4% | 1.2% |
| 1988 | 35,416,286 | 3,359 | 126,716 | 55,162 | 1,099 | 186,336 | 0.5% | 1.8% | 68.0% | 29.6% | 0.6% |
| 1989 | 14,660,466 | 1,439 | 18,902 | 36,304 | 2,897 | 59,542 | 0.4% | 2.4% | 31.7% | 61.0% | 4.9% |
| 1990 | 49,200,620 | 996 | 218,800 | 110,963 | 10,788 | 341,546 | 0.7% | 0.3% | 64.1% | 32.5% | 3.2% |
| 1991 | 38,970,661 | 4,140 | 34,087 | 65,555 | 1,020 | 104,802 | 0.3% | 4.0% | 32.5% | 62.6% | 1.0% |
| 1992 | 38,894,204 | 22,326 | 653,882 | 152,162 | 6,072 | 834,442 | 2.1% | 2.7% | 78.4% | 18.2% | 0.7% |
| 1993 | 20,505,396 | 1,825 | 88,383 | 41,070 | 1,895 | 133,173 | 0.6% | 1.4% | 66.4% | 30.8% | 1.4% |
| 1994 | 56,498,805 | 6,955 | 301,507 | 43,921 | 1,138 | 353,521 | 0.6% | 2.0% | 85.3% | 12.4% | 0.3% |
| 1995 | 52,714,583 | 9,998 | 237,827 | 120,936 | 2,655 | 371,416 | 0.7% | 2.7% | 64.0% | 32.6% | 0.7% |
| 1996 | 51,444,899 | 22,610 | 308,272 | 65,304 | 615 | 396,801 | 0.8% | 5.7% | 77.7% | 16.5% | 0.2% |
| 1997 | 24,264,239 | 946 | 42,858 | 50,042 | 514 | 94,359 | 0.4% | 1.0% | 45.4% | 53.0% | 0.5% |
| 1998 | 21,991,640 | 1,130 | 45,512 | 8,499 | - | 55,141 | 0.3% | 2.0% | 82.5% | 15.4% | 0.0% |
| 1999 | 27,878,900 | 9,115 | 185,678 | 37,003 | 3,954 | 235,749 | 0.8% | 3.9% | 78.8% | 15.7% | 1.7% |
| 2000 | 27,858,929 | 10,283 | 145,002 | 57,019 | 3,928 | 216,231 | 0.8% | 4.8% | 67.1% | 26.4% | 1.8% |
| 2001 | 28,142,018 | 4,513 | 88,267 | 62,500 | 2,529 | 157,808 | 0.6% | 2.9% | 55.9% | 39.6% | 1.6% |
| 2002 | 34,798,606 | 76,102 | 1,289,496 | 251,683 | 14,006 | 1,631,286 | 4.7% | 4.7% | 79.0% | 15.4% | 0.9% |
| 2003 | 34,221,606 | 61,565 | 567,217 | 177,506 | 2,590 | 808,879 | 2.4% | 7.6% | 70.1% | 21.9% | 0.3% |
| 2004 | 35,268,947 | 32,187 | 595,710 | 193,435 | 7,079 | 828,412 | 2.3% | 3.9% | 71.9% | 23.4% | 0.9% |
| 2005 | 34,891,630 | 13,499 | 436,000 | 240,122 | 2,214 | 691,835 | 2.0% | 2.0% | 63.0% | 34.7% | 0.3% |
| 2006 | 36,712,625 | 9,628 | 243,679 | 36,539 | 340 | 290,186 | 0.8% | 3.3% | 84.0% | 12.6% | 0.1% |
| 2007 | 35,327,731 | 21,405 | 672,126 | 263,169 | 12,532 | 969,231 | 2.7% | 2.2% | 69.3% | 27.2% | 1.3% |
| 2008 | 35,547,046 | 22,630 | 479,133 | 166,030 | 3,287 | 671,080 | 1.9% | 3.4% | 71.4% | 24.7% | 0.5% |
| 2009 | 23,141,752 | 6,411 | 198,138 | 134,044 | 1,697 | 340,290 | 1.5% | 1.9% | 58.2% | 39.4% | 0.5% |
| 2010 | 32,596,088 | 5,666 | 90,203 | 88,392 | 7,257 | 191,517 | 0.6% | 3.0% | 47.1% | 46.2% | 3.8% |
| 2011 | 35,971,566 | 9,429 | 438,723 | 130,436 | 11,343 | 589,932 | 1.6% | 1.6% | 74.4% | 22.1% | 1.9% |
| 2012 | 34,505,488 | 11,935 | 260,971 | 165,936 | 6,088 | 444,930 | 1.3% | 2.7% | 58.7% | 37.3% | 1.4% |
| 2013 | 35,434,000 | 7,600 | 779,000 | 381,300 | 5,800 | 1,173,700 | 3.3% | 0.6% | 66.4% | 32.5% | 0.5% |
| 2014 | 33,391,000 | 12,300 | 107,200 | 17,000 | 400 | 136,900 | 0.4% | 9.0% | 78.3% | 12.4% | 0.3% |
| 2015 | 29,538,000 | 14,700 | 124,200 | 11,700 | - | 150,600 | 0.5% | 9.8% | 82.5% | 7.8% | 0.0% |
| 2016 | 31,909,000 | 9,100 | 106,500 | 17,500 | 600 | 133,700 | 0.4% | 6.8% | 79.7% | 13.1% | 0.4% |
| 2017 | 31,903,000 | 43,900 | 215,900 | 87,200 | | 347,000 | 1.1% | | | | |
| 2018 | 29,869,000 | 3,300 | 147,900 | | | 151,200 | 0.5% | | | | |
| 2019 | 32,628,000 | 20,000 | | | | 20,000 | 0.1% | | | | |

**Table 8 - continued: DIPAC terminal area chum salmon brood year performance by age class and release site.**

**Amalga Harbor Chum Terminal Area Brood Year Performance by Age Class**

| Brood | No. of Fry | No. Adults Returned to Terminal Area | | | | Total | Total % | % Terminal Run by Age Class | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Released | Age 3 | Age 4 | Age 5 | Age 6 | Return | Return | Age 3 | Age 4 | Age 5 | Age 6 |
| 1990[1] | 34,744,923 | - | 123,494 | 160,734 | 10,676 | 294,904 | 0.8% | | 41.9% | 54.5% | 3.6% |
| 1991 | 35,918,054 | 1,500 | 48,852 | 66,201 | 4,116 | 120,668 | 0.3% | 1.2% | 40.5% | 54.9% | 3.4% |
| 1992 | 36,147,451 | 54,523 | 880,127 | 307,544 | 7,480 | 1,249,675 | 3.5% | 4.4% | 70.4% | 24.6% | 0.6% |
| 1993 | 34,817,531 | 11,443 | 377,003 | 242,269 | 6,860 | 637,575 | 1.8% | 1.8% | 59.1% | 38.0% | 1.1% |
| 1994 | 34,472,077 | 3,930 | 250,017 | 94,181 | 2,831 | 350,960 | 1.0% | 1.1% | 71.2% | 26.8% | 0.8% |
| 1995 | 34,979,646 | 8,920 | 563,522 | 271,587 | 10,249 | 854,278 | 2.4% | 1.0% | 66.0% | 31.8% | 1.2% |
| 1996 | 34,535,728 | 58,736 | 1,057,832 | 279,743 | 1,955 | 1,398,265 | 4.0% | 4.2% | 75.7% | 20.0% | 0.1% |
| 1997 | 49,155,073 | 9,891 | 216,653 | 317,076 | 19,009 | 562,630 | 1.1% | 1.8% | 38.5% | 56.4% | 3.4% |
| 1998 | 50,783,014 | 33,479 | 755,633 | 206,933 | 1,002 | 997,046 | 2.0% | 3.4% | 75.8% | 20.8% | 0.1% |
| 1999 | 53,218,963 | 76,749 | 1,556,214 | 415,663 | 10,216 | 2,058,842 | 3.9% | 3.7% | 75.6% | 20.2% | 0.5% |
| 2000 | 46,028,136 | 44,766 | 634,521 | 152,209 | 10,683 | 842,180 | 1.8% | 5.3% | 75.3% | 18.1% | 1.3% |
| 2001 | 17,452,832 | 2,339 | 3,709 | 4,642 | - | 10,689 | 0.1% | 21.9% | 34.7% | 43.4% | 0.0% |
| 2002 | 34,878,279 | 69,373 | 1,617,656 | 424,813 | 12,806 | 2,124,648 | 6.1% | 3.3% | 76.1% | 20.0% | 0.6% |
| 2003 | 36,042,133 | 36,432 | 383,236 | 153,123 | 5,311 | 578,102 | 1.6% | 6.3% | 66.3% | 26.5% | 0.9% |
| 2004 | 36,791,145 | 20,393 | 649,542 | 288,122 | 4,860 | 962,917 | 2.6% | 2.1% | 67.5% | 29.9% | 0.5% |
| 2005 | 34,644,948 | 13,885 | 749,466 | 335,189 | 5,893 | 1,104,433 | 3.2% | 1.3% | 67.9% | 30.3% | 0.5% |
| 2006 | 48,098,292 | 23,699 | 617,549 | 150,223 | - | 791,471 | 1.6% | 3.0% | 78.0% | 19.0% | 0.0% |
| 2007 | 45,334,725 | 46,425 | 1,184,488 | 427,669 | 39,541 | 1,698,123 | 3.7% | 2.7% | 69.8% | 25.2% | 2.3% |
| 2008 | 43,970,489 | 10,090 | 776,352 | 506,666 | 7,185 | 1,300,294 | 3.0% | 0.8% | 59.7% | 39.0% | 0.6% |
| 2009 | 44,104,194 | 49,425 | 1,573,125 | 501,978 | 15,931 | 2,140,460 | 4.9% | 2.3% | 73.5% | 23.5% | 0.7% |
| 2010 | 43,425,771 | 12,543 | 200,290 | 294,295 | 24,717 | 531,846 | 1.2% | 2.4% | 37.7% | 55.3% | 4.6% |
| 2011 | 45,027,980 | 10,098 | 688,960 | 278,156 | 7,237 | 984,451 | 2.2% | 1.0% | 70.0% | 28.3% | 0.7% |
| 2012 | 41,961,294 | 13,405 | 624,826 | 335,383 | 9,471 | 983,084 | 2.3% | 1.4% | 63.6% | 34.1% | 1.0% |
| 2013 | 42,391,000 | 15,000 | 696,000 | 269,200 | 12,200 | 992,400 | 2.3% | 1.5% | 70.1% | 27.1% | 1.2% |
| 2014 | 39,562,000 | 30,900 | 311,300 | 74,900 | 2,500 | 419,600 | 1.1% | 7.4% | 74.2% | 17.8% | 0.6% |
| 2015 | 31,617,000 | 85,300 | 316,200 | 29,200 | 100 | 430,800 | 1.4% | 19.8% | 73.4% | 6.8% | 0.0% |
| 2016 | 33,655,000 | 17,800 | 123,500 | 22,000 | 2,400 | 165,700 | 0.5% | 10.7% | 74.6% | 13.3% | 1.4% |
| 2017 | 44,429,000 | 48,900 | 408,500 | 146,400 | | 603,800 | 1.4% | | | | |
| 2018 | 42,069,000 | 27,500 | 536,000 | | | 563,500 | 1.3% | | | | |
| 2019 | 43,875,000 | 55,100 | | | | 55,100 | 0.1% | | | | |

1/ No data available for age-3 returns from brood year 1990 Amalga Harbor releases.

**Table 9: DIPAC coho salmon brood year performance, by release site.**

**GASTINEAU CHANNEL TOTALS (MC=Montana Cr., ST=Steep Cr., SN=Snettisham, SH=Sheep Cr., MH=Macaulay, UAS=various hybrid stocks, FC= Fish Creek/Taku River)**

| Brood | Egg | Number | Common Property Catch | | | | Cost | Brood | Total | Marine |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Source | Released | Troll | Seine | Gillnet | Sport | Recovery | Stock[1] | Return[2] | Survival |
| 1985 | MC | 61,342 | 239 | 9 | 464 | 11 | 0 | 678 | 1,401 | 2.3% |
| 1986 | ST+SN | 168,528 | 7,383 | 138 | 837 | 1,170 | 0 | 3,873 | 13,401 | 8.0% |
| 1987 | MC+SN | 81,806 | 3,635 | 71 | 734 | 210 | 0 | 1,132 | 5,782 | 7.1% |
| 1988 | SH | 1,079,488 | 34,086 | 1,082 | 48,119 | 18,092 | 109,834 | 924 | 212,137 | 19.7% |
| 1989 | MH | 1,013,106 | 40,524 | 3,244 | 50,990 | 15,130 | 70,733 | 767 | 181,388 | 17.9% |
| 1990 | MH | 975,247 | 40,172 | 687 | 11,855 | 11,463 | 34,539 | 687 | 99,403 | 10.2% |
| 1991 | MH | 1,040,149 | 70,757 | 10,875 | 29,584 | 14,486 | 50,743 | 1,265 | 177,710 | 17.1% |
| 1992 | MH | 943,853 | 13,790 | 104 | 16,844 | 3,303 | 19,988 | 1,568 | 55,597 | 5.9% |
| 1993 | MH | 1,033,843 | 24,275 | 838 | 9,751 | 6,610 | 23,953 | 1,267 | 66,694 | 6.5% |
| 1994 | MH | 858,908 | 7,317 | 830 | 508 | 6,553 | 29,046 | 1,118 | 45,372 | 5.3% |
| 1995 | MH | 1,001,453 | 26,750 | 1,703 | 6,003 | 15,092 | 47,458 | 1,241 | 98,247 | 9.8% |
| 1996 | MH | 823,659 | 38,800 | 3,407 | 5,459 | 11,925 | 58,270 | 2,683 | 120,544 | 14.6% |
| 1997 | MH+UAS | 837,873 | 24,586 | 1,935 | 3,194 | 12,503 | 48,095 | 2,713 | 93,026 | 11.1% |
| 1998 | MH+UAS | 896,987 | 24,896 | 1,191 | 2,831 | 6,737 | 48,744 | 2,571 | 86,970 | 9.7% |
| 1999 | MH | 770,656 | 13,917 | 3,854 | 3,592 | 15,874 | 69,815 | 846 | 107,897 | 14.0% |
| 2000 | MH | 813,225 | 11,188 | 2,887 | 3,608 | 14,869 | 48,914 | 591 | 82,056 | 10.1% |
| 2001 | MH | 783,928 | 18,130 | 2,638 | 3,473 | 6,785 | 33,930 | 829 | 65,785 | 8.4% |
| 2002 | MH | 567,282 | 11,437 | 1,643 | 639 | 4,179 | 21,284 | 646 | 39,827 | 7.0% |
| 2003 | MH | 499,616 | 8,182 | 3 | 2,455 | 2,762 | 13,802 | 589 | 27,793 | 5.6% |
| 2004 | MH | 595,131 | 7,463 | 397 | 724 | 2,030 | 12,623 | 463 | 23,700 | 4.0% |
| 2005 | MH | 565,964 | 11,221 | 0 | 2,829 | 4,329 | 25,520 | 17 | 43,916 | 7.8% |
| 2006 | MH | 736,511 | 5,607 | 491 | 230 | 4,052 | 23,043 | 97 | 33,520 | 4.6% |
| 2007 | MH | 559,429 | 7,369 | 110 | 6,752 | 4,131 | 23,721 | 1,655 | 43,738 | 7.8% |
| 2008 | FC | 328,000 | 10,351 | 2,143 | 4,059 | 6,813 | 7,754 | 324 | 31,444 | 9.6% |
| 2009 | FC | 349,000 | 3,605 | 15 | 712 | 2,327 | 5,292 | 679 | 12,630 | 3.6% |
| 2010 | FC | 306,700 | 11,971 | 2,017 | 8,402 | 3,300 | 8,965 | 675 | 35,330 | 11.5% |
| 2011 | MH | 524,900 | 4,305 | 0 | 4,839 | 3,125 | 11,769 | 758 | 24,796 | 4.7% |
| 2012 | MH | 1,181,500 | 17,282 | 794 | 6,885 | 14,120 | 32,993 | 962 | 73,036 | 6.2% |
| 2013 | MH | 1,013,000 | 5,996 | 0 | 11,856 | 7,073 | 10,244 | 987 | 36,156 | 3.6% |
| 2014 | MH | 1,054,700 | 5,031 | 908 | 1,663 | 3,283 | 2,409 | 797 | 14,090 | 1.3% |
| 2015 | MH | 1,018,790 | 12,947 | 134 | 16,603 | 17,054 | 16,184 | 716 | 63,637 | 6.2% |
| 2016 | MH | 1,230,000 | 9,200 | 0 | 17,300 | 12,500 | 12,400 | 620 | 52,000 | 4.2% |
| 2017 | MH | 1,068,000 | 2,700 | 0 | 8,900 | 9,300 | 13,900 | 750 | 35,600 | 3.3% |
| 2018 | MH | 998,300 | 5,500 | 160 | 11,700 | 9,300 | 15,500 | 700 | 42,900 | 4.3% |
| 2019 | MH | 298,400 | 0 | 0 | 940 | 840 | 410 | 730 | 2,900 | 1.0% |
| Total | | 26,079,000 | 540,600 | 44,300 | 305,300 | 271,300 | 951,900 | 36,900 | 2,150,000 | 7.8% |

**Table 9 - continued: MISCELLANEOUS RELEASES (MH=Macaulay, SH=Sheep Cr., AC=Auke Cr., TR=Taku River, PR=Pavlof River, MP=Mendenhall Ponds)**

| Brood Year | Egg Source/ Hatchery/ Release Site | Number Released | Common Property Catch | | | | Cost Recovery | Brood Stock | Total Return[2] | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Troll | Seine | Gillnet | Sport | | | | |
| 1988 | SH/MH/MP | 100,763 | 1,596 | 210 | 867 | 2,412 | 0 | 0 | 5,085 | 5.0% |
| 1992 | TR/SH/TR | 48,574 | 190 | 0 | 272 | 0 | 0 | 0 | 462 | 1.0% |
| 1993 | TR/SH/TR | 126,245 | 522 | 0 | 468 | 5 | 0 | 0 | 995 | 0.8% |
| 1993 | PR/AC/SH | 9,874 | | | | | | | 0 | 0.0% |
| 1994 | PR/SH/SH | 7,229 | 3 | 0 | 1 | 0 | 0 | 0 | 4 | 0.1% |
| 1997 | (*)/SH/SH[3] | 54,251 | 1,172 | 70 | 213 | 115 | | 281 | 1,850 | 3.4% |
| Total | | 346,936 | 3,483 | 280 | 1,821 | 2,532 | 0 | 281 | 8,396 | |

1/ Although all broodstock return to Macaulay Hatchery, a portion is allocated to each release site in proportion to common property catches estimated from CWT recoveries.

2/ Returns do not include jacks.

3/ The release of BY97 coho from Sheep Creek Hatchery in 1999 was conducted under contract with the University of Alaska, Southeast for a genetics outbreeding depression experiment. Egg sources for this release include: Macaulay Hatchery, Hidden Falls Hatchery and Whitman Lake Hatchery.

**Table 10. Sheep Creek/Thane Chinook salmon production summary, brood years 1984 - 2019.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns[1] | Estimated Commercial Harvest[2] | Estimated Sport Harvest[2] | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1984 | Snettisham & Crystal Lake/ (Andrew Cr.) | Snettisham Hatchery | 30,280 | (1988) age 4 | 2 | 49 | 42 | 93 | |
| | | | | (1989) age 5 | 37 | 151 | 87 | 275 | |
| | | | | (1990) age 6 | 35 | 45 | 10 | 90 | |
| | | | | (1991) age 7 | 1 | 2 | 0 | 3 | |
| | | | | **Total Return** | **75** | **247** | **139** | **461** | **1.52%** |
| 1985 | Snettisham & Crystal Lake/ (Andrew Cr.) | Snettisham Hatchery | 31,112 | (1987) minis | 0 | 0 | 0 | 0 | |
| | | | | (1988) jacks | 1 | 6 | 0 | 7 | |
| | | | | (1989) age 4 | 12 | 29 | 10 | 51 | |
| | | | | (1990) age 5 | 45 | 164 | 94 | 303 | |
| | | | | (1991) age 6 | 31 | 66 | 5 | 102 | |
| | | | | (1992) age 7 | 0 | 1 | 0 | 1 | |
| | | | | **Total Return** | **89** | **266** | **109** | **464** | **1.49%** |
| 1986 | Snettisham & Crystal Lake/ (Andrew Cr.) | Snettisham Hatchery | 31,556 | (1988) minis | 0 | 0 | 0 | 0 | |
| | | | | (1989) jacks | 22 | 12 | 2 | 36 | |
| | | | | (1990) age 4 | 22 | 104 | 1 | 127 | |
| | | | | (1991) age 5 | 82 | 93 | 77 | 252 | |
| | | | | (1992) age 6 | 2 | 84 | 36 | 122 | |
| | | | | (1993) age 7 | 2 | 0 | 0 | 2 | |
| | | | | **Total Return** | **130** | **293** | **116** | **539** | **1.71%** |
| 1987 | Snettisham & Crystal Lake/ (Andrew Cr.) | Snettisham Hatchery | 120,000 | (1989) minis | 0 | 0 | 0 | 0 | |
| | | | | (1990) jacks | 89 | 11 | 0 | 100 | |
| | | | | (1991) age 4 | 132 | 59 | 73 | 264 | |
| | | | | (1992) age 5 | 136 | 343 | 141 | 620 | |
| | | | | (1993) age 6 | 218 | 591 | 126 | 935 | |
| | | | | (1994) age 7 | 21 | 17 | 0 | 38 | |
| | | | | **Total Return** | **596** | **1,021** | **340** | **1,957** | **1.63%** |
| 1988 | Snettisham & Crystal Lake/ (Andrew Cr.) | Snettisham Hatchery | 122,155 | (1990) minis | 0 | 0 | 0 | 0 | |
| | | | | (1991) jacks | 0 | 6 | 0 | 6 | |
| | | | | (1992) age 4 | 1 | 50 | 0 | 51 | |
| | | | | (1993) age 5 | 176 | 429 | 278 | 883 | |
| | | | | (1994) age 6 | 241 | 367 | 174 | 782 | |
| | | | | (1995) age 7 | 27 | 51 | 0 | 78 | |
| | | | | **Total Return** | **445** | **903** | **452** | **1,800** | **1.47%** |
| 1988 | Snettisham & Crystal Lake/ (Andrew Cr.) (released @ age 2.0) | Snettisham Hatchery | 100,543 | (1991) minis | 657 | 0 | 0 | 657 | |
| | | | | (1992) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1993) age 4 | 4 | 1 | 0 | 5 | |
| | | | | (1994) age 5 | 18 | 24 | 2 | 44 | |
| | | | | (1995) age 6 | 56 | 126 | 0 | 182 | |
| | | | | (1996) age 7 | 43 | 190 | 66 | 299 | |
| | | | | **Total Return** | **778** | **341** | **68** | **1,187** | **1.18%** |
| 1993 | L. Port Walter/ (King Salmon R.) | Macaulay Hatchery | 28,458 | (1995) minis | 0 | 0 | 0 | 0 | |
| | | | | (1996) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1997) age 4 | 0 | 0 | 0 | 0 | |
| | | | | (1998) age 5 | 2 | 4 | 19 | 25 | |
| | | | | (1999) age 6 | 3 | 0 | 1 | 4 | |
| | | | | (2000) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **5** | **4** | **20** | **29** | **0.10%** |
| 1994 | L. Port Walter/ (King Salmon R.) | Macaulay Hatchery | 35,423 | (1996) minis | 0 | 0 | 0 | 0 | |
| | | | | (1997) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1998) age 4 | 19 | 1 | 20 | 40 | |
| | | | | (1999) age 5 | 4 | 6 | 93 | 103 | |
| | | | | (2000) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2001) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **23** | **7** | **113** | **143** | **0.40%** |

**Table 10. continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns[1] | Estimated Commercial Harvest[2] | Estimated Sport Harvest[2] | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1995 | L. Port Walter/ (King Salmon R.) | Macaulay Hatchery | 44,664 | (1997) minis | 0 | 0 | 0 | 0 | |
| | | | | (1998) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1999) age 4 | 30 | 35 | 20 | 85 | |
| | | | | (2000) age 5 | 0 | 0 | 0 | 0 | |
| | | | | (2001) age 6 | 0 | 0 | 14 | 14 | |
| | | | | (2002) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **30** | **35** | **34** | **99** | **0.22%** |
| 1996 - 2001 | | No Broodstock Collected | | | | No Smolt Released | | | |
| 2002 | Macaulay/Andrew Cr. | Macaulay Hatchery | 70,525 | (2004) minis | 0 | 0 | 0 | 0 | |
| | | | | (2005) jacks | 0 | 12 | 0 | 12 | |
| | | | | (2006) age 4 | 24 | 45 | 9 | 78 | |
| | | | | (2007) age 5 | 0 | 11 | 0 | 11 | |
| | | | | (2008) age 6 | 58 | 0 | 0 | 58 | |
| | | | | (2009) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **82** | **68** | **9** | **159** | **0.23%** |
| 2003 | Macaulay/Andrew Cr. | Macaulay Hatchery | 101,968 | (2005) minis | 0 | 0 | 0 | 0 | |
| | | | | (2006) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2007) age 4 | 0 | 0 | 0 | 0 | |
| | | | | (2008) age 5 | 0 | 0 | 3 | 3 | |
| | | | | (2009) age 6 | 159 | 109 | 93 | 361 | |
| | | | | (2010) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **159** | **109** | **96** | **364** | **0.36%** |
| 2004 | Macaulay/Andrew Cr. | Macaulay Hatchery | 104,812 | (2006) minis | 0 | 0 | 0 | 0 | |
| | | | | (2007) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2008) age 4 | 0 | 0 | 0 | 0 | |
| | | | | (2009) age 5 | 624 | 85 | 189 | 898 | |
| | | | | (2010) age 6 | 73 | 51 | 54 | 178 | |
| | | | | (2011) age 7 | 75 | 49 | 45 | 169 | |
| | | | | **Total Return** | **772** | **185** | **288** | **1,245** | **1.19%** |
| 2005 | Macaulay/Andrew Cr. | Macaulay Hatchery | 101,093 | (2007) minis | 0 | 0 | 0 | 0 | |
| | | | | (2008) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2009) age 4 | 64 | 21 | 95 | 180 | |
| | | | | (2010) age 5 | 265 | 315 | 197 | 777 | |
| | | | | (2011) age 6 | 68 | 49 | 45 | 162 | |
| | | | | (2012) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **397** | **385** | **337** | **1,119** | **1.11%** |
| 2006 - 2013 | | No Broodstock Collected | | | | No Smolt Released | | | |
| 2014 | Macaulay/Andrew Cr. | Macaulay Hatchery | 124,100 | (2016) minis | 0 | 0 | 0 | 0 | |
| | | | | (2017) jacks | 63 | 0 | 6 | 69 | |
| | | | | (2018) age 4 | 39 | 109 | 0 | 148 | |
| | | | | (2019) age 5 | 640 | 93 | 163 | 896 | |
| | | | | (2020) age 6 | 50 | 0 | 11 | 60 | |
| | | | | (2021) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **790** | **200** | **180** | **1,200** | **0.97%** |
| 2015 | Macaulay/Andrew Cr. | Macaulay Hatchery | 150,100 | (2017) minis | 0 | 0 | 0 | 0 | |
| | | | | (2018) jacks | 10 | 54 | 0 | 63 | |
| | | | | (2019) age 4 | 306 | 55 | 48 | 409 | |
| | | | | (2020) age 5 | 655 | 329 | 641 | 1,625 | |
| | | | | (2021) age 6 | 32 | 0 | 21 | 53 | |
| | | | | (2022) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,000** | **440** | **710** | **2,150** | **1.43%** |
| 2016 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |

**Table 10. continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns[1] | Estimated Commercial Harvest[2] | Estimated Sport Harvest[2] | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2017 | Macaulay/Andrew Cr. | | 182,800 | (2019) minis | 0 | 0 | 0 | 0 | |
| | | | | (2020) jacks | 7 | 0 | 23 | 30 | |
| | | | | (2021) age 4 | 128 | 136 | 185 | 449 | |
| | | | | (2022) age 5 | 123 | 307 | 619 | 1,049 | |
| | | | | (2023) age 6 | | | | 0 | |
| | | | | (2024) age 7 | | | | 0 | |
| | | | | **Total Return** | **260** | **440** | **830** | **1,530** | **0.84%** |
| 2018 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| 2019 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| '85-'05,'14 - '15 | | Macaulay Hatchery & Snettisham Hatchery | 1,196,800 | minis | 660 | 0 | 0 | 660 | |
| | | | | jacks | 180 | 100 | 10 | 290 | |
| | | | | age 4 | 650 | 510 | 280 | 1,440 | |
| | | | | age 5 | 2,650 | 1,900 | 1,900 | 6,450 | |
| | | | | age 6 | 990 | 1,440 | 580 | 3,010 | |
| | | | | age 7 | 170 | 310 | 110 | 590 | |
| | | | | **BY84-BY05, BY14-15 Total** | **5,300** | **4,300** | **2,900** | **12,440** | **1.04%** |
| | | | | **% of Total** | **42.6%** | **34.6%** | **23.3%** | **100.0%** | |

1/ Except in 1988, all adults generally return to Macaulay Salmon Hatchery from the Sheep Creek saltwater rearing site.
2/ Contributions based on tag recoveries.

**Table 11: Macaulay Salmon Hatchery Chinook salmon production summary, brood years 1987 - 2019.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1987 | Snettisham + Crystal L./ Andrew Creek | Snettisham Hatchery | 11,000 | (1989) minis | 0 | 0 | 5 | 5 | |
| | | | | (1990) jacks | 5 | 0 | 0 | 5 | |
| | | | | (1991) age 4 | 5 | 5 | 5 | 15 | |
| | | | | (1992) age 5 | 20 | 15 | 15 | 50 | |
| | | | | (1993) age 6 | 38 | 17 | 8 | 63 | |
| | | | | (1994) age 7 | 0 | 2 | 12 | 14 | |
| | | | | **Total Return** | **68** | **39** | **45** | **152** | **1.38%** |
| 1988 | Snettisham + Crystal L./ Andrew Creek | Snettisham Hatchery | 101,462 | (1990) minis | 6 | 0 | 0 | 6 | |
| | | | | (1991) jacks | 0 | 7 | 0 | 7 | |
| | | | | (1992) age 4 | 10 | 8 | 0 | 18 | |
| | | | | (1993) age 5 | 57 | 57 | 67 | 181 | |
| | | | | (1994) age 6 | 314 | 14 | 68 | 396 | |
| | | | | (1995) age 7 | 21 | 6 | 0 | 27 | |
| | | | | **Total Return** | **408** | **92** | **135** | **635** | **0.63%** |
| 1989 | Macaulay + Snettisham/ Andrew Creek | Macaulay Hatchery | 43,595 | (1991) minis | 91 | 0 | 0 | 91 | |
| | | | | (1992) jacks | 13 | 0 | 0 | 13 | |
| | | | | (1993) age 4 | 106 | 99 | 0 | 205 | |
| | | | | (1994) age 5 | 295 | 22 | 119 | 436 | |
| | | | | (1995) age 6 | 79 | 18 | 10 | 107 | |
| | | | | (1996) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **584** | **139** | **129** | **852** | **1.95%** |
| 1990 | Macaulay + Crystal L./ Andrew Creek | Macaulay Hatchery | 191,765 | (1992) minis | 6 | 0 | 0 | 6 | |
| | | | | (1993) jacks | 153 | 105 | 0 | 258 | |
| | | | | (1994) age 4 | 487 | 455 | 109 | 1,051 | |
| | | | | (1995) age 5 | 1,437 | 462 | 453 | 2,352 | |
| | | | | (1996) age 6 | 250 | 59 | 53 | 362 | |
| | | | | (1997) age 7 | 0 | 0 | 1 | 1 | |
| | | | | (1998) age 8 | 13 | 0 | 0 | 13 | |
| | | | | **Total Return** | **2,346** | **1,081** | **616** | **4,043** | **2.11%** |
| 1991 | Macaulay + Crystal L./ Andrew Creek | Macaulay Hatchery | 207,536 | (1993) minis | 0 | 0 | 0 | 0 | |
| | | | | (1994) jacks | 402 | 160 | 0 | 562 | |
| | | | | (1995) age 4 | 610 | 307 | 189 | 1,106 | |
| | | | | (1996) age 5 | 617 | 1,086 | 867 | 2,570 | |
| | | | | (1997) age 6 | 687 | 230 | 418 | 1,335 | |
| | | | | (1998) age 7 | 14 | 9 | 0 | 23 | |
| | | | | **Total Return** | **2,330** | **1,792** | **1,474** | **5,596** | **2.70%** |
| 1992 | Macaulay + Crystal L./ Andrew Creek | Macaulay Hatchery | 241,366 | (1994) minis | 12 | 0 | 0 | 12 | |
| | | | | (1995) jacks | 69 | 56 | 54 | 179 | |
| | | | | (1996) age 4 | 69 | 45 | 29 | 143 | |
| | | | | (1997) age 5 | 467 | 238 | 231 | 936 | |
| | | | | (1998) age 6 | 208 | 69 | 549 | 826 | |
| | | | | (1999) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **825** | **408** | **863** | **2,096** | **0.87%** |
| 1993 | Little Port Walter/ King Salmon River | Macaulay Hatchery | 158,681 | (1995) minis | 0 | 0 | 0 | 0 | |
| | | | | (1996) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1997) age 4 | 32 | 22 | 48 | 102 | |
| | | | | (1998) age 5 | 28 | 9 | 100 | 137 | |
| | | | | (1999) age 6 | 23 | 0 | 21 | 44 | |
| | | | | (2000) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **83** | **31** | **169** | **283** | **0.18%** |
| 1994 | Little Port Walter/ King Salmon River | Macaulay Hatchery | 64,360 | (1996) minis | 0 | 0 | 0 | 0 | |
| | | | | (1997) jacks | 18 | 0 | 0 | 18 | |
| | | | | (1998) age 4 | 9 | 6 | 35 | 50 | |
| | | | | (1999) age 5 | 20 | 2 | 47 | 69 | |
| | | | | (2000) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2001) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **47** | **8** | **82** | **137** | **0.21%** |
| 1995 | Little Port Walter/ King Salmon River | Macaulay Hatchery | 171,908 | (1997) minis | 9 | 0 | 0 | 9 | |
| | | | | (1998) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1999) age 4 | 12 | 68 | 12 | 92 | |
| | | | | (2000) age 5 | 23 | 36 | 118 | 177 | |
| | | | | (2001) age 6 | 13 | 0 | 4 | 17 | |
| | | | | (2002) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **57** | **104** | **134** | **295** | **0.17%** |

**Table 11: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1996 | Little Port Walter/ King Salmon River + AC [1] | Macaulay Hatchery | 212,285 | (1998) minis | 0 | 0 | 0 | 0 | |
| | | | | (1999) jacks | 8 | 0 | 76 | 84 | |
| | | | | (2000) age 4 | 53 | 36 | 133 | 222 | |
| | | | | (2001) age 5 | 170 | 81 | 222 | 473 | |
| | | | | (2002) age 6 | 45 | 33 | 12 | 90 | |
| | | | | (2003) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **276** | **150** | **443** | **869** | **0.41%** |
| 1997 | Macaulay/Andrew Cr. | Macaulay Hatchery | 221,443 | (1999) minis | 164 | 0 | 0 | 164 | |
| | | | | (2000) jacks | 47 | 147 | 0 | 194 | |
| | | | | (2001) age 4 | 306 | 75 | 127 | 508 | |
| | | | | (2002) age 5 | 2,618 | 220 | 1,152 | 3,990 | |
| | | | | (2003) age 6 | 514 | 92 | 649 | 1,255 | |
| | | | | (2004) age 7 | 23 | 7 | 10 | 40 | |
| | | | | **Total Return** | **3,672** | **541** | **1,938** | **6,151** | **2.78%** |
| 1998 | Macaulay/Andrew Cr. | Macaulay Hatchery | 208,586 | (2000) minis | 93 | 0 | 0 | 93 | |
| | | | | (2001) jacks | 42 | 120 | 13 | 175 | |
| | | | | (2002) age 4 | 299 | 162 | 105 | 566 | |
| | | | | (2003) age 5 | 647 | 128 | 1,088 | 1,863 | |
| | | | | (2004) age 6 | 467 | 201 | 204 | 872 | |
| | | | | (2005) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,548** | **611** | **1,410** | **3,569** | **1.71%** |
| 1999 | Macaulay/Andrew Cr. | Macaulay Hatchery | 213,232 | (2001) minis | 367 | 0 | 0 | 367 | |
| | | | | (2002) jacks | 183 | 0 | 51 | 234 | |
| | | | | (2003) age 4 | 492 | 310 | 806 | 1,608 | |
| | | | | (2004) age 5 | 1,768 | 482 | 1635 | 3,885 | |
| | | | | (2005) age 6 | 461 | 396 | 543 | 1,400 | |
| | | | | (2006) age 7 | 24 | 0 | 9 | 33 | |
| | | | | **Total Return** | **3,295** | **1,188** | **3,044** | **7,527** | **3.53%** |
| 2000 | Macaulay/Andrew Cr. | Macaulay Hatchery | 231,276 | (2002) minis | 0 | 0 | 0 | 0 | |
| | | | | (2003) jacks | 17 | 0 | 19 | 36 | |
| | | | | (2004) age 4 | 611 | 315 | 352 | 1,278 | |
| | | | | (2005) age 5 | 679 | 608 | 461 | 1,748 | |
| | | | | (2006) age 6 | 213 | 146 | 163 | 522 | |
| | | | | (2007) age 7 | 0 | 11 | 0 | 11 | |
| | | | | **Total Return** | **1,520** | **1,080** | **995** | **3,595** | **1.55%** |
| 2001 | Macaulay/Andrew Cr. | Macaulay Hatchery | 120,891 | (2003) minis | 12 | 0 | | 12 | |
| | | | | (2004) jacks | 14 | 0 | 6 | 20 | |
| | | | | (2005) age 4 | 129 | 88 | 95 | 312 | |
| | | | | (2006) age 5 | 236 | 267 | 157 | 660 | |
| | | | | (2007) age 6 | 0 | 17 | 0 | 17 | |
| | | | | (2008) age 7 | 0 | 7 | 0 | 7 | |
| | | | | **Total Return** | **391** | **379** | **258** | **1,028** | **0.85%** |
| 2002 | Macaulay/Andrew Cr. | Macaulay Hatchery | 177,423 | (2004) minis | 172 | 0 | 0 | 172 | |
| | | | | (2005) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2006) age 4 | 0 | 28 | 107 | 135 | |
| | | | | (2007) age 5 | 424 | 13 | 340 | 777 | |
| | | | | (2008) age 6 | 163 | 106 | 87 | 356 | |
| | | | | (2009) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **759** | **147** | **534** | **1,440** | **0.81%** |
| 2003 | Macaulay/Andrew Cr. | Macaulay Hatchery | 222,218 | (2005) minis | 0 | 0 | 0 | 0 | |
| | | | | (2006) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2007) age 4 | 0 | 267 | 78 | 345 | |
| | | | | (2008) age 5 | 725 | 805 | 776 | 2,306 | |
| | | | | (2009) age 6 | 301 | 164 | | 465 | |
| | | | | (2010) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,026** | **1,236** | **854** | **3,116** | **1.40%** |
| 2004 | Macaulay/Andrew Cr. | Macaulay Hatchery | 211,248 | (2006) minis | 0 | 0 | 0 | 0 | |
| | | | | (2007) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2008) age 4 | 112 | 99 | 38 | 249 | |
| | | | | (2009) age 5 | 310 | 165 | 191 | 666 | |
| | | | | (2010) age 6 | 203 | 30 | 224 | 457 | |
| | | | | (2011) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **625** | **294** | **453** | **1,372** | **0.65%** |

**Table 11: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2005 | Macaulay/Andrew Cr. | Macaulay Hatchery | 147,723 | (2007) minis | 0 | 0 | 0 | 0 | |
| | | | | (2008) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2009) age 4 | 45 | 19 | 13 | 77 | |
| | | | | (2010) age 5 | 493 | 158 | 491 | 1,142 | |
| | | | | (2011) age 6 | 153 | 96 | 121 | 370 | |
| | | | | (2012) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **691** | **273** | **625** | **1,589** | **1.08%** |
| 2006 | Macaulay/Andrew Cr. | Macaulay Hatchery | 147,062 | (2008) minis | 0 | 0 | 0 | 0 | |
| | | | | (2009) jacks | 0 | 0 | 22 | 22 | |
| | | | | (2010) age 4 | 22 | 3 | 16 | 41 | |
| | | | | (2011) age 5 | 146 | 66 | 132 | 344 | |
| | | | | (2012) age 6 | 19 | 0 | 13 | 32 | |
| | | | | (2013) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **187** | **69** | **183** | **439** | **0.30%** |
| 2007 | Macaulay/Andrew Cr. | Macaulay Hatchery | 216,639 | (2009) minis | 0 | 0 | 0 | 0 | |
| | | | | (2010) jacks | 0 | 10 | 0 | 10 | |
| | | | | (2011) age 4 | 248 | 201 | 224 | 673 | |
| | | | | (2012) age 5 | 490 | 183 | 397 | 1,070 | |
| | | | | (2013) age 6 | 130 | 66 | 116 | 312 | |
| | | | | (2014) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **868** | **460** | **737** | **2,065** | **0.95%** |
| 2008 | Macaulay/Andrew Cr. | Macaulay Hatchery | 223,000 | (2010) minis | 0 | 0 | 0 | 0 | |
| | | | | (2011) jacks | 0 | 63 | 0 | 63 | |
| | | | | (2012) age 4 | 224 | 137 | 150 | 511 | |
| | | | | (2013) age 5 | 387 | 237 | 502 | 1,126 | |
| | | | | (2014) age 6 | 109 | 21 | 99 | 229 | |
| | | | | (2015) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **720** | **458** | **751** | **1,929** | **0.87%** |
| 2009 | Macaulay/Andrew Cr. | Macaulay Hatchery | 193,931 | (2011) minis | 0 | 0 | 0 | 0 | |
| | | | | (2012) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2013) age 4 | 154 | 192 | 102 | 448 | |
| | | | | (2014) age 5 | 411 | 98 | 307 | 816 | |
| | | | | (2015) age 6 | 17 | 0 | 89 | 106 | |
| | | | | (2016) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **582** | **290** | **498** | **1,370** | **0.71%** |
| 2010 | Macaulay/Andrew Cr. | Macaulay Hatchery | 213,229 | (2012) minis | 0 | 0 | 0 | 0 | |
| | | | | (2013) jacks | 76 | 0 | 50 | 126 | |
| | | | | (2014) age 4 | 343 | 235 | 230 | 808 | |
| | | | | (2015) age 5 | 655 | 217 | 840 | 1,712 | |
| | | | | (2016) age 6 | 92 | 80 | 69 | 241 | |
| | | | | (2017) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,166** | **532** | **1,189** | **2,887** | **1.35%** |
| 2011 | Macaulay/Andrew Cr. | Macaulay Hatchery | 206,400 | (2013) minis | 0 | 0 | 0 | 0 | |
| | | | | (2014) jacks | 7 | 0 | 4 | 11 | |
| | | | | (2015) age 4 | 116 | 104 | 67 | 287 | |
| | | | | (2016) age 5 | 277 | 83 | 101 | 462 | |
| | | | | (2017) age 6 | 94 | 0 | 4 | 98 | |
| | | | | (2018) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **494** | **187** | **177** | **858** | **0.42%** |
| 2012 | Macaulay/Andrew Cr. | Macaulay Hatchery | 257,300 | (2014) minis | 0 | 0 | 0 | 0 | |
| | | | | (2015) jacks | 9 | 1 | 5 | 15 | |
| | | | | (2016) age 4 | 184 | 62 | 47 | 293 | |
| | | | | (2017) age 5 | 1,115 | 89 | 135 | 1,339 | |
| | | | | (2018) age 6 | 171 | 31 | 34 | 235 | |
| | | | | (2019) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,500** | **180** | **220** | **1,900** | **0.74%** |
| 2013 | Macaulay/Andrew Cr. | Macaulay Hatchery | 218,900 | (2015) minis | 8 | 0 | 5 | 13 | |
| | | | | (2016) jacks | 90 | 31 | 7 | 129 | |
| | | | | (2017) age 4 | 731 | 9 | 231 | 971 | |
| | | | | (2018) age 5 | 2,055 | 89 | 425 | 2,570 | |
| | | | | (2019) age 6 | 129 | 10 | 58 | 197 | |
| | | | | (2020) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **3,000** | **140** | **730** | **3,900** | **1.78%** |

**Table 11: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2014 | Macaulay/Andrew Cr. | Macaulay Hatchery | 220,500 | (2016) minis | 0 | 0 | 0 | 0 | |
| | | | | (2017) jacks | 137 | 13 | 54 | 204 | |
| | | | | (2018) age 4 | 107 | 105 | 37 | 249 | |
| | | | | (2019) age 5 | 1,135 | 53 | 369 | 1,600 | |
| | | | | (2020) age 6 | 136 | 0 | 42 | 178 | |
| | | | | (2021) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,500** | **170** | **500** | **2,200** | **1.00%** |
| 2015 | Macaulay/Andrew Cr. | Macaulay Hatchery | 219,500 | (2017) minis | 0 | 0 | 0 | 0 | |
| | | | | (2018) jacks | 14 | 42 | 2 | 58 | |
| | | | | (2019) age 4 | 557 | 165 | 174 | 896 | |
| | | | | (2020) age 5 | 916 | 69 | 343 | 1,328 | |
| | | | | (2021) age 6 | 51 | 0 | 1 | 52 | |
| | | | | (2022) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,540** | **280** | **520** | **2,330** | **1.06%** |
| 2016 | Macaulay/Andrew Cr. | Macaulay Hatchery | 249,400 | (2018) minis | 0 | 0 | 0 | 0 | |
| | | | | (2019) jacks | 1,213 | 1 | 39 | 1,300 | |
| | | | | (2020) age 4 | 149 | 346 | 118 | 613 | |
| | | | | (2021) age 5 | 596 | 399 | 759 | 1,755 | |
| | | | | (2022) age 6 | 61 | 21 | 7 | 89 | |
| | | | | (2023) age 7 | | | | 0 | |
| | | | | **Total Return** | **2,020** | **767** | **923** | **3,757** | **1.51%** |
| 2017 | Macaulay/Andrew Cr. | Macaulay Hatchery | 248,800 | (2019) minis | 0 | 0 | 0 | 0 | |
| | | | | (2020) jacks | 9 | 16 | 11 | 36 | |
| | | | | (2021) age 4 | 217 | 131 | 107 | 455 | |
| | | | | (2022) age 5 | 244 | 49 | 686 | 979 | |
| | | | | (2023) age 6 | | | | 0 | |
| | | | | (2024) age 7 | | | | 0 | |
| | | | | **Total Return** | **471** | **196** | **804** | **1,470** | **0.59%** |
| 2018 | Macaulay/Andrew Cr. | Macaulay Hatchery | 325,800 | (2020) minis | 0 | 0 | 0 | 0 | |
| | | | | (2021) jacks | 43 | 20 | 74 | 138 | |
| | | | | (2022) age 4 | 154 | 61 | 160 | 375 | |
| | | | | (2023) age 5 | | | | 0 | |
| | | | | (2024) age 6 | | | | 0 | |
| | | | | (2025) age 7 | | | | 0 | |
| | | | | **Total Return** | **197** | **82** | **234** | **513** | **0.16%** |
| 2019 | Macaulay/Andrew Cr. | | 1,115,600 | Released prior to osmocompetence/smoltification due to loss of water supply. | | | | | |
| '89-'15 | Macaulay/Andrew Cr. | Macaulay Hatchery | 4,554,800 | minis | 930 | 0 | 0 | 930 | 0.02% |
| | | | | jacks | 1,270 | 750 | 290 | 2,310 | 0.05% |
| | | | | age 4 | 5,950 | 3,480 | 3,330 | 12,760 | 0.28% |
| | | | | age 5 | 18,300 | 5,840 | 11,510 | 35,650 | 0.78% |
| | | | | age 6 | 4,650 | 1,830 | 3,550 | 10,030 | 0.22% |
| | | | | age 7 | 60 | 30 | 20 | 110 | 0.00% |
| | | | | **BY89-15 Total*** | **31,200** | **11,900** | **18,700** | **61,790** | **1.36%** |
| | | | | **% of Total** | **50.5%** | **19.3%** | **30.3%** | **100.0%** | |
| | | | | ***Macaulay Hatchery - excludes BY93-96 KSR releases** | | | | | |

[1]BY96 release was composed of 114,337 King Salmon River chinook smolts, of which 21.086 were marked with coded wire tags, and 97,948 Andrew Creek chinook, of which none were tagged.

**Table 12: Fish Creek Chinook salmon production summary, brood years 1993 - 2019.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1993 | Snettisham + Crystal L./ Andrew Creek | Macaulay Hatchery | 196,549 | (1997) minis | 0 | 0 | 0 | 0 | |
| | | | | (1996) jacks | 0 | 0 | 0 | 0 | |
| | | | | (1997) age 4 | 15 | 0 | 0 | 15 | |
| | | | | (1998) age 5 | 31 | 111 | 340 | 482 | |
| | | | | (1999) age 6 | 0 | 82 | 248 | 330 | |
| | | | | (2000) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **46** | **193** | **588** | **827** | **0.42%** |
| 1994 | Little Port Walter/ King Salmon River | Macaulay Hatchery | 109,274 | (1996) minis | 0 | 0 | 0 | 0 | |
| | | | | (1997) jacks | 64 | 0 | 34 | 98 | |
| | | | | (1998) age 4 | 8 | 101 | 136 | 245 | |
| | | | | (1999) age 5 | 0 | 61 | 255 | 316 | |
| | | | | (2000) age 6 | 0 | 0 | 32 | 32 | |
| | | | | (2001) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **72** | **162** | **457** | **691** | **0.63%** |
| 1995 | Macaulay Hatchery/ Andrew Creek + KSR[1] | Macaulay Hatchery | 179,164 | (1997) minis | 0 | 0 | 0 | 0 | |
| | | | | (1998) jacks | 19 | 0 | 0 | 19 | |
| | | | | (1999) age 4 | 12 | 193 | 223 | 428 | |
| | | | | (2000) age 5 | 30 | 167 | 395 | 592 | |
| | | | | (2001) age 6 | 26 | 52 | 132 | 210 | |
| | | | | (2002) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **87** | **412** | **750** | **1,249** | **0.70%** |
| 1996 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 179,059 | (1998) minis | 0 | 0 | 0 | 0 | |
| | | | | (1999) jacks | 8 | 0 | 55 | 63 | |
| | | | | (2000) age 4 | 70 | 207 | 606 | 883 | |
| | | | | (2001) age 5 | 255 | 476 | 880 | 1,611 | |
| | | | | (2002) age 6 | 0 | 72 | 525 | 597 | |
| | | | | (2003) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **333** | **755** | **2,066** | **3,154** | **1.76%** |
| 1997 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 183,701 | (1999) minis | 25 | 0 | 0 | 25 | |
| | | | | (2000) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2001) age 4 | 54 | 81 | 92 | 227 | |
| | | | | (2002) age 5 | 117 | 277 | 842 | 1,236 | |
| | | | | (2003) age 6 | 33 | 42 | 555 | 630 | |
| | | | | (2004) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **229** | **400** | **1,489** | **2,118** | **1.15%** |
| 1998 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 166,670 | (2000) minis | 0 | 0 | 0 | 0 | |
| | | | | (2001) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2002) age 4 | 0 | 34 | 0 | 34 | |
| | | | | (2003) age 5 | 10 | 159 | 533 | 702 | |
| | | | | (2004) age 6 | 26 | 42 | 373 | 441 | |
| | | | | (2005) age 7 | 0 | 0 | 48 | 48 | |
| | | | | **Total Return** | **36** | **235** | **954** | **1,225** | **0.73%** |
| 1999 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 183,252 | (2001) minis | 85 | 0 | 0 | 85 | |
| | | | | (2002) jacks | 39 | 0 | 87 | 126 | |
| | | | | (2003) age 4 | 133 | 47 | 352 | 532 | |
| | | | | (2004) age 5 | 577 | 494 | 721 | 1,792 | |
| | | | | (2005) age 6 | 77 | 242 | 169 | 488 | |
| | | | | (2006) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **911** | **783** | **1,329** | **3,023** | **1.65%** |
| 2000 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 178,525 | (2002) minis | 0 | 0 | 0 | 0 | |
| | | | | (2003) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2004) age 4 | 0 | 53 | 198 | 251 | |
| | | | | (2005) age 5 | 27 | 114 | 305 | 446 | |
| | | | | (2006) age 6 | 62 | 61 | 77 | 200 | |
| | | | | (2007) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **89** | **228** | **580** | **897** | **0.50%** |
| 2001 | Macaulay/Andrew Cr. | Macaulay Hatchery | 121,670 | (2003) minis | 4 | 0 | 0 | 4 | |
| | | | | (2004) jacks | 7 | 0 | 3 | 10 | |
| | | | | (2005) age 4 | 0 | 64 | 125 | 189 | |
| | | | | (2006) age 5 | 264 | 208 | 334 | 806 | |
| | | | | (2007) age 6 | 0 | 18 | 52 | 70 | |
| | | | | (2008) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **275** | **290** | **514** | **1,079** | **0.89%** |

**Table 12: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2002 | Macaulay/Andrew Cr. | Macaulay Hatchery | 171,895 | (2004) minis | 7 | 0 | 3 | 10 | |
| | | | | (2005) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2006) age 4 | 102 | 61 | 166 | 329 | |
| | | | | (2007) age 5 | 0 | 106 | 589 | 695 | |
| | | | | (2008) age 6 | 0 | 37 | 252 | 289 | |
| | | | | (2009) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **109** | **204** | **1,010** | **1,323** | **0.77%** |
| 2003 | Macaulay/Andrew Cr. | Macaulay Hatchery | 178,429 | (2005) minis | 0 | 0 | 0 | 0 | |
| | | | | (2006) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2007) age 4 | 0 | 76 | 99 | 175 | |
| | | | | (2008) age 5 | 0 | 226 | 328 | 554 | |
| | | | | (2009) age 6 | 0 | 40 | 118 | 158 | |
| | | | | (2010) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **0** | **342** | **545** | **887** | **0.50%** |
| 2004 | Macaulay/Andrew Cr. | Macaulay Hatchery | 184,864 | (2006) minis | 0 | 0 | 0 | 0 | |
| | | | | (2007) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2008) age 4 | 0 | 34 | 0 | 34 | |
| | | | | (2009) age 5 | 41 | 437 | 694 | 1,172 | |
| | | | | (2010) age 6 | 0 | 32 | 77 | 109 | |
| | | | | (2011) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **41** | **503** | **771** | **1,315** | **0.71%** |
| 2005 | Macaulay/Andrew Cr. | Macaulay Hatchery | 183,225 | (2007) minis | 0 | 0 | 0 | 0 | |
| | | | | (2008) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2009) age 4 | 0 | 19 | 42 | 61 | |
| | | | | (2010) age 5 | 13 | 61 | 433 | 507 | |
| | | | | (2011) age 6 | 8 | 42 | 5 | 55 | |
| | | | | (2012) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **21** | **122** | **480** | **623** | **0.34%** |
| 2006 | Macaulay/Andrew Cr. | Macaulay Hatchery | 275,425 | (2008) minis | 0 | 0 | 0 | 0 | |
| | | | | (2009) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2010) age 4 | 0 | 4 | 24 | 28 | |
| | | | | (2011) age 5 | 8 | 73 | 113 | 194 | |
| | | | | (2012) age 6 | 0 | 86 | 70 | 156 | |
| | | | | (2013) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **8** | **163** | **207** | **378** | **0.14%** |
| 2007 | Macaulay/Andrew Cr. | Macaulay Hatchery | 288,579 | (2009) minis | 0 | 0 | 0 | 0 | |
| | | | | (2010) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2011) age 4 | 9 | 226 | 28 | 263 | |
| | | | | (2012) age 5 | 0 | 356 | 226 | 582 | |
| | | | | (2013) age 6 | 0 | 31 | 109 | 140 | |
| | | | | (2014) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **9** | **613** | **363** | **985** | **0.34%** |
| 2008 | Macaulay/Andrew Cr. | Macaulay Hatchery | 282,000 | (2010) minis | 0 | 0 | 0 | 0 | |
| | | | | (2011) jacks | 9 | 43 | 43 | 95 | |
| | | | | (2012) age 4 | 0 | 345 | 136 | 481 | |
| | | | | (2013) age 5 | 9 | 630 | 652 | 1,291 | |
| | | | | (2014) age 6 | 25 | 18 | 298 | 341 | |
| | | | | (2015) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **43** | **1,036** | **1,129** | **2,208** | **0.78%** |
| 2009 | Macaulay/Andrew Cr. | Macaulay Hatchery | 220,635 | (2011) minis | 0 | 0 | 0 | 0 | |
| | | | | (2012) jacks | 0 | 0 | 52 | 52 | |
| | | | | (2013) age 4 | 0 | 178 | 0 | 178 | |
| | | | | (2014) age 5 | 92 | 213 | 337 | 642 | |
| | | | | (2015) age 6 | 0 | 32 | 119 | 151 | |
| | | | | (2016) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **92** | **423** | **508** | **1,023** | **0.46%** |
| 2010 | Macaulay/Andrew Cr. | Macaulay Hatchery | 278,640 | (2012) minis | 0 | 0 | 0 | 0 | |
| | | | | (2013) jacks | 20 | 0 | 95 | 115 | |
| | | | | (2014) age 4 | 56 | 221 | 288 | 565 | |
| | | | | (2015) age 5 | 12 | 319 | 845 | 1,176 | |
| | | | | (2016) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2017) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **88** | **540** | **1,228** | **1,856** | **0.67%** |

**Table 12: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2011 | Macaulay/Andrew Cr. | Macaulay Hatchery | 280,200 | (2013) minis | 0 | 0 | 0 | 0 | |
| | | | | (2014) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2015) age 4 | 0 | 93 | 116 | 209 | |
| | | | | (2016) age 5 | 17 | 34 | 1 | 52 | |
| | | | | (2017) age 6 | 0 | 46 | 167 | 213 | |
| | | | | (2018) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **17** | **174** | **284** | **474** | **0.17%** |
| 2012 | Macaulay/Andrew Cr. | Macaulay Hatchery | 209,700 | (2014) minis | 0 | 0 | 0 | 0 | |
| | | | | (2015) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2016) age 4 | 28 | 0 | 61 | 89 | |
| | | | | (2017) age 5 | 13 | 99 | 289 | 401 | |
| | | | | (2018) age 6 | 0 | 49 | 0 | 49 | |
| | | | | (2019) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **40** | **150** | **350** | **540** | **0.26%** |
| 2013 | Macaulay/Andrew Cr. | Macaulay Hatchery | 269,500 | (2015) minis | 0 | 0 | 0 | 0 | |
| | | | | (2016) jacks | 13 | 14 | 50 | 77 | |
| | | | | (2017) age 4 | 48 | 78 | 321 | 447 | |
| | | | | (2018) age 5 | 32 | 44 | 2,319 | 2,394 | |
| | | | | (2019) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2020) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **90** | **140** | **2,700** | **2,900** | **1.08%** |
| 2014 | Macaulay/Andrew Cr. | Macaulay Hatchery | 279,400 | (2016) minis | 0 | 0 | 0 | 0 | |
| | | | | (2017) jacks | 12 | 22 | 1 | 35 | |
| | | | | (2018) age 4 | 3 | 143 | 119 | 266 | |
| | | | | (2019) age 5 | 60 | 502 | 1,788 | 2,400 | |
| | | | | (2020) age 6 | 0 | 0 | 97 | 97 | |
| | | | | (2021) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **70** | **670** | **2,000** | **2,800** | **1.00%** |
| 2015 | Macaulay/Andrew Cr. | Macaulay Hatchery | 279,300 | (2017) minis | 0 | 0 | 0 | 0 | |
| | | | | (2018) jacks | 0 | 5 | 0 | 5 | |
| | | | | (2019) age 4 | 31 | 23 | 920 | 975 | |
| | | | | (2020) age 5 | 0 | 92 | 1,315 | 1,407 | |
| | | | | (2021) age 6 | 0 | 50 | 65 | 115 | |
| | | | | (2022) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **30** | **170** | **2,300** | **2,500** | **0.90%** |
| 2016 | Macaulay/Andrew Cr. | Macaulay Hatchery | 233,900 | (2018) minis | 0 | 0 | 0 | 0 | |
| | | | | (2019) jacks | 0 | 2 | 20 | 20 | |
| | | | | (2020) age 4 | 0 | 233 | 305 | 538 | |
| | | | | (2021) age 5 | 77 | 111 | 1,211 | 1,399 | |
| | | | | (2022) age 6 | 19 | 0 | 75 | 94 | |
| | | | | (2023) age 7 | | | | 0 | |
| | | | | **Total Return** | **95** | **346** | **1,611** | **2,050** | **0.88%** |
| 2017 | Macaulay/Andrew Cr. | Macaulay Hatchery | 272,200 | (2019) minis | 0 | 0 | 0 | 0 | |
| | | | | (2020) jacks | 9 | 0 | 52 | 61 | |
| | | | | (2021) age 4 | 26 | 72 | 330 | 428 | |
| | | | | (2022) age 5 | 75 | 90 | 1,150 | 1,316 | |
| | | | | (2023) age 6 | | | | 0 | |
| | | | | (2024) age 7 | | | | 0 | |
| | | | | **Total Return** | **110** | **162** | **1,533** | **1,805** | **0.66%** |
| 2018 | Macaulay/Andrew Cr. | Macaulay Hatchery | 272,200 | (2020) mini | 0 | 0 | 0 | 0 | |
| | | | | (2021) jacks | 20 | 0 | 225 | 244 | |
| | | | | (2022) age 4 | 19 | 21 | 365 | 405 | |
| | | | | (2023) age 5 | | | | 0 | |
| | | | | (2024) age 6 | | | | 0 | |
| | | | | (2025) age 7 | | | | 0 | |
| | | | | **Total Return** | **38** | **21** | **590** | **649** | **0.24%** |
| 2019 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| '93-'15 | Macaulay/Andrew Cr. | Macaulay Hatchery | 4,770,400 | minis | 120 | 0 | 0 | 120 | 0.00% |
| | | | | jacks | 130 | 80 | 390 | 600 | 0.01% |
| | | | | age 4 | 560 | 2,180 | 3,920 | 6,660 | 0.14% |
| | | | | age 5 | 1,610 | 5,200 | 14,280 | 21,090 | 0.44% |
| | | | | age 6 | 260 | 1,070 | 3,510 | 4,840 | 0.10% |
| | | | | age 7 | 0 | 0 | 50 | 50 | 0.00% |
| | | | | **BY93-15 Total*** | **2,700** | **8,500** | **22,200** | **33,360** | **0.70%** |
| | | | | **% of Total** | **8.1%** | **25.5%** | **66.5%** | **100.0%** | |
| | | | | ***excludes BY94 KSR releases** | | | | | |

[1]Includes 4,000 King Salmon River smolts.

**Table 13: Auke Bay Chinook salmon production summary, brood years 1993 - 2019.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1993 | Snettisham + Crystal L./ Andrew Creek | Macaulay Hatchery | 193,464 | (1995) minis | 0 | 0 | 0 | 0 | |
| | | | | (1996) jacks | 5 | 0 | 0 | 5 | |
| | | | | (1997) age 4 | 44 | 17 | 0 | 61 | |
| | | | | (1998) age 5 | 71 | 89 | 152 | 312 | |
| | | | | (1999) age 6 | 104 | 111 | 186 | 401 | |
| | | | | (2000) age 7 | 8 | 0 | 2 | 10 | |
| | | | | Total Return | **232** | **217** | **340** | **789** | **0.41%** |
| 1994 | Little Port Walter/ King Salmon River | Macaulay Hatchery | 106,255 | (1996) minis | 0 | 0 | 0 | 0 | |
| | | | | (1997) jacks | 256 | 10 | 17 | 283 | |
| | | | | (1998) age 4 | 39 | 43 | 108 | 190 | |
| | | | | (1999) age 5 | 25 | 35 | 160 | 220 | |
| | | | | (2000) age 6 | 0 | 45 | 18 | 63 | |
| | | | | (2001) age 7 | 0 | 0 | 0 | 0 | |
| | | | | Total Return | **320** | **133** | **303** | **756** | **0.71%** |
| 1995 | Macaulay Hatchery/ Andrew Creek + KSR[1] | Macaulay Hatchery | 176,193 | (1997) minis | 0 | 0 | 0 | 0 | |
| | | | | (1998) jacks | 161 | 21 | 0 | 182 | |
| | | | | (1999) age 4 | 332 | 306 | 264 | 902 | |
| | | | | (2000) age 5 | 197 | 161 | 433 | 791 | |
| | | | | (2001) age 6 | 100 | 102 | 87 | 289 | |
| | | | | (2002) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **790** | **590** | **784** | **2,164** | **1.23%** |
| 1996 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 174,230 | (1998) minis | 0 | 0 | 0 | 0 | |
| | | | | (1999) jacks | 71 | 0 | 110 | 181 | |
| | | | | (2000) age 4 | 380 | 466 | 629 | 1,475 | |
| | | | | (2001) age 5 | 858 | 1,193 | 944 | 2,995 | |
| | | | | (2002) age 6 | 192 | 241 | 486 | 919 | |
| | | | | (2003) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,501** | **1,900** | **2,169** | **5,570** | **3.20%** |
| 1997 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 173,207 | (1999) minis | 50 | 0 | 0 | 50 | |
| | | | | (2000) jacks | 0 | 3 | 37 | 40 | |
| | | | | (2001) age 4 | 302 | 192 | 257 | 751 | |
| | | | | (2002) age 5 | 880 | 312 | 1,328 | 2,520 | |
| | | | | (2003) age 6 | 237 | 20 | 524 | 781 | |
| | | | | (2004) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,469** | **527** | **2,146** | **4,142** | **2.39%** |
| 1998 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 56,929 | (2000) minis | 0 | 0 | 0 | 0 | |
| | | | | (2001) jacks | 16 | 0 | 0 | 16 | |
| | | | | (2002) age 4 | 0 | 0 | 0 | 0 | |
| | | | | (2003) age 5 | 0 | 55 | 183 | 238 | |
| | | | | (2004) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2005) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **16** | **55** | **183** | **254** | **0.45%** |
| 1999 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 157,393 | (2001) minis | 16 | 0 | 0 | 16 | |
| | | | | (2002) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2003) age 4 | 79 | 100 | 211 | 390 | |
| | | | | (2004) age 5 | 46 | 388 | 1,181 | 1,615 | |
| | | | | (2005) age 6 | 0 | 273 | 283 | 556 | |
| | | | | (2006) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **141** | **761** | **1,675** | **2,577** | **1.64%** |
| 2000 | Macaulay Hatchery/ Andrew Creek | Macaulay Hatchery | 85,040 | (2002) minis | 0 | 0 | 0 | 0 | |
| | | | | (2003) jacks | 47 | 0 | 52 | 99 | |
| | | | | (2004) age 4 | 125 | 0 | 109 | 234 | |
| | | | | (2005) age 5 | 135 | 427 | 90 | 652 | |
| | | | | (2006) age 6 | 57 | 57 | 0 | 114 | |
| | | | | (2007) age 7 | 0 | 0 | 67 | 67 | |
| | | | | **Total Return** | **364** | **484** | **318** | **1,166** | **1.37%** |
| | 2001 | No Broodstock Collected | | | | No Smolt Released | | | |
| 2002 | Macaulay/Andrew Cr. | Macaulay Hatchery | 104,949 | (2004) minis | 0 | 0 | 0 | 0 | |
| | | | | (2005) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2006) age 4 | 95 | 58 | 39 | 192 | |
| | | | | (2007) age 5 | 663 | 47 | 524 | 1,234 | |
| | | | | (2008) age 6 | 75 | 79 | 67 | 221 | |
| | | | | (2009) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **833** | **184** | **630** | **1,647** | **1.57%** |

**Table 13: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2003 | Macaulay/Andrew Cr. | Macaulay Hatchery | 86,065 | (2005) minis | 0 | 0 | 0 | 0 | |
| | | | | (2006) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2007) age 4 | 0 | 132 | 0 | 132 | |
| | | | | (2008) age 5 | 562 | 222 | 445 | 1,229 | |
| | | | | (2009) age 6 | 128 | 63 | 71 | 262 | |
| | | | | (2010) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **690** | **417** | **516** | **1,623** | **1.89%** |
| 2004 | Macaulay/Andrew Cr. | Macaulay Hatchery | 95,184 | (2006) minis | 166 | 0 | 0 | 166 | |
| | | | | (2007) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2008) age 4 | 139 | 98 | 99 | 336 | |
| | | | | (2009) age 5 | 775 | 411 | 752 | 1,938 | |
| | | | | (2010) age 6 | 89 | 13 | 136 | 238 | |
| | | | | (2011) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **1,169** | **522** | **987** | **2,678** | **2.81%** |
| 2005 | Macaulay/Andrew Cr. | Macaulay Hatchery | 90,767 | (2007) minis | 0 | 0 | 0 | 0 | |
| | | | | (2008) jacks | 19 | 0 | 0 | 19 | |
| | | | | (2009) age 4 | 63 | 37 | 39 | 139 | |
| | | | | (2010) age 5 | 196 | 208 | 178 | 582 | |
| | | | | (2011) age 6 | 78 | 57 | 86 | 221 | |
| | | | | (2012) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **356** | **302** | **303** | **961** | **1.06%** |
| 2006 | Macaulay/Andrew Cr. | Macaulay Hatchery | 84,447 | (2008) minis | 8 | 0 | 0 | 8 | |
| | | | | (2009) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2010) age 4 | 15 | 45 | 10 | 70 | |
| | | | | (2011) age 5 | 26 | 57 | 84 | 167 | |
| | | | | (2012) age 6 | 22 | 10 | 15 | 47 | |
| | | | | (2013) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **71** | **112** | **109** | **292** | **0.35%** |
| 2007 | Macaulay/Andrew Cr. | Macaulay Hatchery | 87,190 | (2009) minis | 2 | 0 | 0 | 2 | |
| | | | | (2010) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2011) age 4 | 47 | 69 | 87 | 203 | |
| | | | | (2012) age 5 | 74 | 317 | 102 | 493 | |
| | | | | (2013) age 6 | 0 | 0 | 47 | 47 | |
| | | | | (2014) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **123** | **386** | **236** | **745** | **0.85%** |
| 2008 | Macaulay/Andrew Cr. | Macaulay Hatchery | 89,000 | (2010) minis | 32 | 0 | 0 | 32 | |
| | | | | (2011) jacks | 19 | 7 | 11 | 37 | |
| | | | | (2012) age 4 | 25 | 75 | 16 | 116 | |
| | | | | (2013) age 5 | 53 | 241 | 307 | 601 | |
| | | | | (2014) age 6 | 50 | 0 | 146 | 196 | |
| | | | | (2015) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **179** | **323** | **480** | **982** | **1.10%** |
| 2009 | Macaulay/Andrew Cr. | Macaulay Hatchery | 90,388 | (2011) minis | 0 | 0 | 0 | 0 | |
| | | | | (2012) jacks | 0 | 10 | 0 | 10 | |
| | | | | (2013) age 4 | 49 | 18 | 78 | 145 | |
| | | | | (2014) age 5 | 205 | 99 | 52 | 356 | |
| | | | | (2015) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2016) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **254** | **127** | **130** | **511** | **0.57%** |
| 2010 | Macaulay/Andrew Cr. | Macaulay Hatchery | 89,932 | (2012) minis | 0 | 0 | 0 | 0 | |
| | | | | (2013) jacks | 0 | 0 | 74 | 74 | |
| | | | | (2014) age 4 | 54 | 163 | 30 | 247 | |
| | | | | (2015) age 5 | 80 | 58 | 245 | 383 | |
| | | | | (2016) age 6 | 26 | 0 | 1 | 27 | |
| | | | | (2017) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **160** | **221** | **350** | **731** | **0.81%** |
| 2011 | Macaulay/Andrew Cr. | Macaulay Hatchery | 87,800 | (2013) minis | 0 | 0 | 0 | 0 | |
| | | | | (2014) jacks | 10 | 0 | 0 | 10 | |
| | | | | (2015) age 4 | 57 | 0 | 131 | 189 | |
| | | | | (2016) age 5 | 185 | 36 | 210 | 432 | |
| | | | | (2017) age 6 | 0 | 21 | 117 | 137 | |
| | | | | (2018) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **252** | **57** | **458** | **767** | **0.87%** |

**Table 13: continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2012 | Macaulay/Andrew Cr. | Macaulay Hatchery | 70,000 | (2014) minis | 0 | 0 | 0 | 0 | |
| | | | | (2015) jacks | 28 | 0 | 34 | 62 | |
| | | | | (2016) age 4 | 17 | 24 | 1 | 42 | |
| | | | | (2017) age 5 | 159 | 71 | 6 | 235 | |
| | | | | (2018) age 6 | 14 | 0 | 13 | 27 | |
| | | | | (2019) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **220** | **90** | **50** | **370** | **0.53%** |
| 2013 | Macaulay/Andrew Cr. | Macaulay Hatchery | 88,800 | (2015) minis | 53 | 0 | 6 | 58 | |
| | | | | (2016) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2017) age 4 | 80 | 22 | 107 | 208 | |
| | | | | (2018) age 5 | 97 | 71 | 130 | 298 | |
| | | | | (2019) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2020) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **230** | **90** | **240** | **560** | **0.63%** |
| 2014 | Macaulay/Andrew Cr. | Macaulay Hatchery | 88,400 | (2016) minis | 0 | 0 | 0 | 0 | |
| | | | | (2017) jacks | 62 | 53 | 6 | 122 | |
| | | | | (2018) age 4 | 14 | 38 | 22 | 74 | |
| | | | | (2019) age 5 | 197 | 31 | 175 | 403 | |
| | | | | (2020) age 6 | 0 | 13 | 0 | 13 | |
| | | | | (2021) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **270** | **130** | **200** | **610** | **0.69%** |
| 2015 | Macaulay/Andrew Cr. | Macaulay Hatchery | 87,000 | (2017) minis | 0 | 0 | 0 | 0 | |
| | | | | (2018) jacks | 29 | 0 | 1 | 30 | |
| | | | | (2019) age 4 | 142 | 238 | 189 | 569 | |
| | | | | (2020) age 5 | 32 | 88 | 435 | 555 | |
| | | | | (2021) age 6 | 0 | 23 | 12 | 35 | |
| | | | | (2022) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **200** | **350** | **640** | **1,190** | **1.37%** |
| 2016 | Macaulay/Andrew Cr. | Macaulay Hatchery | 89,300 | (2018) minis | 0 | 0 | 0 | 0 | |
| | | | | (2019) jacks | 538 | 16 | 28 | 582 | |
| | | | | (2020) age 4 | 0 | 40 | 37 | 77 | |
| | | | | (2021) age 5 | 117 | 139 | 366 | 622 | |
| | | | | (2022) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2023) age 7 | | | | 0 | |
| | | | | **Total Return** | **656** | **195** | **431** | **1,281** | **1.43%** |
| 2017 | Macaulay/Andrew Cr. | Macaulay Hatchery | 89,600 | (2019) minis | **0** | 0 | 0 | 0 | |
| | | | | (2020) jacks | 11 | 0 | 11 | 22 | |
| | | | | (2021) age 4 | 65 | 75 | 112 | 252 | |
| | | | | (2022) age 5 | 139 | 197 | 481 | 816 | |
| | | | | (2023) age 6 | | | | 0 | |
| | | | | (2024) age7 | | | | 0 | |
| | | | | **Total Return** | **215** | **272** | **604** | **1,090** | **1.22%** |
| 2018 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| 2019 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| '93-'15 | Macaulay/Andrew Cr. | Macaulay Hatchery | 2,256,378 | minis | 330 | 0 | 10 | 340 | |
| | | | | jacks | 470 | 90 | 320 | 880 | |
| | | | | age 4 | 2,060 | 2,100 | 2,320 | 6,480 | |
| | | | | age 5 | 5,490 | 4,580 | 7,960 | 18,030 | |
| | | | | age 6 | 1,170 | 1,080 | 2,280 | 4,530 | |
| | | | | age 7 | 10 | 0 | 70 | 80 | |
| | | | | **BY93-15 Total*** | **9,500** | **7,900** | **13,000** | **30,340** | **1.34%** |
| | | | | **% of Total** | **31.3%** | **26.0%** | **42.8%** | **100.0%** | |
| | | | | ***excludes BY94 KSR releases** | | | | | |

[1]Includes 4,009 King Salmon River smolts.

**Table 14: Lena Cove Chinook salmon production summary, brood years 2012 - 2019.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2012 | Macaulay/Andrew Cr. | Macaulay Hatchery | 90,000 | (2014) minis | 0 | 0 | 0 | 0 | |
| | | | | (2015) jacks | 45 | 0 | 54 | 99 | |
| | | | | (2016) age 4 | 68 | 60 | 5 | 133 | |
| | | | | (2017) age 5 | 184 | 190 | 46 | 419 | |
| | | | | (2018) age 6 | 18 | 43 | 22 | 83 | |
| | | | | (2019) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **310** | **290** | **130** | **730** | **0.81%** |
| 2013 | Macaulay/Andrew Cr. | Macaulay Hatchery | 179,900 | (2015) minis | 109 | 0 | 0 | 109 | |
| | | | | (2016) jacks | 57 | 128 | 4 | 189 | |
| | | | | (2017) age 4 | 253 | 479 | 6 | 738 | |
| | | | | (2018) age 5 | 391 | 550 | 523 | 1,463 | |
| | | | | (2019) age 6 | 57 | 36 | 61 | 154 | |
| | | | | (2020) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | 870 | 1,200 | 590 | 2,700 | **1.50%** |
| 2014 | Macaulay/Andrew Cr. | Macaulay Hatchery | 179,100 | (2016) minis | 104 | 0 | 2 | 106 | |
| | | | | (2017) jacks | 62 | 30 | 6 | 98 | |
| | | | | (2018) age 4 | 19 | 265 | 73 | 357 | |
| | | | | (2019) age 5 | 451 | 165 | 551 | 1,200 | |
| | | | | (2020) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2021) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **640** | **460** | **630** | **1,800** | **1.01%** |
| 2015 | Macaulay/Andrew Cr. | Macaulay Hatchery | 148,900 | (2017) minis | 0 | 0 | 0 | 0 | |
| | | | | (2018) jacks | 14 | 25 | 26 | 65 | |
| | | | | (2019) age 4 | 203 | 380 | 292 | 900 | |
| | | | | (2020) age 5 | 217 | 154 | 696 | 1,067 | |
| | | | | (2021) age 6 | 16 | 0 | 21 | 37 | |
| | | | | (2022) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **450** | **560** | **1,030** | **2,100** | **1.41%** |
| 2016 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| 2017 | Macaulay/Andrew Cr. | Macaulay Hatchery | 187,500 | (2019) minis | 0 | 0 | 0 | 0 | |
| | | | | (2020) jacks | 18 | 10 | 23 | 52 | |
| | | | | (2021) age 4 | 121 | 234 | 209 | 563 | |
| | | | | (2022) age 5 | 136 | 197 | 481 | 814 | |
| | | | | (2023) age 6 | | | | 0 | |
| | | | | (2024) age7 | | | | 0 | |
| | | | | **Total Return** | **280** | **440** | **710** | **1,400** | **0.75%** |
| 2018 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| 2019 | Macaulay/Andrew Cr. | No Broodstock Collected | | | | No Smolt Released | | | |
| '12-'15 | Macaulay/Andrew Cr. | Macaulay Hatchery | 597,900 | minis | 210 | 0 | 0 | 210 | |
| | | | | jacks | 180 | 180 | 90 | 450 | |
| | | | | age 4 | 540 | 1,180 | 380 | 2,100 | |
| | | | | age 5 | 1,240 | 1,060 | 1,810 | 4,100 | |
| | | | | age 6 | 90 | 80 | 100 | 270 | |
| | | | | age 7 | 0 | 0 | 0 | 0 | |
| | | | | **BY 12-15** | **2,300** | **2,500** | **2,400** | **7,100** | **1.19%** |
| | | | | **% of Total** | **32.4%** | **35.2%** | **33.8%** | | |

**Table 15: Pullen Creek Chinook salmon production summary, brood years 1998-2013.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 1998 | Burro Cr./Tahini River | Macaulay Hatchery | 91,618 | (2001) jacks | 0 | 71 | 20 | 91 | |
| | | | | (2002) age 4 | 20 | 27 | 56 | 103 | |
| | | | | (2003) age 5 | 221 | 10 | 48 | 279 | |
| | | | | (2004) age 6 | 13 | 19 | 29 | 61 | |
| | | | | (2005) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **254** | **127** | **153** | **534** | **0.58%** |
| 1999 | Burro Cr./Tahini River | Macaulay Hatchery | 32,123 | (2002) jacks | 2 | 0 | 7 | 9 | |
| | | | | (2003) age 4 | 86 | 21 | 76 | 183 | |
| | | | | (2004) age 5 | 25 | 15 | 84 | 124 | |
| | | | | (2005) age 6 | 31 | 4 | 6 | 41 | |
| | | | | (2006) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **144** | **40** | **173** | **357** | **1.11%** |
| 2000 | Burro Cr./Tahini River | Macaulay Hatchery | 95,386 | (2003) jacks | 4 | 0 | 3 | 7 | |
| | | | | (2004) age 4 | 20 | 24 | 208 | 252 | |
| | | | | (2005) age 5 | 151 | 76 | 164 | 391 | |
| | | | | (2006) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2007) age 7 | 18 | 0 | 0 | 18 | |
| | | | | **Total Return** | **193** | **100** | **375** | **668** | **0.70%** |
| 2001 | Burro Cr./Tahini River | Macaulay Hatchery | 58,793 | (2004) jacks | 0 | 8 | 8 | 16 | |
| | | | | (2005) age 4 | 74 | 76 | 308 | 458 | |
| | | | | (2006) age 5 | 19 | 213 | 82 | 314 | |
| | | | | (2007) age 6 | 30 | 6 | 18 | 54 | |
| | | | | (2008) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **123** | **303** | **416** | **842** | **1.43%** |
| 2002 | Burro Cr./Tahini River | Macaulay Hatchery | 128,688 | (2005) jacks | 0 | 29 | 172 | 201 | |
| | | | | (2006) age 4 | 26 | 36 | 89 | 151 | |
| | | | | (2007) age 5 | 545 | 28 | 154 | 727 | |
| | | | | (2008) age 6 | 38 | 0 | 0 | 38 | |
| | | | | (2009) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **609** | **93** | **415** | **1,117** | **0.87%** |
| 2003 | Pullen Cr./Tahini River | Macaulay Hatchery | 219,260 | (2006) jacks | 0 | 8 | 112 | 120 | |
| | | | | (2007) age 4 | 83 | 210 | 582 | 875 | |
| | | | | (2008) age 5 | 729 | 84 | 34 | 847 | |
| | | | | (2009) age 6 | 40 | 0 | 0 | 40 | |
| | | | | (2010) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **852** | **302** | **728** | **1,882** | **0.86%** |
| 2004 | Pullen Cr./Tahini River | Macaulay Hatchery | 68,002 | (2007) jacks | 0 | 2 | 22 | 24 | |
| | | | | (2008) age 4 | 112 | 58 | 0 | 170 | |
| | | | | (2009) age 5 | 243 | 42 | 37 | 322 | |
| | | | | (2010) age 6 | 6 | 0 | 12 | 18 | |
| | | | | (2011) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **361** | **102** | **71** | **534** | **0.79%** |
| 2005 | Pullen Cr./Tahini River | Macaulay Hatchery | 168,135 | (2008) jacks | 46 | 0 | 0 | 46 | |
| | | | | (2009) age 4 | 40 | 10 | 164 | 214 | |
| | | | | (2010) age 5 | 83 | 54 | 30 | 167 | |
| | | | | (2011) age 6 | 30 | 0 | 0 | 30 | |
| | | | | (2012) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **199** | **64** | **194** | **457** | **0.27%** |
| 2006 | Pullen Cr./Tahini River | Macaulay Hatchery | 51,495 | (2009) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2010) age 4 | 0 | 1 | 0 | 1 | |
| | | | | (2011) age 5 | 10 | 5 | 0 | 15 | |
| | | | | (2012) age 6 | 1 | 0 | 0 | 1 | |
| | | | | (2013) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **11** | **6** | **0** | **17** | **0.03%** |

**Table 15 continued.**

| Brood Year | Donor Source/Ancestral Stock | Rearing Location | Smolt Released | (Return Year) Age Class | Hatchery Rack + Escapement Returns | Estimated Commercial Harvest | Estimated Sport Harvest | Total | Marine Survival |
|---|---|---|---|---|---|---|---|---|---|
| 2007 | Pullen Cr./Tahini River | Macaulay Hatchery | 276,262 | (2010) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2011) age 4 | 315 | 0 | 0 | 315 | |
| | | | | (2012) age 5 | 26 | 106 | 10 | 142 | |
| | | | | (2013) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2014) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **341** | **106** | **10** | **457** | **0.17%** |
| 2008 | Pullen Cr./Tahini River | Macaulay Hatchery | 258,000 | (2011) jacks | 0 | 38 | 0 | 38 | |
| | | | | (2012) age 4 | 35 | 221 | 0 | 256 | |
| | | | | (2013) age 5 | 441 | 43 | 159 | 643 | |
| | | | | (2014) age 6 | 2 | 0 | 53 | 55 | |
| | | | | (2015) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **478** | **302** | **212** | **992** | **0.38%** |
| 2009 | Pullen Cr./Tahini River | Macaulay Hatchery | 128,619 | (2012) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2013) age 4 | 37 | 304 | 168 | 509 | |
| | | | | (2014) age 5 | 9 | 91 | 9 | 109 | |
| | | | | (2015) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2016) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **46** | **395** | **177** | **618** | **0.48%** |
| 2010 | Pullen Cr./Tahini River | Macaulay Hatchery | 194,603 | (2013) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2014) age 4 | 17 | 59 | 39 | 115 | |
| | | | | (2015) age 5 | 0 | 10 | 87 | 97 | |
| | | | | (2016) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2017) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **17** | **69** | **126** | **212** | **0.11%** |
| 2011 | Pullen Cr./Tahini River | Macaulay Hatchery | 50,100 | (2014) jacks | 0 | 0 | 0 | 0 | |
| | | | | (2015) age 4 | 0 | 0 | 64 | 64 | |
| | | | | (2016) age 5 | 0 | 0 | 0 | 0 | |
| | | | | (2017) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2018) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **0** | **0** | **64** | **64** | **0.13%** |
| | 2012 | No Broodstock Collected | | | | No Smolt Released | | | |
| 2013 | Pullen Cr./Tahini River | Macaulay Hatchery | 228,700 | (2016) Jacks | 0 | 17 | 0 | 17 | |
| | | | | (2017) age 4 | 0 | 50 | 1 | 51 | |
| | | | | (2018) age 5 | 0 | 6 | 0 | 6 | |
| | | | | (2019) age 6 | 0 | 0 | 0 | 0 | |
| | | | | (2020) age 7 | 0 | 0 | 0 | 0 | |
| | | | | **Total Return** | **0** | **70** | **0** | **70** | **0.03%** |
| | 2014 - 2022 | No Broodstock Collected | | | | No Smolt Released | | | |
| '98-'13 | Pullen Cr./Tahini River | Macaulay Hatchery | 2,050,000 | jacks | 50 | 170 | 340 | 560 | |
| | | | | age 4 | 870 | 1,100 | 1,800 | 3,800 | |
| | | | | age 5 | 2,500 | 780 | 900 | 4,200 | |
| | | | | age 6 | 190 | 30 | 120 | 340 | |
| | | | | age 7 | 20 | 0 | 0 | 20 | |
| | | | | **BY98-13 Total** | **3,600** | **2,100** | **3,200** | **8,900** | **0.43%** |
| | | | | **% of Total** | **40.4%** | **23.6%** | **36.0%** | | |

Table 16.–Macaulay Salmon Hatchery fish transport permits.

| Species/Stock | Location | ET, transport, release? | FTP # | Maximal #, Life Stage | Expires |
|---|---|---|---|---|---|
| Chum | MSH | ET, Release | 99J-1002 | 135 million eggs/ 36 million fry | 6/30/27 |
| Chum | Amalga Harbor | Transfer, Release | 99J-1001 | 54 million fry | 12/31/23 |
| Chum | Boat Harbor | Transfer, Release | 00J-1011 | 24 million fry | 6/30/29 |
| Chum | Limestone Inlet | Transfer, Release | 00J-1003 | 15 million fry | 6/30/29 |
| Chum | Thane Net Pens | Transfer, Release | 02J-1001 | 24 million fry | 6/30/27 |
| Chum | HFH to MSH | Transport | 02J-1015 | 32 million eggs | 6/30/27 |
| Chinook/ Andrew Creek | MSH | ET, Release | 10J-1006 | 1,250,000 eggs/ 650,000 smolt | 7/24/30 |
| Chinook/ Andrew Creek | Fish Creek | Transfer, Release | 97J-1002 | 300,000 smolt | 12/29/29 |
| Chinook/ Andrew Creek | Auke Bay | Transfer, Release | 97J-1001 | 200,000 smolt | 6/30/29 |
| Chinook/ Andrew Creek | Mendenhall Ponds | Transfer, Release | 10J-1027 | 4,000 subcatchables/ catchables | 9/30/30 |
| Chinook/ Andrew Creek | Thane Net Pens | Transfer, Release | 04J-1003 | 200,000 smolt | 12/31/23 |
| Chinook/ Andrew Creek | Lena Cove | Transfer, Release | 14J-1010 | 320,000 smolt | 4/30/24 |
| Chinook/ Andrew Creek | CLH to MSH | ET, Transfer | 06J-1035 | 650,000 eggs | 8/31/31 |

continued…

Table 16 continued.

| Species/Stock | Location | ET, transport, release? | FTP # | Maximal #, Life Stage | Expires |
|---|---|---|---|---|---|
| Chinook/ Andrew Creek | MCH to MSH | ET, Transfer | 08J-1002 | 650,000 eggs | 7/31/28 |
| Chinook/ Andrew Creek | HFH to MSH | ET, Transfer | 09J-1017 | 650,000 eggs | 7/31/29 |
| Chinook/ Andrew Creek | Fish Creek | Transfer | 17J-1008 | 400 adults | 6/30/27 |
| Chinook/ Andrew Creek | Fish Creek | ET, Transfer | 17J-1009 | 1 million eggs | 6/30/27 |
| Chinook/ Tahini River | Pullen Creek | Transfer, Release | 10J-1016 | 300,000 smolt | 6/15/23 |
| Coho/ Fish Creek | MSH | ET, Release | 12J-1012 | 1.5 million eggs | 6/30/31 |
| Coho/ Fish Creek | Fish Creek | ET, Transfer, Release | 23J-1002 | 300,000 green eggs | 10/31/23 |
| Coho/ Fish Creek | Thane Net Pens | Transfer, Release | 13J-1015 | 1.2 million smolt | 12/31/28 |
| Rainbow Trout/ Swanson River | WJHH to MSH to Twin Lakes | Transfer, Release | 16J-1001 | 50,000 eggs/ 15,000 catchables | 12/31/25 |
| Rainbow Trout/ Swanson River | WJHH to MSH to Mendenhall Ponds | Transfer, Release | 16J-1002 | 50,000 eggs/ 4,000 catchables | 12/31/25 |

Note: ET = Egg take.

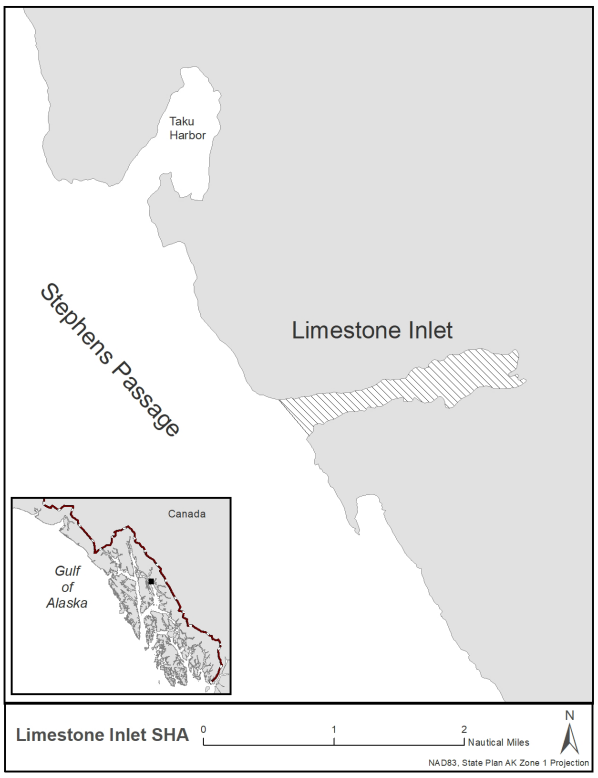


Figure 1. Limestone Inlet SHA.

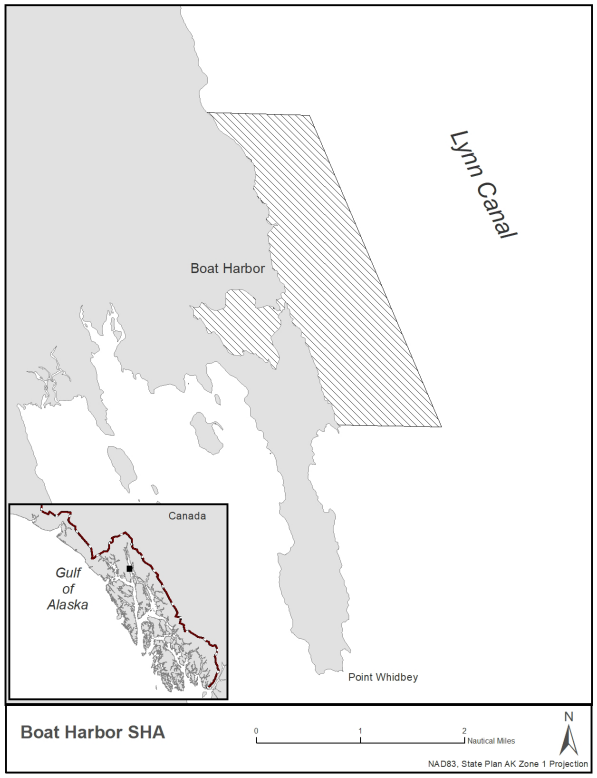


Figure 2. Boat Harbor SHA.

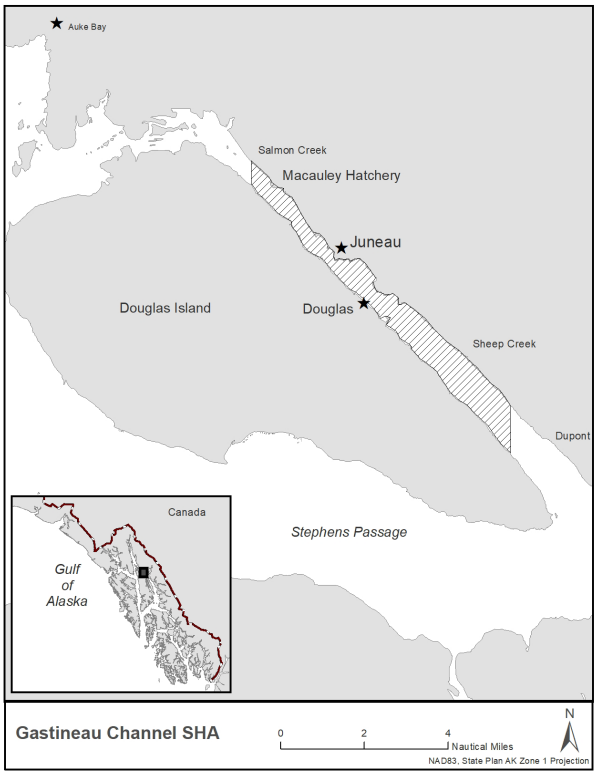


Figure 3. Gastineau Channel SHA.

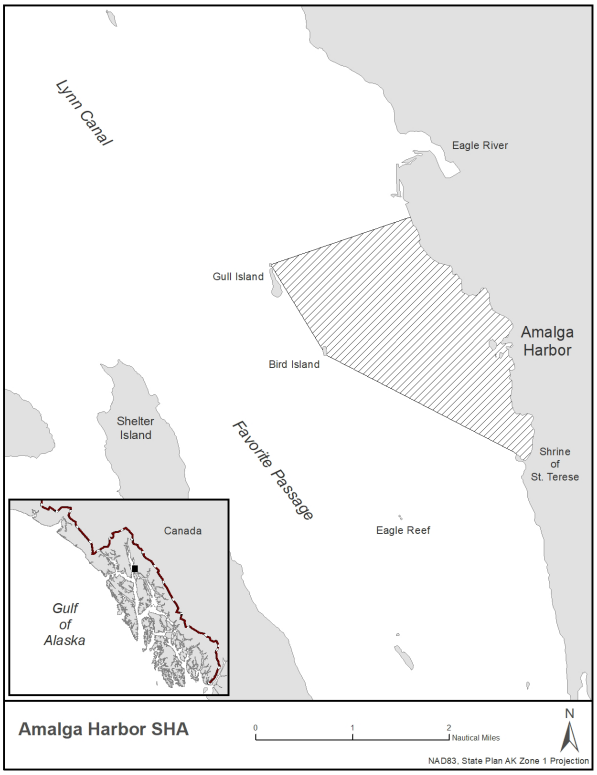


Figure 4. Amalga Harbor SHA.