

THE PACIFIC SALMON COMMISSION

**JOINT NORTHERN BOUNDARY TECHNICAL
COMMITTEE**

**U.S./CANADA NORTHERN BOUNDARY AREA
2020 SALMON FISHERIES MANAGEMENT REPORT
AND 2021 PRELIMINARY EXPECTATIONS**

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LIST OF ACRONYMS WITH DEFINITIONS

AABM	Aggregate Abundance Based Management
AAH	Annual Allowable Harvest
ADF&G	Alaska Department of Fish & Game
AUC	Area-under-the-curve
DFO	Canadian Department of Fisheries and Oceans
ESSR	Excess to Spawning Salmon Requirement
FSC	Food, Social, and Ceremonial
ITQ	Individual Transferable Quota
MFLNRO	Ministry of Forest, Lands, and Natural Resource Operations
NBC	Northern British Columbia Dixon Entrance to Kitimat including Queen Charlotte Islands.
NBTC	Northern Boundary Technical Committee
NMFS	National Marine Fisheries Service
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
SFC	Skeena Fisheries Commission
TAC	Total Allowable Catch
TRTC	Total Return to Canada

TABLE OF CONTENTS

	<u>Page</u>
MEMBERSHIP OF THE NORTHERN BOUNDARY TECHNICAL COMMITTEE.....	ii
LIST OF ACRONYMS WITH DEFINITIONS	1
LIST OF TABLES	3
LIST OF FIGURES	4
EXECUTIVE SUMMARY	5
2020 FISHERIES.....	5
MANAGEMENT PERFORMANCE	7
2021 FORECASTS	9
INTRODUCTION	10
SOUTHERN SOUTHEAST ALASKA.....	10
2020 Salmon Forecast.....	10
Review of the 2020 Fishing Season.....	10
Management Performance Relative to Pacific Salmon Treaty Requirements	14
2021 Southeast Alaska Pink Salmon Forecast	15
NORTHERN BRITISH COLUMBIA	16
2020 Preseason Salmon Forecast.....	16
Review of 2020 Fishing Season - Net and Troll Fisheries.....	17
Management Performance Relative to Treaty Requirements	22
2021 Preseason Salmon Forecast Northern British Columbia.....	23
TABLES	25
FIGURES	64

LIST OF TABLES

	<u>Page</u>
Table 1.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 101 purse seine fishery.	26
Table 2.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 102 purse seine fishery.	27
Table 3.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 103 purse seine fishery.	28
Table 4.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 104 purse seine fishery.	29
Table 5.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 101 drift gillnet fishery.	30
Table 6.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 106 drift gillnet fishery.	31
Table 7.–Weekly commercial catch and fishing effort by opening in the 2020 Annette Island Reserve purse seine fishery.....	32
Table 8.–Weekly commercial catch and fishing effort by opening in the 2020 Annette Island Reserve gillnet fishery.	33
Table 9.–Southern Southeast Alaska pink salmon escapement indices by stock group and district for 2020 (in millions).....	34
Table 10.–Preliminary annual allowable harvest (AAH) calculations for the Alaska District 104 Week 27-30 purse seine fishery, 1999-2020.	35
Table 11.–Preliminary annual allowable harvest (AAH) calculations for the Alaska District 101 gillnet fishery, 1999-2020.	36
Table 12.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 1 gillnet fishery.	37
Table 13.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 1 seine fishery (preliminary).	38
Table 14.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 1/101 troll fishery (preliminary).	39
Table 15.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Entrance (subareas 1-4) gillnet fishery.....	40
Table 16.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Inside (subareas 7-17) gillnet fishery.....	41
Table 17.–Weekly commercial catch and fishing effort in the 2020 Canadian total Area 3 gillnet fishery.....	42
Table 18.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Entrance (subareas 1-4) seine fishery (preliminary).....	43
Table 19.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Inside (subareas 7-17) seine fishery.....	44
Table 20.–Weekly commercial catch and fishing effort in the 2020 Canadian total Area 3 seine fishery (preliminary).	45
Table 21.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 3/103 troll fishery (preliminary). In 2020, fishing occurred in Area 103.....	46
Table 22.–Weekly commercial catch and fishing effort in the 2020 Canadian total Area 4 gillnet fishery (preliminary).	47
Table 23.–Weekly commercial catch and fishing effort in the 2020 Canadian total Area 4 seine fishery.	48
Table 24.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 4/104 troll fishery (preliminary). In 2020, all fishing occurred in Area 104.....	49
Table 25.–Weekly commercial catch and fishing effort in the 2020 Canadian total Area 5 gillnet fishery.....	50
Table 26.–Weekly commercial catch and fishing effort in the 2020 Canadian total Area 5 seine.	51
Table 27.–Weekly commercial catch and fishing effort in the 2020 Canadian Area 5/105 troll fishery (preliminary). In 2020, all fishing occurred in Area 5.....	52

Table 28.—Annual gillnet and seine effort for Canadian Area 1, 3, 4, and 5, 1980-2020.	53
Table 29.—Escapements to Canadian Areas 3, 4, and 5 in 2020.	56
Table 30.—Annual salmon escapements for Canadian Area 1, 1970-2020.	57
Table 31.—Annual salmon escapements for Canadian Area 3, 1970-2020.	58
Table 32.—Annual salmon escapements for Canadian Area 4, 1970-2020.	59
Table 33.—Annual salmon escapements for Canadian Area 5, 1970-2020.	60
Table 34.—Annual allowable harvest (AAH) calculations for Canadian Area 3 Entrance (1-4) net fishery, 1999-2020. The Alaskan 101, 102, and 103 pink salmon escapement requirement is 10,750,000.	61
Table 35.—Annual allowable harvest (AAH) calculates for Canadian Area 1/101 troll fishery, 1999-2020. The Alaskan 101, 102, and 103 pink salmon escapement requirement is 10,750,000.	62
Table 36.—Pre-season salmon forecast for Canadian Areas 1, 3, 4, and 5 in 2021.	63

LIST OF FIGURES

Figure 1.—Alaska Department of Fish and Game southern Southeast Alaska regulatory districts.	65
Figure 2.—Alaska District 101 drift gillnet and District 104 purse seine treaty fisheries.	66
Figure 3.—Canadian Statistical Areas 1-10, northern British Columbia.	67
Figure 4.—Canadian Statistical Area 1 management sub-areas.	68
Figure 5.—Canadian Statistical Area 3 management sub-areas.	69
Figure 6.—Canadian Area 4 management sub-areas.	70
Figure 7.—Canadian Statistical Area 5 management sub-areas.	71

EXECUTIVE SUMMARY

This report reviews:

- 1) catch, effort, and management actions in the 2020 Northern Boundary Area troll and net fisheries of southern Southeast Alaska Districts 101 to 108 and northern British Columbia Areas 1, 3, 4, and 5;
- 2) management performance relative to Pacific Salmon Treaty requirements for sockeye and pink salmon;
- 3) preliminary expectations and fishing plans for 2021.

2020 FISHERIES

Pink salmon returns were below average throughout Southeast Alaska and the southern Southeast Alaska pink salmon harvest was 6.3 million (Districts 101-108, all harvest codes, all gear), which was 33% of the recent ten-year average. For all Southeast Alaska, excluding the Yakutat area, the pink salmon harvest was 8.1 million fish, which was below the preseason forecast point estimate of 12 million, but within the 7-19 million 80% confidence interval range of the forecast.

The total 2020 Southeast Alaska pink salmon escapement index of 9.73 million index fish ranked 32nd since 1960. Biological escapement goals were met in the Southern Southeast and Northern Southeast Outside subregions, but escapement to the Northern Southeast Inside Subregion was below goal in 2020 (Table 5). On a finer scale, escapements were within or above management targets for 10 of 15 districts in the region and for 30 of the 46 pink salmon stock groups in Southeast Alaska. The Southern Southeast Subregion includes all the area from Sumner Strait south to Dixon Entrance (Districts 101–108). The escapement index value of 5.66 million was within the escapement goal range of 3.0 to 8.0 million index fish.

Sockeye salmon harvests in the Alaska boundary area were well below the 1985–2019 average in the District 101–104 traditional purse seine fisheries, and in the District 101 drift gillnet fishery. The Hugh Smith Lake adult sockeye salmon escapement was 3,860 salmon, which was well below the optimal escapement goal range of 8,000 to 18,000 adult sockeye salmon. Based on the expanded peak foot survey count, the escapement of sockeye salmon into McDonald Lake was only 8,200 fish, which was well below the sustainable escapement goal range of 55,000 to 120,000.

Summer chum salmon harvests in the Alaska boundary area were below the 1985–2019 average in the District 101–104 traditional purse seine fisheries and the District 101 drift gillnet fishery. The Southern Southeast chum salmon stock group is composed of an aggregate of 15 summer-run chum salmon streams on the inner islands and mainland of southern Southeast Alaska, from Sumner Strait south to Dixon Entrance, with a sustainable escapement goal of 62,000 index spawners (based on the aggregate peak survey to all 15 streams). Summer chum salmon escapements were below average at most index streams in southern Southeast Alaska, but the index

of 70,000 in 2020 was above goal due to a large escapement to the Tombstone River in Portland Canal.

Coho salmon harvests in the Alaska boundary area were below average in the District 101–104 traditional purse seine fisheries and the District 101 drift gillnet fishery. Coho salmon escapement counts and estimates in southern Southeast Alaska were within or above goal ranges. The combined peak count of 8,610 coho salmon in the 14 surveyed streams in the Ketchikan survey index was just above the escapement goal of 4,250–8,500 fish. The total escapement of 634 coho salmon to Hugh Smith Lake was within the biological escapement goal range of 500–1,600 fish.

The 2020 season was challenging due to the broad impact of the COVID-19 pandemic on all aspects of society, including fisheries and fisheries management. In March, the State of Alaska designated fisheries as critical infrastructure to protect the food supply chain and the economy. The Commissioner of the Alaska Department of Fish and Game (ADF&G) immediately directed staff to develop action plans to safely implement field projects to the extent practicable so that fisheries could be prosecuted with the least amount of disruption. Alaska was able to meet all its PST obligations with respect to data collection inclusive of catch accounting, sampling, escapement monitoring, and hatchery marking and tagging. The State of Alaska does not anticipate any implications for meeting annual Treaty commitments due to the COVID-19 pandemic.

In Canadian Area 1, domestic management objectives restrict commercial net fisheries that intercept passing salmon stocks and focus opportunities in terminal areas targeting specific stocks. Area 1 pink stocks are even-year dominant; however, the returns were expected to be below average in 2020. While there were no gillnet openings in 2020, a pink-directed seine opening occurred on August 24 within Masset Inlet. A total of 183,297 pink salmon were harvested. Chum salmon production to Area 1 has generally been poor for the past two decades with returns consistently at or below management target. No fishing opportunities on chum surpluses were identified in-season in Area 1. Three troll fisheries operated in Area 1 in 2020, the pink-directed AB-Line fishery, the coho-directed fishery, and the Chinook ITQ fishery.

The Area 3 sockeye return was expected to be average to below average in 2020. Seine fishery opportunities were expected as the pink return was anticipated to be an average even year. Due to low returns of sockeye past Area 3 fishwheels, no commercial fisheries targeting sockeye proceeded in 2020. There was one Area 3 commercial seine openings in 2020 targeting pink salmon in Week 28 that operated with non-retention/non-possession restrictions for coho, chinook, sockeye, and steelhead. Due to the concerns over weak Nass Chinook, commercial fisheries were delayed avoiding these fish. With the weaker trend in earlier timed Area 3/Nass coho salmon abundance, coho retention was not permitted in net fisheries. The coho-directed Area 3/103 troll fishery was delayed until August 1.

The pre-season forecast suggested that there would be no harvestable surplus of Skeena River sockeye salmon, and as such, no commercial fisheries were expected for Areas 4 and 5. However, the sockeye commercial trigger of sockeye past the Tyee test fishery was reached on July 25, resulting in 2 gillnet fishery opening in Week 32. There were no Area 4 seine fishery opening in 2020. Portions of Area 104 were open to the troll fishery for coho and pink salmon retention from August 1 to September 30.

Area 5 did not open to commercial net fishing in 2020. Portions of Area 105 were open to the troll fishery for coho and pink salmon retention from August 1 to September 30.

The preliminary post-season sockeye salmon escapement estimate to the upper Nass River of 335,990 exceeded the escapement target of 200,000. The preliminary sockeye salmon net escapement estimate of 230,508 to the Nass exceeded the escapement target of 200,000 and is near the 2010–2019 average of 235,735. The preliminary Skeena sockeye salmon net escapement estimate of 1,448,135 sockeye salmon exceeded the escapement target of 900,000 and is an improvement over the 2010-2019 average escapement of 981,403. Pink salmon returns throughout the North Coast have been extremely variable but almost all Areas showed improvements over the brood year. Area 1, 3 and 4 escapements were stronger than the 2010-2019 average, while Area 5 showed a continued trend of decline compared to historical averages. Chum salmon escapements in Areas 3 have been improving with management actions to reduce impacts to wild chum implemented through the respective chum rebuilding plans.

In response to the COVID-19 pandemic, Public Safety Canada identified workers undertaking fishing and fish processing essential functions to ensuring the health, safety, and well-being of the population. Department of Fisheries and Oceans staff maintained all critical functions to implement fisheries, including licensing, monitoring, and enforcement, however some fisheries were implemented in a reduced or modified capacity due to concerns around COVID-19 transmission. Canada was able to meet all its PST obligations and does not anticipate any implications for meeting annual Treaty commitments due to the COVID-19 pandemic.

MANAGEMENT PERFORMANCE

Pacific Salmon Treaty based harvest sharing agreements were renewed in 2019 for the Northern Boundary area fisheries—Alaska District 104 purse seine, Alaska District 101 drift gillnet, Canadian Area 3 net, and Canadian Area 1 troll. The agreements are “abundance based” where the allowable harvest is a percentage of the Annual Allowable Harvest (AAH). The AAH is the total return of applicable stocks minus the lesser of: 1) the actual escapement, or 2) the escapement goal. Catches over or under the AAH are summed over the period of the agreement to allow for annual variation.

In Alaska’s District 104 purse seine fishery, the Nass and Skeena sockeye salmon run size determines the AAH of these stocks prior to Statistical Week 31. In Alaska’s District 101 gillnet fishery, the AAH is based solely on the run size of Nass River sockeye salmon. The run size of Alaskan pink salmon returning to Districts 101-103 determines the allowable harvests of these stocks in Canada’s Area 3 (1-4) net and Area 1 troll fisheries. The agreement specifies a harvest in the District 104 purse seine fishery, from the beginning of the season through Statistical Week 30, of 2.45% of the combined AAH of both the Nass and Skeena River sockeye salmon runs. The District 104 purse seine fishery opens by regulation on the first Sunday in July. In 2020, the first potential opening was July 5 (week 28). The pre-week 31 fishing plan for District 104 was based on the preseason Canadian Department of Fisheries and Oceans (DFO) forecast returns of approximately 1.27 million Nass and Skeena sockeye salmon.

In the 2020 Treaty period (Alaska statistical weeks 28-30), 6,923 sockeye salmon were harvested during a 6-hour opening in Week 30 (Table 4). The fishery was closed in weeks 28 and 29 due to low Skeena River sockeye salmon abundance. A total of 13 purse seine vessels fished at some time in the district during the Treaty period. In past years 60% to 80% of Treaty-period sockeye salmon have been of Nass and Skeena origin, therefore we would anticipate between 4,200 and 5,500 Nass and Skeena sockeye may have been harvested in the District 104 purse seine fishery during the 2020 Treaty period. The final number of Nass and Skeena sockeye salmon harvested in the District 104 purse seine fishery was 5,300 fish.

In the District 101 (Tree Point) drift gillnet fishery, the AAH is calculated as the total run of Nass sockeye salmon minus either the escapement requirement of 200,000 or the actual in-river escapement, whichever is less. The agreement specifies a harvest of 13.8 percent of the AAH of the Nass River sockeye salmon run. The return of Nass sockeye salmon was forecast at 386,000 in 2020 which, minus an escapement goal of 200,000, would result in an AAH of about 186,000 fish. Using this forecast, the 2020 allowable harvest in the District 101 drift gillnet fishery was approximately 25,700 Nass River sockeye salmon. A total of 9,348 sockeye salmon were harvested, which was only 9% of the 1985-2019 average of 109,130 fish and was the lowest harvest since the inception of the Pacific Salmon Treaty. The final number of Nass River sockeye salmon harvested at Tree Point during the Treaty period was 7,528 fish.

The District 101 drift gillnet fishery opens by regulation on the third Sunday in June, which was June 21 (week 26) in 2020. During the early weeks of the fishery, management is based on the run strength of Alaska wild stock chum and sockeye salmon and on the strength of the Nass River sockeye salmon. Beginning in the third week of July, when pink salmon stocks begin to enter the fishery in large numbers, management emphasis shifts by regulation to that species. By regulation, the District 101 Pink Salmon Management Plan sets gillnet fishing time in this district in relation to the District 101 purse seine fishing time when both fleets are concurrently harvesting the same pink salmon stocks.

For 2020, Canada was to manage the Area 3-1 to 3-4 net fisheries to achieve an annual catch share of 2.49% of the AAH of Alaskan Districts 101, 102 and 103 pink salmon. With a Total Return of 17.36 million pink salmon, the total AAH for all fisheries was approximately 6.61 million pink salmon. The resulting Area 3-1 to 3-4 Canadian commercial troll total allowable catch of this AAH was approximately 164,545 pinks of Alaskan Districts 101, 102 and 103 origin. The 2020 preliminary Canadian pink salmon catch in Sub-areas 3-1 to 3-4 was 1,816, and the Alaska stock component of this catch is estimated to be 1,793, or 0.03% of the AAH. This result is below the annex agreement of 2.49%.

In addition, Canada was to manage the Area 1 troll fishery to achieve an annual catch share of 2.57% of the AAH of Alaskan Districts 101, 102 and 103 pink salmon. With a Total Return of 17.36 million pink salmon, the total AAH for all fisheries was approximately 6.61 million pink salmon. The resulting Area 1 Canadian commercial troll total allowable catch of this AAH was approximately 169,832 pinks of Alaskan Districts 101, 102 and 103 origin. The fishery harvested a total of 133,167 pink salmon, with an estimated 111,616 being of Alaskan origin. This equates

to 1.69% of the Alaskan District 101, 102 and 103 pink AAH, well below the annex agreement of 2.57%.

2021 FORECASTS

The Southeast Alaska pink salmon harvest in 2021 is predicted to be in the *average* range, with a point estimate of 28 million fish (80% prediction interval: 19–42 million fish). The 2021 harvest forecast of 28 million pink salmon is just below the recent 10-year average harvest of 34 million pink salmon. A forecast of 28 million pink salmon is an improvement over the previous odd-year harvest in 2019 (21 million) and is just over half of the average odd-year harvest since 2001. The harvest forecast was primarily based on juvenile pink salmon abundance indices collected by the NOAA/ADF&G Southeast Coastal Monitoring Project in northern Southeast Alaska inside waters during June and July. A multiple regression model was developed, using monthly peak juvenile CPUE (standardized catch based on 20-minute trawl sets) for the June and July surveys and an Icy Strait Temperature Index.

A below average Nass River sockeye salmon total return of 318,000 (with a 25% probability of the return exceeding 469,000 and a 75% probability the return will exceed 217,000) is expected compared to recent trends. The sibling-model forecast predicts a 50% probability of approximately 1.69 million sockeye salmon returning to the Skeena River in 2021 with a 10% probability of a return exceeding 3.61 million and a 90% probability the return would exceed 0.796 million. Below average pink salmon returns are anticipated to Areas 1, 3, 4 and 5, based on brood year escapements.

INTRODUCTION

This report reviews the 2020 Boundary Area pink, chum, coho, and sockeye salmon gillnet and purse seine fisheries of southern Southeast (SSE) Alaska and northern British Columbia and outlines preliminary expectations and fishing plans for 2021. The document is submitted to the Pacific Salmon Commission as required in Article IV of the Pacific Salmon Treaty. Weekly catch and effort data are provided by opening, district or area, gear, and species (sockeye, pink, chum, coho, and Chinook salmon) for Northern Boundary Area fisheries for 2020. Sub-area catch data is also presented for all salmon species for Canadian Area 3. Maps showing the statistical fishing districts or areas for southern Southeast Alaska and northern British Columbia are provided in Figures 1 to 7.

SOUTHERN SOUTHEAST ALASKA

2020 Salmon Forecast

The 2020 pink salmon harvest in Southeast Alaska was expected to be weak, with a point estimate of 12 million fish and a forecast range of 7–19 million fish. Formal forecasts were not made for subregions or for species other than pink salmon in Southeast Alaska.

Review of the 2020 Fishing Season

Commercial fisheries harvested 8.4 million salmon in southern Southeast Alaska in 2020. This total includes Traditional, Hatchery Terminal Harvest Area, and Annette Island Reserve fisheries; purse seine, drift gillnet, and troll gear; in Districts 101 through 108, 150, and 152. The salmon harvest was comprised of 6.3 million (74%) pink, 1.5 million (18%) chum, 320,325 coho (4%), 279,157 (3%) sockeye, and 61,531 (0.7%) Chinook salmon.

Districts 101 to 107 Purse Seine Fisheries

The management of the southern Southeast Alaska inside purse seine fishery was based on in-season pink salmon returns to Districts 101 through 107. Exceptions to this management scheme were: 1) early season openings in lower District 102 to target Southern Southeast Regional Aquaculture Association's (SSRAA) Kendrick Bay summer chum salmon; and 2) District 102 fisheries directed on fall chum salmon. (In the following sections "average" refers to the 1985–2019 average.)

District 101 Purse Seine Fishery

The District 101 purse seine fishery opened July 5, 2020 for the first of 11 fishing periods (Table 1). The fishery harvested 1,275,244 pink salmon, 40,955 sockeye salmon, 72,408 chum salmon, 10,764 coho salmon, and 234 Chinook salmon (Table 1). The number of days that the fishery was open was 38% of average, and the number of boats fishing was 66% of average. The pink salmon harvest of 1,275,244 was 24% of average and catches were below average in all weeks of the fishery. Sockeye salmon catches were also low in most weeks and the catch of 40,955 fish was 46% the 1985–2019 average. The total chum salmon catch of 72,408 was 25% of average and the total coho salmon harvest of 10,764 fish was 29% of average.

District 102 Purse Seine Fishery

Limited portions of District 102 near Kendrick Bay were opened weeks 26 and 27 (June 21–July 1) to access returns of SSRAA enhanced summer chum salmon returning to Kendrick Bay. The fishery was open 87 hours in weeks 26 and 27. A total of 25 purse seine vessels fished in week 26 and 40 in week 27, harvesting 34,352 chum salmon (Table 2). The traditional seine fishery in District 102 targeting local stocks of pink salmon opened Sunday, July 5 (Week 28). During the traditional fishing period there were 12 openings that were all 15 hours in duration (Table 2).

The District 102 purse seine fishery harvested 1,011,024 pink salmon, 15,858 sockeye salmon, 137,090 chum salmon, 13,364 coho salmon, and 144 Chinook salmon (Table 2). The number of days that the fishery was open was above average in weeks 26 and 27, and below average in July and August. There were no openings targeting fall chum salmon and the overall number of days open was 41% of the 1985–2019 average. The number of boats fishing the district was near or below average throughout the fishery (Table 2).

Pink salmon harvests were below average throughout the season, and the total harvest of 1,011,024 fish was 26% of the 1985–2019 average (Table 2). Sockeye salmon catches were below average throughout the season and the total sockeye salmon catch of 15,858 fish was 38% of average. Catches of summer-run chum salmon peaked in mid-July and the total chum salmon catch of 137,090 fish was 29% of the 1985–2019 average. Catches of coho salmon peaked in week 32 with a harvest of 4,780 fish and the total harvest of 13,364 fish was 27% of the 1985–2019 average.

District 103 Purse Seine Fishery

The District 103 purse seine fishery opened July 23, 2020 for the first of 8 fishing periods (Table 3). The fishery harvested 1,125,385 pink salmon, 23,991 sockeye salmon, 73,285 chum salmon, 16,469 coho salmon, and 240 Chinook salmon (Table 3). The number of days that the fishery was open was below average, and the number of boats fishing was above average in weeks 30–32 and 33 and dropped below average in the final two weeks of the fishery.

Pink salmon catches peaked in week 32 with a harvest of 627,881 fish but dropped well below average in the normal peak weeks of the fishery (weeks 33 and 34). The total pink salmon harvest of 1,125,385 was 29% of the 1985–2019 average. Sockeye salmon catches were above average and the total catch of 23,991 fish was 107% of the average. Chum salmon harvests were above average through early August and then dropped sharply in the final two weeks of the fishery. The total chum salmon harvest of 73,285 fish was only 69% of the long-term average. Catches of coho salmon were well above average through week 32 and then dropped well below average in weeks 33 and 34. The total coho salmon harvest of 16,469 fish was 56% of the 1985–2019 average.

District 104 Purse Seine Fishery

The District 104 purse seine fishery opens by regulation on the first Sunday in July. In 2020, the first potential opening was July 5 (week 28). The pre-week 31 fishing plan for District 104 was based on the preseason Canadian Department of Fisheries and Oceans (DFO) forecast returns of

approximately 1,270,000 Nass and Skeena sockeye salmon. In the 2020 Treaty period (Alaska statistical weeks 28-30), 6,923 sockeye salmon were harvested during a 6-hour opening in week 30 (Table 4). The fishery was closed in weeks 28 and 29 due to low Skeena River sockeye salmon abundance. A total of 13 purse seine vessels fished at some time in the district during the Treaty period. In past years 60% to 80% of Treaty-period sockeye salmon have been of Nass and Skeena origin, therefore we would anticipate between 4,200 and 5,500 Nass and Skeena sockeye salmon may have been harvested in the District 104 purse seine fishery during the 2020 Treaty period. The final number of Nass and Skeena sockeye salmon harvested in the District 104 purse seine fishery was 5,300 fish.

In 2020, a total of 1,453,277 pink salmon, 143,877 sockeye salmon, 84,027 chum salmon, 19,705 coho salmon, and 3,833 Chinook salmon were harvested in the District 104 purse seine fishery (Table 4). The number of days that the fishery was open, and the number of boats fishing were both below the 1985–2019 average. Purse seine fisheries were on non-retention for Chinook salmon throughout most the season, except for weeks 32 through 34. Sockeye salmon harvests were below average in all weeks and the treaty period (week 28–30) harvest of 6,923 fish was only 7% of the 1985–2019 average. The total sockeye salmon harvest of 143,877 was 32% of the 1985–2019 average of 453,000 fish. Harvests of coho salmon were also well below average in all weeks and the overall harvest of 19,705 fish was 18% of the long-term average. The overall pink salmon harvest of 1,453,277 was only 19% of the long-term average and the chum salmon harvest of 84,027 was 29% of the long-term average.

Districts 105, 106, and 107 Purse Seine Fisheries

For the 2020 season, the combined Districts 105, 106, and 107 traditional state managed purse seine fisheries harvested 498,740 pink salmon, 54,717 chum salmon, 3,711 coho salmon, and 7,246 sockeye salmon.

District 101 Drift Gillnet Fishery

The 2019 PST agreement calls for abundance-based management of the District 101 drift gillnet fishery. The agreement specifies a harvest of 13.8 percent of the AAH of the Nass River sockeye run. For the 2020 season, DFO forecasted a total return of 386,000 Nass River sockeye salmon. The AAH is calculated as the total run of Nass sockeye salmon minus either the escapement requirement of 200,000 or the actual in-river escapement, whichever is less. The District 101 drift gillnet fishery opens by regulation on the third Sunday in June, which was June 21 in 2020. During the early weeks of the fishery, management is based on the run strength of Alaska wild stock chum and sockeye salmon and on the run strength of Nass River sockeye salmon. Beginning in the third week of July, when pink salmon stocks begin to enter the fishery in large numbers, management emphasis shifts by regulation to that species. By regulation, the District 101 Pink Salmon Management Plan begins the third Sunday in July and sets gillnet fishing time in this district in relation to the District 101 purse seine fishing time. Beginning in week 36 (August 30) management was based on the strength of wild stock fall chum and coho salmon.

The District 101 drift gillnet fishery opened Sunday June 21 (week 26) in 2020. The number of days the fishery was open was near average all season, but the number of boats fishing during

weekly openings was below average throughout the season. The total number of individual boats fishing during the season was 50, which was approximately 48% of the 1985-2019 average of 105 boats. A total of 9,348 sockeye salmon were harvested, which was only 9% of the 1985–2019 average of 109,130 fish, and the lowest harvest since the inception of the PST. Harvests of sockeye salmon were well below treaty period averages throughout the season. The cumulative sockeye salmon harvest prior to the initiation of the Pink Salmon Management Plan in Week 30 was 4,783 fish, or about 51% of the season's total sockeye salmon harvest. The final number of Nass River sockeye salmon harvested at Tree Point during the Treaty period was 7,528 fish.

Pink salmon harvests were below average most of the season and the total harvest of 186,278 fish was 39% of average. Chum salmon harvests were also below average in most weeks of the fishery and the total harvest of 136,083 fish was 46% of average. Coho salmon harvests were below average throughout the season and the total harvest of 20,277 fish was 42% of the treaty period average. Chinook salmon harvests were above average in most weeks of the season.

District 106 Drift Gillnet Fishery

The 2020 harvest in the District 106 commercial gillnet fishery included 152,583 pink salmon, 19,314 sockeye salmon, 154,105 chum salmon, 48,950 coho salmon, and 1,198 Chinook salmon (Table 6). The number of boats participating in the District 106 fishery was above average during July and below average in August and September. Chinook salmon harvests were below average in most weeks from late June through late August. Sockeye salmon harvests were below average all season, and the total sockeye salmon harvest of 19,314 fish was 15% of the recent 10-year average. The overall harvest of 48,950 coho salmon was 32% of the recent 10-year average of 136,800 fish. Pink salmon harvests were below average throughout the season, and the overall harvest of 152,583 fish was 43% of the recent 10-year average. Chum salmon harvests were near average throughout the season and the overall harvest of 154,105 chum salmon was 87% of the average.

Annette Island Reserve Fisheries

In 2020, the Annette Island purse seine fishery harvested 380,518 pink salmon, 19,056 chum salmon, 12,302 sockeye salmon, 1,908 coho salmon, and 241 Chinook salmon. The 2020 Annette Island drift gillnet fishery harvested 148,756 pink salmon, 56,676 chum salmon, 2,342 sockeye salmon, 5,659 coho salmon, and 571 Chinook salmon (Tables 7-8).

Pink, Sockeye, and Chum Salmon Escapements

The total 2020 Southeast Alaska pink salmon escapement index of 9.73 million index fish ranked 32nd since 1960. Biological escapement goals were met in the Southern Southeast and Northern Southeast Outside subregions, but escapement to the Northern Southeast Inside Subregion was below goal in 2020 (Table 9). On a finer scale, escapements met or exceeded management targets for 10 of 15 districts in the region and for 30 of the 46 pink salmon stock groups in Southeast Alaska. The Southern Southeast Subregion includes all of the area from Sumner Strait south to Dixon Entrance (Districts 101–108). The escapement index value of 5.7 million was within the escapement goal range of 3.0 to 8.0 million index fish. The pink salmon harvest of 6.3 million in

the Southern Southeast Subregion was below the recent 10-year average of 19.2 million fish. The overall Southeast Alaska pink salmon harvest of 8.1 million fish was approximately 23% of the 2010–2019 average of 35.4 million.

Sockeye salmon escapements throughout Southeast Alaska were mixed in 2020, and escapement targets were met for 6 of the 12 sockeye salmon systems with formal escapement goals. The Hugh Smith Lake adult sockeye salmon escapement was 3,860, which was well below the optimal escapement goal range of 8,000 to 18,000 adult sockeye salmon. Based on the expanded peak foot survey count, the escapement of sockeye salmon into McDonald Lake was 8,200 fish, which was well below the sustainable escapement goal range of 55,000 to 120,000.

For summer-run chum salmon, lower bound sustainable escapement goals were not met for two of the three subregions in Southeast Alaska. Runs are divided into summer and fall stocks. The Southern Southeast summer-run chum salmon stock group is composed of an aggregate of 15 summer-run chum salmon streams on the inner islands and mainland of southern Southeast Alaska, from Sumner Strait south to Dixon entrance, with a sustainable escapement goal of 62,000 index spawners (based on the aggregate peak survey to all 15 streams). Summer chum salmon escapements were below average at many index streams in southern Southeast Alaska, but the index of 70,000 in 2020 was above goal due to a large escapement to the Tombstone River in Portland Canal. Cholmondeley Sound is the only area in southern Southeast Alaska with a formal escapement goal for fall chum salmon. Fall chum salmon runs are monitored in Cholmondeley Sound through aerial surveys at Disappearance and Lagoon creeks. The escapement index of 30,000 was right at the lower bound of the sustainable escapement goal range of 30,000 to 48,000 index spawners (based on the aggregate peak survey to both streams).

Management Performance Relative to Pacific Salmon Treaty Requirements

District 104 Purse Seine Fishery

The 2019 revision of the Pacific Salmon Treaty Agreement calls for the implementation of abundance-based management in the District 104 purse seine fishery. The agreement allows the District 104 purse seine fishery to harvest 2.45 percent of the AAH of Nass and Skeena sockeye salmon prior to Statistical Week 31. The AAH is calculated as the total run of Nass and Skeena sockeye salmon minus either the escapement requirement of 1.1 million or the actual in-river escapement, whichever is less. The 2.45% AAH value was based on the weighted-average percent of the Nass and Skeena sockeye salmon AAH that would have been harvested in this fishery, during the 1985–1996 period, if the annual pre-week 31 harvest had been exactly 120,000 sockeye salmon. Catches from 1997 were not included in the baseline calculation due to unusually high levels of sockeye salmon abundance in the fishery. The ADF&G management intent is to harvest Nass and Skeena sockeye salmon at the allowable AAH percentage. The Treaty recognizes that overages and underages will occur and provides an overage/underage provision intended to hold the Parties accountable for their catch shares but permit a reasonable degree of management flexibility.

The total return of Nass and Skeena River sockeye in 2020 was 2.0 million fish. This return would

have allowed a treaty-period catch in the District 104 purse seine fishery of 21,644 Nass and Skeena river sockeye salmon. The 2020 total catch of sockeye salmon during the District 104 treaty period was 6,923 fish. Annual AAH fishery performance in the District 104 fishery is presented in Table 10 with bilaterally accepted numbers through 2019 and preliminary run reconstruction estimates for 2020. The final number of Nass and Skeena sockeye salmon harvested prior to week 31 in the District 104 purse seine fishery was 5,300 fish in 2020.

District 101 Drift Gillnet Fishery

The 2019 Pacific Salmon Treaty Agreement calls for abundance-based management of the District 101 drift gillnet fishery. The agreement allows the District 101 gillnet fishery to harvest 13.8 percent of the AAH) of Nass River sockeye salmon run. The AAH is calculated as the total run of Nass River sockeye salmon minus either the escapement requirement of 200 thousand, or the actual in-river escapement, whichever is less. The 13.8% AAH value was based on the weighted-average percent of the Nass sockeye salmon run that was harvested in this fishery during years 1985–1997. The ADF&G management intent is to harvest Nass River sockeye salmon at the allowable AAH percentage. The Pacific Salmon Treaty recognizes that overages and underages will occur and provides an overage/underage provision intended to hold the Parties accountable for their harvest shares while permitting a reasonable degree of management flexibility.

The total return of Nass River sockeye salmon in 2020 is estimated at 295,194 sockeye salmon. This return allows a catch in the District 101 gillnet fishery of 13,137 Nass River sockeye salmon. The 2020 total catch of sockeye salmon in the District 101 gillnet fishery was 9,342 fish, which was only 9% of the 1985-2019 average of 109,130 fish and was the lowest harvest since the inception of the Pacific Salmon Treaty. Annual AAH fishery performance in the District 101 gillnet fishery is presented in Table 11 with bilaterally accepted numbers through 2019 and preliminary run reconstruction estimates for 2020. The final number of Nass River sockeye salmon harvested in the District 101 drift gillnet fishery in 2020 was 7,528 fish.

2021 Southeast Alaska Pink Salmon Forecast

The Southeast Alaska pink salmon harvest in 2021 is predicted to be in the average range, with a point estimate of 28 million fish (80% prediction interval: 19–42 million fish). An actual harvest of 28 million pink salmon would be approximately a third of the recent 10-year average of 35 million pink salmon. The harvest forecast was primarily based on juvenile pink salmon abundance indices collected by the NOAA/ADF&G Southeast Coastal Monitoring Project in northern Southeast Alaska inside waters during June and July. A multiple regression model was developed, using monthly peak juvenile CPUE (standardized catch based on 20-minute trawl sets) for the June and July surveys and an Icy Strait Temperature Index. Formal forecasts are not made for species other than pink salmon in Southeast Alaska.

NORTHERN BRITISH COLUMBIA

2020 Preseason Salmon Forecast

Area 1 Expectations

- Sockeye** There are no significant local sockeye salmon stocks in Area 1 and no directed commercial fisheries on passing stocks.
- Pink** The outlook prediction for Haida Gwaii even-year pinks is below average based on the poor even-year escapements that have been trending below average for the last 3 cycles, and poor juvenile pink abundance indices observed in SEAK.
- Chum** Returns have been variable and trending downward in recent years. Fisheries will only occur on terminal surpluses identified in-season.

Area 3 Expectations

- Sockeye** Nass River Sockeye returns are forecasted to be average to below average with an expected total return to Canada from 258,000 (75% probability) to 583,000 (25% probability) and a point estimate of 386,000 (50% probability) based on a sibling-regression model. Nass Sockeye returns will be carefully monitored to account increasing uncertainty and recent trends towards lower survival. Fishery opportunities will be determined in-season.
- Pink** Pink returns to the Nass watershed have been dominant in odd years since the 1980s. Area 3 even year pink salmon are influenced mostly by returns to Kwinimass and Khutzymateen rivers. Area 3 even-year pink have been trending above average over the last 3 generations. Fisheries will be determined based on in-season estimates of abundance.
- Chum** Area 3 chum salmon stocks remain below target escapement levels, though recent improvements in aggregate return are encouraging. Nonetheless, fishing opportunities will be constrained to reduce impacts to wild chum salmon returning to Area 3 streams.

Area 4 Expectations

- Sockeye** The total Skeena Sockeye return is expected to be low to modest with a pre-season return forecast from 0.41 million (90% probability) to 1.9 million (10% probability) and a point estimate of 0.88 million (50% probability) based on the sibling model. No harvestable surpluses are anticipated, but fishing opportunities will be determined based on in-season estimates of abundance.

- Pink*** Area 4 even-year pink salmon have been trending above average over the last 3 generations. Fisheries will be determined based on in-season estimates of abundance.
- Chum*** Skeena River chum salmon escapements are depressed and there will be no chum salmon retention in Area 4.

Area 5 Expectations

- Sockeye*** Commercial fisheries targeting sockeye salmon will depend on Skeena River returns.
- Pink*** Pink salmon targeted fisheries in Area 5 are not anticipated but will be dependent on fishing opportunities in Area 4.
- Chum*** Local chum salmon stocks are depressed, and no surplus is anticipated.

Review of 2020 Fishing Season - Net and Troll Fisheries

Area 1

Commercial net interception fisheries on passing salmon stocks no longer occur in Area 1 (Figure 3), focusing instead on local pink and chum salmon stocks. Pink salmon stocks are primarily even-year dominant, however, the returns were expected to be below average in 2020. No gillnet fisheries occurred in 2020 (Table 12). A surplus of pink salmon returning to Yakoun River was identified in Masset Inlet. A commercial seine opening occurred on August 24 for 12 hours, which was extended until August 31. Ten seines participated in the fishery, with a final effort of 35 boat days. A total of 183,297 pink salmon were harvested throughout the duration of the fishery (Table 13). Chum salmon returns to Area 1 have been consistently at or below management targets for the past two decades. Therefore, no chum surpluses were identified in-season in Area 1 (Tables 12-13).

The Area 1 troll fishery was managed considering domestic Chinook, sockeye and chum salmon stocks of concern, and the PST Aggregate Abundance-Based Management Chinook salmon ceiling. An Individual Transferable Quota system governed the harvest of all chinook salmon. Additional management measures were implemented to address the ongoing low abundance and productivity for North Coast Coho stocks. The 2020 management plan included a reduction of 50% reduction in coho harvest rate. To accomplish this, the coho-directed Area F fishery opening was delayed until August 1. The pink and coho-directed troll fishery in Dixon Entrance was opened from July 1 to September 30 at the A-B Line, in sub-areas 101-4, -5, -8, -9, and a portion of -3. Further spatial openings for the directed coho and pink troll fishery occurred on August 1 in portions of Area 1, 3, and 101-106. The chinook-directed salmon fishery in portions of Area 1 and 101 was opened from August 15 to September 30, in response to concerns of Fraser River and West Coast Vancouver

Island Chinook stocks of concern. The troll fishery closed on September 30; sockeye and chum retention were restricted throughout the season.

The preliminary catch estimate for the Area 1 portion (includes Area 101) of the 2020 troll fishery is 0 sockeye, 77,057 coho, 133,031 pink, 0 chum and 15,581 Chinook salmon (Table 14).

Area 3

Management units (sub-areas) of Statistical Area 3 are outlined in Figure 5. In recent years, the Area 3 sockeye salmon gillnet fishery has started in early to mid-June to assess stock strength of returning Nass-bound sockeye salmon, however no assessment fishery was implemented in 2020. Since 1994, in-season escapement estimates have been provided by the Nisga'a fishwheel operations conducted in the lower Nass River approximately five miles upstream from the old Nass gillnet test fishery site. In 2020, fishwheel operations began on May 31st and closed for the season on September 12th. Operations were shut down in one or both of the fishwheels due to high-water events on June 20-22, July 3, July 17, and from August 15 to 25. Water levels at the fishwheel were the fifth highest on record over the 27 years of operation. The Nass River fishwheel operation, along with the Nisga'a Fisheries Program, continues to be an example of quality stock assessment and effective fisheries co-management.

In general, the Area 3 net fishery is managed for Nass River sockeye salmon until mid-July after which the outer Area 3 fishery is managed based on Nass and Skeena pink and Skeena sockeye salmon stock abundance. The inside Area 3 (Sub-areas 3–7 to 17) net fishery is managed for Nass sockeye and local pink salmon abundance from mid-July to late August or early September. In 2020, gillnet fisheries in Area 3 were closed due to low returns of sockeye past the Gitwinsilhk fishwheels, thus no harvestable surplus was identified (Table 15-17).

Area 3 pink escapement in 2020 were expected to be low, coming off two poor brood years into the Khutzeymateen and Kwinamass rivers. A conservative approach was undertaken by DFO with the first seine assessment fishery occurring on July 6 Week 28 around the south end of Wales Island and Sommerville Island (Table 18-20). In 2020, the seine opening, which were pink-directed fisheries, operated with non-retention/non-possession restrictions for coho, chinook, sockeye, and steelhead. Thirteen seines participated in the 16-hour opening resulting in a total catch of 1,816 pink and 1,751 chum salmon (Table 18,20). Unfortunately, pink salmon escapements did not improve, and no further opportunities were granted. No seine opportunities were permitted in Area 3 sub areas 7-17 (Table 19)

There were no Nisga'a individual sale marine fisheries in 2020, and the Nisga'a food, social, and ceremonial fishery was closed for 17 days, from July 13-29, due to low returns of Nass sockeye and Chinook. Total Nisga'a Treaty and Harvest Agreement catches in both the Nass River and the marine approach areas included 39,390 sockeye, 3,796 coho, 5,545 pink, 903 chum, and 7,773 Chinook salmon. In 2020, there were no permitted Area 3 In-land or marine Economic Demonstration fisheries.

In-season coho salmon returns to the Nass River Fishwheels indicated a below average return in 2020, following two years of poor returns to the North Coast. In response, the Area F directed Coho fishery, with pink retention, was delayed until August 1st, the goal to reduce the harvest rates

by approximately 50%. This fishery did not permit the retention of sockeye due to low returns to the Nass and Skeena rivers and chum to protect Haida Gwaii mainland and Area 2E stocks. Total catch from the Area 103 troll fisheries was 523 coho and 71 pink salmon, with a combined effort of 9 boat days over 61 days open to fishing (Table 21). There was no effort in Area 3 in 2020.

The end of season preliminary total return to Canada (TRTC) estimates for Nisga'a Treaty accounting are 266,000 sockeye, 133,000 coho, 654,000 pink, 112,000 chum and 24,000 Chinook salmon. Chum and pink escapements were above the 2000–2019 mean escapement values, while sockeye, Chinook and coho escapements were below the 2000–2019 mean values.

The preliminary post-season sockeye salmon escapement estimate to the upper Nass River of 335,990 exceeding the escapement target of 200,000. The Meziadin River escapement of 273,955 was above both the 2000-2020 average (149,986) and the desired escapement target (160,000). The Kwinageese River sockeye salmon escapement of 8,441 is above the 2002-2020 average (4,199).

Area 4

The sibling-model forecast predicted a 50% probability of approximately 0.88 million sockeye salmon returning to the Skeena River in 2020 with a 10% probability of the return exceeding 1.9 million and a 90% probability the return will exceed 0.41 million fish. The sockeye return was expected to be poor but net fishery openings would be dependent on in-season estimates of abundance. In-season abundance indicators include the Tyee test fishery, various in-river fish counting facilities, harvest rate and CPUE models, First Nation's FSC fish catches and commercial catches in Area 4 and other fishing areas in Northern BC and Southern Southeast Alaska. The Tyee test fishery operated from June 10 to September 26 in 2020.

With the concerns surrounding Chinook salmon returning to Area 4 no targeted Chinook salmon gillnet openings were planned for 2020. Early in the season sockeye salmon escapement was trending at very low levels which was in-consistent with the 2020 preseason forecast for the Skeena River. In-season estimates of Total Return to Canada (TRTC) did not exceed the minimum conservation threshold of 400,000 until July 25. In the first week of August sockeye salmon escapement past Tyee improved and continued to increase, the abundance indicated a strong enough return to open a gillnet fishery.

In Week 32, there were two sockeye salmon targeted gillnet fisheries (August 6 and 7), each with a 16-hour opening. There was relatively low effort through the fishery openings (201 boat days total) with 22,807 sockeye and 9,363 pink salmon retained (Table 22). All Area 4 gillnet fisheries were conducted with non-retention non-possession of coho, chum, Chinook, and steelhead. There were no seine opportunities in Area 4 in 2020 (Table 23).

Portions of Area 104 were open to troll for coho and pink salmon retention from August 1 to September 30. The Area 104 total hauled catch for the 2020 troll season was 4,851 coho and 3,435 pink (Table 24).

The Skeena Total Return to Canada (TRTC) is estimated at various points during the season using escapement estimates from Tyee, marine catch in Area 3/4/5, and reconstructed (historic) run-timing proportions for Skeena River sockeye salmon as they enter Area 3/4/5, but forward-lagged to Tyee for calculation purposes. Two versions of the TRTC estimate are provided in-season: a simple p50 estimate based on several “average” run-timing scenarios with no consideration of escapement estimate variability, and a stochastic p50 version incorporating both run-timing and escapement variability. Post-season analysis indicates that the 50% peak entry date of Skeena sockeye salmon into the outer portion of the Skeena sockeye fishing area was on July 28, 6-7 days later than the average date of July 21/22. Later run timing for Skeena sockeye entering the outer portion of Areas 3, 4 and 5 has most recently been observed in 6 of the last 10 years. The preliminary post-season sockeye salmon escapement estimate to the Skeena River is 1,448,135 exceeding the escapement target of 900,000, with a preliminary total run estimate of 1,611,326.

In the marine water of Area 4, Chinook, coho, and pink salmon began open, sockeye opened on August 6, 2020. Recreational marine fishing for Chinook was reduced to one per day in marine waters in Area 4 from June 1 to July 14 to address concerns of Skeena Chinook. Chum remained closed for the 2020 fishing season in Area 4. Recreational fishing for Skeena River sockeye started with normal daily limits and opening times for Chinook, coho, and pink salmon in 2020. On May 19, the entire Skeena River watershed was closed to Chinook salmon until July 15. Chinook opened from July 15 to August 14 in the Skeena River watershed to 2 a day before closing on August 15 for the remainder of the season. Skeena sockeye started closed and opened to 1 a day on August 5 when the trigger of 180,000 sockeye passed the Tyee test site. On August 12, the daily Skeena River watershed sockeye limit was increased to 2 per day. The Lower Skeena Creel Survey started on July 15 and continued through September 18. The survey reported a retained catch of 534 Large Chinook, 538 Jack Chinook, 583 Coho, 1,737 Sockeye, and 167 Pink salmon. There was no creel program on Babine Lake in 2020.

The North Coast Skeena First Nation Stewardship Society (NCSFNSS), Metlakatla First Nation, and Lake Babine Nation (LBN) all participated in the Skeena River Demonstration Fishery for 2020. Marine demonstration fishery opportunities for NCSFNSS and Metlakatla First Nation occurred in Areas 4-9, 4-12, and 4-15, and Lake Babine Nation harvested at the Babine Counting Fence. Combined, these fisheries harvested 3,474 Skeena sockeye.

First Nation’s Food, Social and Ceremonial fisheries throughout the Skeena River mainstem and marine approach waters reported a harvest of 137,077 sockeye, 3,438 coho, 5,016 pink, 59 chum and 4,931 Chinook salmon. There were no Excess to Salmon Spawning Requirements (ESSR) opportunities for sockeye salmon in the Skeena River in 2020.

Escapement to the Pinkut spawning channels and river was 404,969 effective spawners of a total capacity of 88,000. Female sockeye target of 29,000 were not met with only 24,000 female sockeye loaded into the channel. Egg targets were not met in Pinkut Channel with 51 million eggs deposited, 22 million fewer than the target. In 2020, the Pinkut Creek facility was vandalized, female loading numbers and egg deposition is not known. The combined escapement to Fulton River spawning channels #1 and #2 and the Fulton River above the fence totalled 446,912 effective spawners of a total capacity of 381,000. Female loading targets were reached in Channel #2 with

60k loaded (58k target). Channel #1 and Fulton River female loading targets were not met, with 104k sockeye loaded of the target 110k. Egg deposition targets were met in the Fulton facilities.

Area 5

Management of the Area 5 fishery during July is based on Skeena River sockeye salmon abundance, and fisheries up to mid-August are opened alongside fisheries in Area 4. From late July to early August, the fishery targets Skeena River pink salmon stocks which use Area 5 as a migration route. In mid to late August, fisheries are managed for harvest of local pink salmon stocks. In 2020, there were no commercial seine or gillnet fisheries in Area 5 (Tables 25-26).

For the troll fleet, portions of Area 105 were opened from August 1 to September 30 to target coho and pink salmon. The Area 105 total hauled catch for 2020 troll season was 2,481 coho and 189 pink salmon (Table 27).

Fishing Effort (Seine and Gillnet)

In Area 1, the total commercial gillnet effort was 0 boat days, which is below the 2000-2009 average effort of 2.6 boat days, and the same as the 2010-2019 decadal average effort of 0 boat days. There were no gillnet openings in 2020, below the 2000-2009 decadal average of 1.5 days fishing and the same as the 2010-2019 decadal average. The total Area 1 seine effort of 35 boat days is also above the 2000-2009 average of 0.7 boat days, and the previous decadal average of 1.7 boat days. In 2020, there the seine fishery spent 9 days fishing, above the 2000-2009 average effort of 0.2 days fishing and 2010-2019 decadal average of 1.1 days fishing (Table 28).

In Area 3, the total commercial gillnet effort was 0 boat days, which is well below the 2000-2009 average effort of 2,283 boat days, and the decadal average effort of 962.5 boat days. The total Area 3 seine effort of 13 boat days is also well below the 2000-2009 average of 265.9 boat days, and the previous decadal average of 148.5 boat days. There were no gillnet openings, while seines fished 1 day, well below the 2000-2009 averages of 13.2 and 12.1 days fishing, respectively, and below the decadal averages of 9.5 and 7.7 days, respectively (Table 28).

In Area 4, the total commercial gillnet effort was 201 boat days, which is well below the 2000-2009 average effort 2892.4 boat days, and the decadal average effort of 633.9 boat days. Gillnets fished for 2 days in 2020, below the 2000-2009 decadal average of 10.2 days fishing and the same as the 2010-2019 decadal average of 4.9 days fishing. There were no seine openings in Area 4 in 2020. Seine effort was below the 2000-2009 and 2010-2019 decadal averages for boat days, 256.5 and 41 boat days, respectively, and days fishing, 9.8 and 4.3 days, respectively.

There were no commercial fishing opportunities granted in Area 5 in 2020, thus the total number of boat days and days fishing for gillnet and seine fisheries were zero. This is well below the gillnet boat days and days fishing 2000-2009 averages of 49.8 and 5.8, respectively, and below the 2010-2019 decadal averages of 4.6 and 2.2, respectively. Also, well below the seine fishery boat days and days fishing 2000-2009 averages of 36.4 and 8.8 respectively, and below the 2010-2019 decadal averages of 0.6 and 0.2, respectively (Table 28).

Salmon Escapements

The cumulative preliminary escapements for Canadian Areas 3 to 5 in 2020 are 1,663,597 sockeye; 18,759 coho; 585,275 pink; 60,672 chum; and 13,846 Chinook salmon (Table 29).

Annual salmon escapements for Canadian Area 1, 3, 4, and 5 can be found in Tables 30-33.

Management Performance Relative to Treaty Requirements

Areas 3 (1-4) Pink Net Catch (Preliminary)

For 2020, Canada was to manage the Area 3-1 to 3-4 net fisheries to achieve an annual catch share of 2.49% of the annual allowable harvest (AAH) of Alaskan Districts 101, 102 and 103 pink salmon. With a total return of approximately 17.36 million pink salmon, the Alaskan Districts 101, 102 and 103 AAH was approximately 6.61 million pink. The resulting Area 3-1 to 3-4 Canadian commercial net total allowable catch of this AAH was approximately 164,545 salmon of Alaskan Districts 101, 102 and 103 origin.

In the Canadian northern boundary area, pink salmon returns were anticipated to be average to above average for Area 3 and Area 4, based on brood year return strength. Escapement to Area 3 was above the last decadal average, while in Area 4 pink escapement is below the last decadal average (Table 31-32). The 2020 preliminary Canadian pink salmon catch in Sub-areas 3-1 to 3-4 was 1,816, and the Alaska stock component of this catch is estimated to be 1,793, or 0.03% of the AAH. This result is below the annex agreement of 2.49% (Table 34).

Area 1 Pink Troll Fishery (Preliminary)

For 2020, Canada was to manage the Area 1 troll fishery to achieve an annual catch share of 2.57% of the annual allowable harvest (AAH) of Alaskan Districts 101, 102 and 103 pink salmon. With a total return of approximately 17.36 million pink salmon, the Alaskan Districts 101, 102 and 103 AAH was approximately 6.61 million pink. The resulting Area 1 Canadian commercial net total allowable catch of this AAH was approximately 169,832 salmon of Alaskan Districts 101, 102 and 103 origin.

The Canadian commercial troll fishery targeting pink salmon was open in the northern portion of Area 1 (Dixon Entrance AB Line) from July 1 to September 30. Pink retention was also permitted during the Chinook-directed fishery in parts of Area 1, which was open from August 15 to September 30. Effort directed at pink salmon in Area 1 was minimal in 2020, with pinks being harvested as by-catch in fisheries directed at coho and Chinook. The fishery harvested a total of 133,167 pink salmon, with an estimated 111,616 being of Alaskan origin. This equates to 1.69% of the Alaskan District 101, 102 and 103 pink AAH, well below the annex agreement of 2.57% (Table 35).

The pattern of total Area 1 weekly pink salmon troll catches in 2020 is illustrated in Table 14.

2021 Preseason Salmon Forecast Northern British Columbia

Expectations and fishing plans for 2021 are still preliminary. Specific opening dates and fishing patterns are determined through consultations with industry and since this process has not yet been completed it is too early to provide details. A summary of the forecasts for Areas 1, 3, 4 and 5 is provided in Table 36.

Area 1 Expectations

Sockeye There are no significant local sockeye stocks in Area 1 and no directed commercial fisheries on passing stocks.

Pink Haida Gwaii stocks are even-year dominated, odd-year cycle opportunities are determined in season. Given the trends in low odd-year escapements, no opportunities are anticipated.

Chum There has been a continued trend of poor productivity and low returns over the last decade. Fisheries will only occur if a terminal surplus is identified in season.

Area 3 Expectations

Sockeye Pre-season Nass River Sockeye returns are forecast to be below average with an expected total return to Canada from 217,000 (75% probability) to 469,000 (25% probability) and a point estimate (50% probability) of 318,000 based on a sibling-regression model. The returns of Nass Sockeye will be monitored in-season considering increasing uncertainty and recent trends towards lower survival.

Pink Below average return was expected based on below average brood year escapements.

Chum Area 3 chum stocks remain below target levels with a below average return expected in 2021. Fishing opportunities were constrained to reduce impacts to wild chum returning to Area 3 streams.

Area 4 Expectations

Sockeye The sibling model forecast predicted a 50% probability of approximately 1.69 million sockeye returning to the Skeena in 2021 with a 10% probability of the return exceeding 3.61 million and a 90% probability the return would exceed 796,000. Modest surpluses are anticipated, and commercial opportunities will be based on in-season estimates.

Pink A below average return was expected based on brood year escapements. Area 4 pink salmon returns are generally stronger in odd years but have been trending low in recent

years. Fishing opportunities in Area 4 will be based on in-season indications of abundance, but are not anticipated

Chum Skeena chum escapements are depressed and well below average returns are expected. No harvestable surpluses of Area 4 chum are expected.

Area 5 Expectations

Sockeye Commercial fisheries targeting sockeye salmon are concurrent with fisheries targeting Skeena River stocks. The sibling model forecast predicted a 50% probability of approximately 1.69 million sockeye returning to the Skeena in 2021 with a 10% probability of the return exceeding 3.61 million and a 75% probability the return would exceed 796,000. Modest surpluses are anticipated, and commercial opportunities will be based on in-season estimates.

Pink Area 5 pink salmon returns are generally stronger in odd years, but continue to follow a trend of poor returns in recent years. Fishing opportunities in Area 5 will be based on in-season indications of abundance, but are not anticipated.

Chum Local chum stocks are depressed with a well-below average return expected in 2021. No harvestable surpluses are expected.

TABLES

Table 1.—Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 101 purse seine fishery.

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
28	July 5, 2020	July 5, 2020	33	15	495	0	401	695	56,026	3,163	60,285
29	July 12, 2020	July 12, 2020	42	15	630	0	1,212	860	97,114	6,840	106,026
29B	July 16, 2020	July 16, 2020	54	15	810	0	1,917	759	164,333	7,675	174,684
30	July 19, 2020	July 19, 2020	42	15	630	0	2,143	446	150,434	5,955	158,978
30B	July 23, 2020	July 23, 2020	76	15	1,140	0	3,130	785	134,267	9,996	148,178
31	July 26, 2020	July 26, 2020	50	15	750	0	3,872	1,178	160,869	12,275	178,194
31B	July 30, 2020	July 30, 2020	39	15	585	0	1,971	599	115,332	3,886	121,788
32	August 2, 2020	August 2, 2020	19	15	285	86	3,300	814	95,358	7,222	106,780
32B	August 5, 2020	August 5, 2020	32	15	480	58	5,891	1,157	109,820	5,296	122,222
32C	August 8, 2020	August 8, 2020	22	15	330	42	11,251	956	98,691	5,817	116,757
34	August 16, 2020	August 16, 2020	28	15	420	48	5,867	2,515	93,000	4,283	105,713
Season Total			102	165	6,555	234	40,955	10,764	1,275,244	72,408	1,399,605

Table 2.–Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 102 purse seine fishery.

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
26	June 21, 2020	June 24, 2020	25	87	2,175	0	119	712	7,309	11,384	19,524
27	June 28, 2020	July 1, 2020	40	87	3,480	0	588	1,370	11,369	22,968	36,295
28	July 5, 2020	July 5, 2020	14	15	210	0	161	288	2,556	6,368	9,373
29	July 12, 2020	July 12, 2020	28	15	420	0	425	743	5,565	17,873	24,606
29B	July 16, 2020	July 16, 2020	20	15	300	0	678	903	17,327	23,446	42,354
30	July 19, 2020	July 19, 2020	25	15	375	0	507	734	11,744	16,577	29,562
30B	July 23, 2020	July 23, 2020	17	15	255	0	307	382	33,421	7,747	41,857
31	July 26, 2020	July 26, 2020	1	15	15	0	9	16	110	1,058	1,193
31B	July 30, 2020	July 30, 2020	28	15	420	0	1,303	1,128	127,335	6,813	136,579
32	August 2, 2020	August 2, 2020	23	15	345	47	2,622	1,574	188,757	4,500	197,500
32B	August 5, 2020	August 5, 2020	22	15	330	35	2,570	1,648	179,106	5,004	188,363
32C	August 8, 2020	August 8, 2020	38	15	570	21	1,859	1,558	199,908	3,919	207,265
33B	August 13, 2020	August 13, 2020	40	15	600	37	3,390	1,771	184,143	6,448	195,789
34	August 16, 2020	August 16, 2020	16	15	240	4	1,320	537	42,374	2,985	47,220
Season Total			98	354	9,735	144	15,858	13,364	1,011,024	137,090	1,177,480

Table 3.—Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 103 purse seine fishery.

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
30B	July 23, 2020	July 23, 2020	30	15	450	0	2,507	1,763	67,280	13,095	84,645
31	July 26, 2020	July 26, 2020	28	15	420	0	4,719	1,799	51,633	5,909	64,060
31B	July 30, 2020	July 30, 2020	20	15	300	0	2,839	1,692	104,101	7,266	115,898
32	August 2, 2020	August 2, 2020	33	15	495	109	4,742	1,801	174,036	7,229	187,917
32B	August 5, 2020	August 5, 2020	47	15	705	77	3,251	2,988	236,019	11,898	254,233
32C	August 8, 2020	August 8, 2020	43	16	688	15	2,333	3,169	217,826	15,516	238,859
33B	August 13, 2020	August 13, 2020	23	15	345	16	1,589	1,557	147,276	7,400	157,838
34	August 16, 2020	August 16, 2020	36	15	540	23	2,011	1,700	127,214	4,972	135,920
Season Total			94	121	3,943	240	23,991	16,469	1,125,385	73,285	1,239,370

Table 4.—Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 104 purse seine fishery.

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
30	July 19, 2020	July 19, 2020	13	6	78	0	6,923	2,199	66,720	3,960	79,802
31	July 26, 2020	July 26, 2020	33	15	495	0	12,510	2,707	85,307	6,874	107,398
31B	July 30, 2020	July 30, 2020	71	15	1,065	0	41,647	4,166	509,164	19,872	574,849
32	August 2, 2020	August 2, 2020	68	15	1,020	771	26,546	2,195	191,282	15,571	236,365
32B	August 5, 2020	August 5, 2020	35	15	525	181	11,930	1,352	136,292	12,570	162,325
32C	August 8, 2020	August 8, 2020	23	15	345	103	10,158	1,085	111,983	7,812	131,141
33B	August 13, 2020	August 13, 2020	37	15	555	1,914	21,002	2,975	260,760	12,031	298,682
34	August 16, 2020	August 16, 2020	39	15	585	864	13,161	3,026	91,769	5,337	114,157
Season Total			99	111	4,668	3,833	143,877	19,705	1,453,277	84,027	1,704,719

Table 5.—Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 101 drift gillnet fishery.

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
26	June 21, 2020	June 25, 2020	25	96	2,400	348	1,469	221	228	7,862	10,128
27	June 28, 2020	July 2, 2020	26	96	2,496	519	1,931	534	2,113	10,966	16,063
28	July 5, 2020	July 9, 2020	31	96	2,975	304	705	821	8,635	12,684	23,149
29	July 12, 2020	July 16, 2020	33	96	3,167	200	669	1,253	15,887	20,041	38,050
30	July 19, 2020	July 23, 2020	36	96	3,455	297	1,866	1,324	36,136	33,555	73,178
31	July 26, 2020	July 30, 2020	39	96	3,743	87	1,421	932	73,002	23,760	99,202
32	August 2, 2020	August 7, 2020	32	120	3,839	14	328	1,295	21,851	8,312	31,800
33	August 9, 2020	August 11, 2020	21	48	1,008	10	146	554	6,943	4,531	12,184
34	August 16, 2020	August 18, 2020	26	48	1,248	6	292	1,038	10,422	5,146	16,904
35	August 23, 2020	August 27, 2020	29	96	2,784	8	340	3,232	9,490	6,144	19,214
36	August 30, 2020	September 3, 2020	23	96	2,208	6	170	4,382	1,543	2,203	8,304
37	September 6, 2020	September 10, 2020	22	96	2,112	7	8	2,637	23	574	3,249
38	September 13, 2020	September 17, 2020	19	96	1,824	6	3	2,054	5	305	2,373
Season Total			50	1,176	33,258	1,812	9,348	20,277	186,278	136,083	353,798

Table 6.—Weekly commercial catch and fishing effort by opening in the 2020 Alaska District 106 drift gillnet fishery.

Week	Openings	Closures	Effort			Catch					Total
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	
26	June 21, 2020	June 23, 2020	32	48	1,535	91	449	190	109	2,594	3,433
27	June 28, 2020	July 1, 2020	45	72	3,239	575	2,045	1,006	3,824	15,388	22,838
28	July 5, 2020	July 7, 2020	54	48	2,591	156	1,732	1,161	4,174	11,787	19,010
29	July 12, 2020	July 14, 2020	58	48	2,783	159	1,268	1,511	7,858	26,872	37,668
30	July 19, 2020	July 21, 2020	71	48	3,407	60	1,573	1,391	9,993	15,597	28,614
31	July 26, 2020	July 28, 2020	78	48	3,743	76	1,740	2,068	33,461	24,892	62,237
32	August 2, 2020	August 4, 2020	51	48	2,447	14	643	890	15,083	7,205	23,835
33	August 9, 2020	August 12, 2020	40	72	2,879	9	679	2,001	24,430	11,804	38,923
34	August 16, 2020	August 18, 2020	53	48	2,543	12	759	2,878	20,310	7,279	31,238
35	August 23, 2020	August 25, 2020	45	48	2,159	5	327	3,573	6,981	2,950	13,836
36	August 30, 2020	September 2, 2020	39	72	2,807	2	74	7,393	1,199	5,190	13,858
37	September 6, 2020	September 9, 2020	50	72	3,599	14	21	11,892	158	6,989	19,074
38	September 13, 2020	September 16, 2020	48	72	3,455	5	4	6,996	3	4,558	11,566
39	September 20, 2020	September 22, 2020	19	48	912	4	0	900	0	472	1,376
Season Total			120	792	38,101	1,182	11,314	43,850	127,583	143,577	327,506

Table 7.—Weekly commercial catch and fishing effort by opening in the 2020 Annette Island Reserve purse seine fishery.

Week	Openings	Closures	Effort		Catch					
			Boats ¹	Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
27	June 29, 2020	June 29, 2020	1	15	18	12	40	4,322	615	5,007
27B	July 2, 2020	July 2, 2020	1	15	49	24	49	3,479	682	4,283
28	July 5, 2020	July 5, 2020	1	15	45	62	81	11,721	826	12,735
29	July 13, 2020	July 13, 2020	1	15	37	314	99	31,647	1,486	33,583
29B	July 15, 2020	July 15, 2020	1	15	0	0	0	0	0	0
30	July 19, 2020	July 19, 2020	1	15	1	446	135	43,289	2,622	46,493
30B	July 22, 2020	July 22, 2020	1	15	7	369	73	36,937	1,797	39,183
31	July 27, 2020	July 27, 2020	1	15	0	473	156	43,687	2,269	46,585
31B	July 31, 2020	July 31, 2020	1	15	19	114	65	24,605	1,024	25,827
32	August 2, 2020	August 2, 2020	1	15	27	165	98	58,917	2,372	61,579
32B	August 5, 2020	August 6, 2020	1	39	21	5,508	504	67,737	3,235	77,005
33	August 10, 2020	August 10, 2020	1	15	16	4,384	517	35,415	1,601	41,933
33B	August 13, 2020	August 13, 2020	1	15	1	431	91	18,762	527	19,812
34	August 16, 2020	August 16, 2020	1	15	0	0	0	0	0	0
37	September 6, 2020	September 6, 2020	1	15	0	0	0	0	0	0
38	September 14, 2020	September 14, 2020	1	15	0	0	0	0	0	0
Season Total				264	241	12,302	1,908	380,518	19,056	408,678

¹All landing under Annette Island fisheries are placed under one Commercial Fisheries Entry Commission license, therefore it is shown as one boat. Information is based solely on data given to the department by Annette Island salmon processors and is not confirmed by ADFG managers as complete.

Table 8.—Weekly commercial catch and fishing effort by opening in the 2020 Annette Island Reserve gillnet fishery.

Week	Openings	Closures	Effort		Catch					
			Boats ¹	Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
25	June 14, 2020	June 17, 2020	1	72	37	7	2	40	265	351
26	June 21, 2020	June 24, 2020	1	72	63	1	1	333	712	1,110
27	June 28, 2020	July 2, 2020	1	96	185	28	13	4,801	3,455	8,482
28	July 5, 2020	July 8, 2020	1	72	93	70	40	9,773	3,149	13,125
29	July 12, 2020	July 16, 2020	1	96	119	354	122	13,878	10,843	25,316
30	July 19, 2020	July 23, 2020	1	96	47	158	142	18,718	10,032	29,097
31	July 26, 2020	July 30, 2020	1	96	14	67	210	25,472	9,706	35,469
32	August 2, 2020	August 7, 2020	1	120	1	144	140	18,857	7,183	26,325
33	August 9, 2020	August 13, 2020	1	96	2	373	307	30,573	5,846	37,101
34	August 16, 2020	August 19, 2020	1	72	9	1,104	421	20,761	2,259	24,554
35	August 23, 2020	August 26, 2020	1	72	0	33	928	4,448	1,375	6,784
36	August 30, 2020	September 2, 2020	1	72	1	2	1,459	1,078	808	3,348
37	September 6, 2020	September 9, 2020	1	72	0	1	999	24	683	1,707
38	September 13, 2020	September 16, 2020	1	72	0	0	875	0	360	1,235
Season Total				1,176	571	2,342	5,659	148,756	56,676	214,004

¹All landing under Annette Island fisheries are placed under one Commercial Fisheries Entry Commission license, therefore it is shown as one boat. Information is based solely on data given to the department by Annette Island salmon processors and is not confirmed by ADFG managers as complete.

Table 9.—Southern Southeast Alaska pink salmon escapement indices by stock group and district for 2020 (in millions).

Stock group	District	Pink salmon index 2020	Management target		Met minimum escapement	Recent 10-year average
E Behm	101	1.24	0.67	1.77		1.73
Portland	101	0.39	0.1	0.28	+	0.47
W Behm	101	0.47	0.25	0.66		0.56
Kasaan	102	0.53	0.24	0.64		0.80
Moirra	102	0.06	0.05	0.13		0.16
E Dall	103	0.21	0.13	0.36		0.28
Hetta	103	0.74	0.30	0.79		0.72
Klawock	103	0.74	0.42	1.11		0.83
Sea Otter Sound	103	0.16	0.10	0.28		0.18
Affleck Canal	105	0.21	0.14	0.38		0.25
Shipley Bay	105	0.18	0.11	0.28		0.17
Burnett	106	0.09	0.05	0.14		0.10
Ratz Harbor	106	0.10	0.04	0.12		0.10
Totem Bay	106	0.07	0.05	0.13		0.07
Whale Pass	106	0.14	0.07	0.18		0.10
Anan	107	0.21	0.21	0.57	-	0.31
Union Bay	107	0.09	0.05	0.12		0.09
Stikine	108	0.04	0.02	0.06		0.05
District Total	101	2.10	1.02	2.71		2.76
District Total	102	0.59	0.29	0.77		0.96
District Total	103	1.85	0.95	2.54		2.01
District Total	105	0.39	0.25	0.66		0.42
District Total	106	0.40	0.21	0.57		0.37
District Total	107	0.30	0.26	0.69		0.41
District Total	108	0.04	0.02	0.06		0.05
Southern Southeast Alaska Total		5.66	3.00	8.00		6.98

Table 10.—Preliminary annual allowable harvest (AAH) calculations for the Alaska District 104 Week 27-30 purse seine fishery, 1999-2020.

Year	Nass/Skeena Total Return	Nass/Skeena Escapement	Allowable Nass/ Skeena AAH	Allowable Dist. 104 Nass/Skeena Harvest (2.45%)	Total Pre-Week 31 Sockeye Harvest	Actual Nass/Skeena Harvest	Overage/ Underage Per Year	Cumulative: +overage / (- underage)
1999	1,771,048	936,705	834,343	20,441	7,664	3,232	-17,209	-17,209
2000	5,318,228	1,100,000	4,218,228	103,347	48,969	29,221	-74,126	-91,335
2001	4,965,291	1,100,000	3,865,291	94,700	203,090	167,854	73,154	-18,181
2002	2,776,502	1,051,333	1,725,169	42,267	26,554	18,627	-23,640	-41,820
2003	3,306,520	1,100,000	2,206,520	54,060	84,742	44,258	-9,802	-51,622
2004	2,621,000	1,100,000	1,521,000	37,265	30,758	19,233	-18,032	-69,653
2005	1,770,474	1,000,144	770,330	18,873	35,690	19,442	569	-69,085
2006	3,650,525	1,100,000	2,550,525	62,488	89,615	68,940	6,452	-62,632
2007	2,752,074	1,100,000	1,652,074	40,476	112,135	75,615	35,139	-27,493
2008	2,531,701	1,100,000	1,431,701	35,077	6,262	4,880	-30,197	-57,690
2009	1,602,959	1,053,858	549,101	13,453	15,971	10,128	-3,325	-61,015
2010	1,395,616	956,954	438,662	10,747	4,617	1,091	-9,656	-70,671
2011	2,487,985	1,100,000	1,387,985	34,006	25,280	16,599	-17,407	-88,078
2012	2,737,173	1,100,000	1,637,173	40,111	18,300	9,598	-30,513	-118,590
2013	981,476	642,461	339,015	8,306	13,102	4,228	-4,078	-122,668
2014	3,824,535	1,100,000	2,724,535	66,751	114,375	74,005	7,254	-115,414
2015	3,015,042	1,100,000	1,915,042	46,919	43,873	21,433	-25,486	-140,900
2016	2,140,259	1,100,000	1,040,259	25,486	110,346	65,039	39,553	-101,347
2017	1,422,783	1,100,000	322,783	7,908	12,036	6,916	-992	-102,339
2018	2,086,458	1,100,000	986,458	24,168	19,743	9,999	-14,169	-116,508
2019	1,200,155	862,549	337,606	8,271	9,399	4,450	-3,821	-120,330
2020 ^a	1,983,411	1,100,000	1,129,421	21,644	6,923	5,300	16,344	-136,673

^a Preliminary information pending completion of run reconstruction analyses.

Table 11.—Preliminary annual allowable harvest (AAH) calculations for the Alaska District 101 gillnet fishery, 1999-2020.

Year	Nass River Total Return	Nass River Escapement	Allowable Nass River AAH	Allowable Alaska Harvest (13.8%)	Total District 101 Gillnet Seasonal Sockeye Harvest	Actual Nass River Alaska Harvest	Overage/ Underage Per Year	Cumulative: +overage / (-underage)
1999	842,806	200,000	642,806	88,707	160,028	129,794	41,087	41,087
2000	625,983	200,000	425,983	58,786	94,651	46,305	-12,481	28,606
2001	580,616	167,258	413,358	57,043	80,041	55,096	-1,947	26,659
2002	1,403,976	200,000	1,203,976	166,149	120,353	90,553	-75,596	-48,937
2003	1,177,472	200,000	977,472	134,891	105,263	72,942	-61,949	-110,886
2004	986,098	200,000	786,098	108,482	142,357	110,340	1,858	-109,028
2005	666,880	200,000	466,880	64,429	79,725	55,319	-9,110	-118,138
2006	775,110	200,000	575,110	79,365	62,770	47,948	-31,417	-149,555
2007	602,208	164,745	437,463	60,370	66,822	46,369	-14,001	-163,556
2008	380,397	200,000	180,397	24,895	34,113	24,359	-536	-164,092
2009	575,336	200,000	375,336	51,796	69,859	55,270	3,474	-160,618
2010	438,941	200,000	238,941	32,974	62,680	26,613	-6,361	-166,979
2011	556,710	200,000	356,710	49,226	88,618	55,122	5,896	-161,083
2012 ^a	476,818	200,000	276,818	38,201	62,342	38,983	782	-160,301
2013	501,428	200,000	301,428	41,597	54,578	35,471	-6,126	-166,427
2014	549,685	200,000	349,685	48,257	55,828	29,022	-19,235	-185,662
2015	868,749	200,000	668,749	92,287	28,155	14,867	-77,420	-263,081
2016	438,311	200,000	238,311	32,887	39,912	14,388	-18,499	-281,580
2017	362,540	200,000	162,540	22,431	25,073	12,444	-9,987	-292,134
2018	315,972	200,000	115,972	16,004	19,920	11,303	-4,701	-297,677
2019	377,475	200,000	177,475	24,529	15,996	11,269	-13,260	-310,937
2020 ^a	295,194	200,000	95,194	13,137	9,342	7,528	-5,609	-343,619

^a Preliminary information pending completion of run reconstruction analyses.

Table 12.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 1 gillnet fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 13.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 1 seine fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
32	08/1	8-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
33	08/2	15-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
34	08/3	22-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
35	08/4	29-Aug	0	0	175,597	0	0	175,597	32	125	6
36	09/1	5-Sep	0	0	7,700	0	0	7,700	3	67	3
37	09/2	12-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
38	09/3	19-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
39	09/4	26-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
40	10/1	3-Oct	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
Total			0	0	183,297	0	0	183,297	35	192	9

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 14.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 1/101 troll fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook***	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	451	3947	CLOSED	0	4,398	16	96	4
28	07/2	11-Jul	CLOSED	2825	13668	CLOSED	0	16,493	41	168	7
29	07/3	18-Jul	CLOSED	4994	15332	CLOSED	0	20,326	48	168	7
30	07/4	25-Jul	CLOSED	5,035	17,528	CLOSED	0	22,564	86	168	7
31	07/5	1-Aug	CLOSED	9,027	18,480	CLOSED	0	27,507	117	168	7
32	08/1	8-Aug	CLOSED	35,614	39,276	CLOSED	0	74,890	445	168	7
33	08/2	15-Aug	CLOSED	13,020	16,641	CLOSED	1,635	31,296	358	168	7
34	08/3	22-Aug	CLOSED	4,383	6,819	CLOSED	7,237	18,439	493	168	7
35	08/4	29-Aug	CLOSED	980	1,317	CLOSED	4,106	6,404	312	168	7
36	09/1	5-Sep	CLOSED	419	21	CLOSED	1,363	1,803	125	168	7
37	09/2	12-Sep	CLOSED	194	1	CLOSED	807	1,002	74	168	7
38	09/3	19-Sep	CLOSED	79	1	CLOSED	327	407	21	168	7
39	09/4	26-Sep	CLOSED	35	0	CLOSED	105	140	13	168	7
40	10/1	3-Oct	CLOSED	0	0	CLOSED	0	0	2	96	4
Total			0	77,057	133,031	0	15,581	225,668	2,151	2,208	92

2020 catch figures are based on Phone-in (FOS) estimates.

*Boat Days are the sum of daily vessels independent of hours open.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

***Chinook Area hail catch pro-rated with validated Chinook landings.

Table 15.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Entrance (subareas 1-4) gillnet fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 16.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Inside (subareas 7-17) gillnet fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 17.—Weekly commercial catch and fishing effort in the 2020 Canadian total Area 3 gillnet fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 18.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Entrance (subareas 1-4) seine fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	1,816	1,751	CLOSED	3,567	13	16	1
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
32	08/1	8-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
33	08/2	15-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
34	08/3	22-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
35	08/4	29-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
36	09/1	5-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
37	09/2	12-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
38	09/3	19-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
39	09/4	26-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
40	10/1	3-Oct	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
Total			0	0	1,816	1,751	0	3,567	13	16	1

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 19.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 3 Inside (subareas 7-17) seine fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 20.—Weekly commercial catch and fishing effort in the 2020 Canadian total Area 3 seine fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	1,816	1,751	CLOSED	3,567	13	16	1
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
32	08/1	8-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
33	08/2	15-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
34	08/3	22-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
35	08/4	29-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
36	09/1	5-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
37	09/2	12-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
38	09/3	19-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
39	09/4	26-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
40	10/1	3-Oct	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
Total			0	0	1,816	1,751	0	3,567	13	16	1

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 21.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 3/103 troll fishery (preliminary). In 2020, fishing occurred in Area 103.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	0	0	0	0	0	0	0	24	1
32	08/1	8-Aug	0	523	71	0	0	594	5	168	7
33	08/2	15-Aug	0	0	0	0	0	0	4	168	7
34	08/3	22-Aug	0	0	0	0	0	0	0	168	7
35	08/4	29-Aug	0	0	0	0	0	0	0	168	7
36	09/1	5-Sep	0	0	0	0	0	0	0	168	7
37	09/2	12-Sep	0	0	0	0	0	0	0	168	7
38	09/3	19-Sep	0	0	0	0	0	0	0	168	7
39	09/4	26-Sep	0	0	0	0	0	0	0	168	7
40	10/1	3-Oct	0	0	0	0	0	0	0	96	4
Total			0	523	71	0	0	594	9	1,464	61

2020 catch figures are based on Phone-in (FOS) estimates.

*Boat Days are the sum of daily vessels independent of hours open.

**Days Fishing are the sum of the daily fishery openings independent of hours open.

Table 22.—Weekly commercial catch and fishing effort in the 2020 Canadian total Area 4 gillnet fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
32	08/1	8-Aug	22,807	CLOSED	9,363	CLOSED	CLOSED	32,170	201	32	2
33	08/2	15-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
34	08/3	22-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
35	08/4	29-Aug	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
36	09/1	5-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
37	09/2	12-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
38	09/3	19-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
39	09/4	26-Sep	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
40	10/1	3-Oct	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
Total			22,807	0	9,363	0	0	32,170	201	32	2

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open

Table 23.—Weekly commercial catch and fishing effort in the 2020 Canadian total Area 4 seine fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open

Table 24.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 4/104 troll fishery (preliminary). In 2020, all fishing occurred in Area 104.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	CLOSED	0	0	CLOSED	CLOSED	0	0	24	1
32	08/1	8-Aug	CLOSED	1,843	1,052	CLOSED	CLOSED	2,895	17	168	7
33	08/2	15-Aug	CLOSED	2,934	2,383	CLOSED	CLOSED	5,316	34	168	7
34	08/3	22-Aug	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
35	08/4	29-Aug	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
36	09/1	5-Sep	CLOSED	74	0	CLOSED	CLOSED	74	2	168	7
37	09/2	12-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
38	09/3	19-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
39	09/4	26-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
40	10/1	3-Oct	CLOSED	0	0	CLOSED	CLOSED	0	0	96	4
Total			0	4,851	3,435	0	0	8,286	53	1,464	61

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open

Table 25.—Weekly commercial catch and fishing effort in the 2020 Canadian total Area 5 gillnet fishery.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open

Table 26.—Weekly commercial catch and fishing effort in the 2020 Canadian total Area 5 seine.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
FISHERY DID NOT OPEN			-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	-

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open

Table 27.—Weekly commercial catch and fishing effort in the 2020 Canadian Area 5/105 troll fishery (preliminary). In 2020, all fishing occurred in Area 5.

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	07/1	4-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
28	07/2	11-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
29	07/3	18-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
30	07/4	25-Jul	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
31	07/5	1-Aug	CLOSED	0	0	CLOSED	CLOSED	0	0	24	1
32	08/1	8-Aug	CLOSED	891	144	CLOSED	CLOSED	1,035	13	168	7
33	08/2	15-Aug	CLOSED	1,590	45	CLOSED	CLOSED	1,635	23	168	7
34	08/3	22-Aug	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
35	08/4	29-Aug	CLOSED	0	0	CLOSED	CLOSED	0	1	168	7
36	09/1	5-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
37	09/2	12-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
38	09/3	19-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
39	09/4	26-Sep	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
40	10/1	3-Oct	CLOSED	0	0	CLOSED	CLOSED	0	0	96	4
Total			0	2,481	189	0	0	2,670	37	1,464	61

2020 catch figures are based on Phone-in (FOS) estimates

* Boat Days are the sum of daily vessels operating in a 24-hour period.

**Days Fishing are the sum of the daily fishery openings independent of hours open

Table 28.—Annual gillnet and seine effort for Canadian Area 1, 3, 4, and 5, 1980-2020.

YEAR	GEAR	AREA 1		AREA 3		AREA 4		AREA 5	
		BOAT DAYS	DAYS* FISHING	BOAT DAYS	DAYS FISHING	BOAT DAYS	DAYS FISHING	BOAT DAYS	DAYS FISHING
1980	GN	0	0	2,980	20	5,726	13	852	15
	SN	0	0	912	20	6	2	158	15
1981	GN	0	0	2,127	26	13,170	26	552	11
	SN	0	0	1,189	26	401	8	49	11
1982	GN	0	0	3,155	34	8,799	18	548	17
	SN	0	0	1,649	34	827	6	197	17
1983	GN	6	12	2,377	22	4,699	15	501	14
	SN	108	12	2,157	22	0	0	55	14
1984	GN	18	27	2,929	23	7,705	22	435	15
	SN	543	27	1,580	20	761	6	355	14
1985	GN	74	24	813	21	12,504	26	169	16
	SN	241	24	1,099	17	819	9	241	12
1986	GN	345	27	1,125	25	6,095	21	529	23
	SN	328	35	1,221	24	94	8	389	22
1987	GN	39	13	1,015	19	5,803	17	192	13
	SN	156	13	1,780	18	215	7	269	12
1988	GN	56	18	727	18	14,141	23	305	17
	SN	190	16	888	15	273	4	229	15
1989	GN	20	11	1,525	26	8,638	28	428	22
	SN	78	11	1,059	18	70	18	87	17
1990	GN	12	17	977	26	8,583	32	282	21
	SN	215	17	556	15	60	20	296	15
1991	GN	16	13	1,813	36	10,931	25	375	24
	SN	64	5	2,958	18	178	7	228	18
1992	GN	68	21	2,527	31	12,110	25	368	24
	SN	239	16	1,016	18	197	10	128	17
1993	GN	26	15	3,692	43	10,909	22	183	22
	SN	15	15	1,816	16	329	12	71	13
1994	GN	82	16	3,443	23	8,130	20	430	12
	SN	164	7	698	9	0	0	5	1
1995	GN	270	29	4,305	31	12,062	19	434	22
	SN	322	7	2,536	15	484	9	154	13
1996	GN	19	18	4,433	36	13,487	25	507	26
	SN	79	15	1,117	20	975	14	347	19
1997	GN	536	23	2,759	23	9,558	21	269	20
	SN	313	8	809	15	172	11	25	13
1998	GN	5	11	1,197	16	1,041	6	47	3
	SN	12	2	204	9	0	0	4	0
1999	GN	1	5	3,300	17	238	3	0	0
	SN	0	0	1,001	15	26	2	6	2

YEAR	GEAR	AREA 1		AREA 3		AREA 4		AREA 5	
		BOAT DAYS	DAYS* FISHING	BOAT DAYS	DAYS FISHING	BOAT DAYS	DAYS FISHING	BOAT DAYS	DAYS FISHING
2000	GN	15	4	2,321	17	5,150	19	164	3
	SN	0	0	282	12	544	9	54	11
2001	GN	2	1	1,031	11	5,380	19	86	12
	SN	0	0	244	13	393	9	57	11
2002	GN	2	2	2,882	19	3,559	13	43	11
	SN	7	2	294	15	218	15	64	15
2003	GN	0	0	3,417	17	2,484	8	27	5
	SN	0	0	210	15	118	9	32	11
2004	GN	0	3	3,241	13	1,581	6	78	5
	SN	0	0	448	13	218	13	28	7
2005	GN	0	0	2,645	16	198	2	0	0
	SN	0	0	291	18	0	0	19	6
2006	GN	7	5	3,487	15	6,376	17	71	13
	SN	0	0	236	7	682	16	3	6
2007	GN	0	0	1,694	9	1,796	7	11	2
	SN	0	0	478	15	85	9	82	15
2008	GN	0	0	595	7	2,213	9	18	7
	SN	0	0	61	3	274	14	10	1
2009	GN	0	0	1,517	8	187	2	0	0
	SN	0	0	115	10	33	4	15	5
2010	GN	0	0	929	6	466	3	14	1
	SN	8	4	17	2	0	0	1	1
2011	GN	0	0	675	7	1,070	6	7	5
	SN	0	0	109	4	117	9	0	0
2012	GN	0	0	831	6	992	5	9	3
	SN	0	0	110	5	79	5	0	0
2013	GN	0	0	1,457	9	199	2	0	0
	SN	0	0	179	12	0	0	0	0
2014	GN	0	0	1357	10	1,831	8	9	7
	SN	9	7	146	9	132	7	5	1
2015	GN	0	0	1778	28	303	5	0	0
	SN	0	0	365	10	10	2	0	0
2016	GN	0	0	574	9	853	10	5	4
	SN	0	0	141	13	20	5	0	0
2017	GN	0	0	1078	9	0	0	0	0
	SN	0	0	249	14	0	0	0	0
2018	GN	0	0	379	4	625	10	2	2
	SN	0	0	111	5	52	15	0	0
2019	GN	0	0	567	7	0	0	0	0
	SN	0	0	58	3	0	0	0	0
2020	GN	0	0	0	0	2	201	0	0
	SN	9	35	1	13	0	0	0	0

YEAR	GEAR	<u>AREA 1</u>		<u>AREA 3</u>		<u>AREA 4</u>		<u>AREA 5</u>	
		BOAT	DAYS*	BOAT	DAYS	BOAT	DAYS	BOAT	DAYS
		DAYS	FISHING	DAYS	FISHING	DAYS	FISHING	DAYS	FISHING
AVG 80-89	GN	55.8	13.2	1,877.3	23.4	8,728.0	20.9	451.1	16.3
	SN	164.4	13.8	1,353.4	21.4	346.6	6.8	202.9	14.9
	TOTAL	220.2	27.0	3,230.7	44.8	9,074.6	27.7	654.0	31.2
AVG 90-99	GN	103.5	16.8	2,844.6	28.2	8,704.9	19.8	289.5	17.4
	SN	142.3	9.2	1,271.1	15.0	242.1	8.5	126.4	11.1
	TOTAL	245.8	26.0	4,115.7	43.2	8,947.0	28.3	415.9	28.5
AVG 00-09	GN	2.6	1.5	2,283.0	13.2	2,892.4	10.2	49.8	5.8
	SN	0.7	0.2	265.9	12.1	256.5	9.8	36.4	8.8
	TOTAL	4.0	1.7	2,548.9	25.3	3,148.9	20.0	86.2	14.6
AVG 10-19	GN	0.0	0.0	962.5	9.5	633.9	4.9	4.6	2.2
	SN	1.7	1.1	148.5	7.7	41.0	4.3	0.6	0.2
	TOTAL	1.7	1.1	1,111.0	17.2	674.9	9.2	5.2	2.4

Table 29.—Escapements to Canadian Areas 3, 4, and 5 in 2020.

Area	Sockeye	Coho	Pink	Chum	Chinook
3	215,462	7,790	552,508	60,535	4,074
4	1,488,135	10,735	31,025	71	9,660
5	825	234	1,742	66	112
Totals	1,663,597	18,759	585,275	60,672	13,846

Table 30.—Annual salmon escapements for Canadian Area 1, 1970-2020.

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK
1970	26,500	24,050	432,650	24,800	800
1971	16,500	14,335	6,050	44,500	500
1972	17,500	26,150	329,900	8,600	1,000
1973	38,000	58,350	4,000	50,000	900
1974	39,000	97,100	201,400	41,800	1,000
1975	16,500	47,000	3,950	53,050	1,500
1976	40,900	153,500	285,050	53,500	700
1977	36,750	55,400	4,900	60,300	800
1978	20,300	61,250	217,500	56,200	600
1979	20,650	34,750	3,250	32,450	400
1980	33,200	17,140	290,795	14,768	600
1981	23,000	18,000	3,650	26,100	750
1982	28,500	35,250	362,000	70,800	1,400
1983	19,500	20,600	2,130	35,225	600
1984	18,500	28,850	1,213,900	52,775	300
1985	43,200	23,700	1,875	63,800	1,500
1986	13,500	32,900	838,500	82,500	500
1987	9,100	32,650	4,500	51,100	2,000
1988	23,600	28,900	566,100	29,950	2,200
1989	11,200	16,550	1,300	18,975	2,800
1990	200	10,270	1,389,560	4,700	2,000
1991	4,400	11,350	600	1,000	1,900
1992	12,100	8,200	994,800	6,300	2,000
1993	500	2,500	350	50,060	1,000
1994	8,700	UNK	647,000	32,150	2,000
1995	7,100	UNK	1,000	19,855	1,500
1996	19,300	UNK	2,924,000	6,725	3,000
1997	12,000	UNK	UNK	31,050	2,500
1998	14,000	38,400	747,200	32,100	3,000
1999	15,550	28,000	2,700	33,000	3,200
2000	19,200	22,600	465,000	13,520	3,600
2001	3,900	6,674	1	3,804	UNK
2002	9,850	13,474	939,003	7,000	3,500
2003	7,500	2,538	UNK	34,081	4,000
2004	10,000	719	177,500	4,000	UNK
2005	5,000	1,500	UNK	1,650	UNK
2006	27,200	UNK	250,250	18,300	UNK
2007	8,500	UNK	UNK	1,950	UNK
2008	9,100	UNK	607,750	600	UNK
2009	7,500	UNK	UNK	35,520	UNK
2010	18,025	UNK	1,135,000	200	UNK
2011	7,000	UNK	UNK	25,400	UNK
2012	19,050	UNK	207,200	4,000	UNK
2013	9,000	UNK	35,000	1,000	UNK
2014	19,800	UNK	1,030,000	UNK	UNK
2015	UNK	UNK	UNK	UNK	UNK
2016	10,600	UNK	250,000	8,500	UNK
2017	12,500	UNK	UNK	2,500	UNK
2018	6,800	UNK	553,200	5,000	UNK
2019	5,900	UNK	UNK	14,000	UNK
2020	7,900	UNK	802,400	UNK	UNK
AVG 70-79	27,260	57,189	148,865	42,520	820
AVG 80-89	22,330	25,454	328,475	44,599	1,265
AVG 90-99	9,385	16,453	745,246	21,694	2,210
AVG 00-09	10,775	7,918	406,584	12,043	3,700
AVG 10-19	12,075	UNK	535,067	7,575	UNK

Table 31.—Annual salmon escapements for Canadian Area 3, 1970-2020.

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK
1970	115,503	43,300	224,750	35,400	18,250
1971	247,524	44,325	136,525	28,825	17,000
1972	178,716	20,850	244,250	81,125	19,800
1973	284,682	9,400	70,786	66,025	3,550
1974	193,703	16,435	84,915	121,570	3,775
1975	70,874	15,410	141,758	30,550	6,025
1976	143,405	32,700	158,175	64,650	5,590
1977	400,371	35,605	229,155	57,775	9,060
1978	147,718	33,100	401,445	75,970	10,190
1979	212,944	18,655	50,625	42,313	8,180
1980	155,515	22,405	130,777	54,794	9,072
1981	255,818	34,429	204,425	16,508	7,925
1982	306,070	31,055	427,135	29,476	6,575
1983	185,150	36,360	738,205	45,115	8,055
1984	182,450	67,650	531,035	67,425	12,620
1985	361,208	44,539	508,855	48,971	7,999
1986	187,261	34,910	375,245	34,900	17,375
1987	184,242	31,652	371,866	31,387	8,695
1988	136,760	10,551	185,065	47,050	7,370
1989	112,609	20,690	641,270	33,770	12,525
1990	155,472	38,510	154,968	30,980	12,103
1991	269,850	16,777	388,100	23,835	3,967
1992	645,964	16,118	196,808	15,684	16,415
1993	440,740	7,510	314,102	79,951	24,126
1994	179,262	15,329	155,356	33,199	2,440
1995	237,991	13,967	349,017	40,451	1,256
1996	219,825	11,613	344,860	22,990	2,619
1997	237,312	3,989	216,527	20,302	957
1998	193,810	9,781	151,940	138,490	1,268
1999	197,550	13,216	464,775	33,467	724
2000	138,042	17,339	322,990	20,718	19,348
2001	117,692	26,366	826,632	30,472	32,340
2002	338,879	30,224	598,264	17,813	14,804
2003	199,458	18,254	841,856	40,002	28,274
2004	141,913	15,062	542,500	54,033	16,875
2005	146,813	19,418	944,415	30,855	15,571
2006	149,598	15,644	129,050	43,975	28,061
2007	113,637	9,181	589,059	17,225	24,964
2008	155,860	12,383	58,676	14,593	22,138
2009	179,652	17,262	640,955	20,680	29,576
2010	163,317	168,914	256,789	10,885	20,729
2011	192,584	85,910	160,418	9,879	10,826
2012	159,112	125,756	282,396	19,446	9,797
2013	210,263	518,485	543,757	16,635	9,034
2014	260,102	307,428	438,618	20,347	13,108
2015	389,503	42,517	390,255	51,800	19,465
2016	277,484	191,096	275,997	63,857	10,192
2017	229,000	180,000	322,000	25,000	4,984
2018	230,508	73,000	218,684	48,487	14,956
2019	245,476	128,091	160,466	28,198	11,981
2020	215,462	7,790	552,508	60,535	4,074
AVG 70-79	199,544	26,978	174,238	60,420	10,142
AVG 80-89	206,708	33,424	411,388	40,940	9,821
AVG 90-99	277,778	14,681	273,645	43,935	6,588
AVG 00-09	168,154	18,113	549,440	29,037	23,195
AVG 10-19	235,735	182,120	304,938	29,453	12,507

Table 32.—Annual salmon escapements for Canadian Area 4, 1970-2020.

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK
1970	678,652	84,725	971,800	10,890	21,150
1971	821,850	75,795	1,173,381	5,232	18,500
1972	697,237	57,514	1,765,154	36,920	20,651
1973	820,196	41,292	1,260,186	25,476	40,341
1974	723,898	38,798	367,605	14,102	31,576
1975	822,633	22,119	1,767,907	10,375	20,319
1976	575,590	32,891	693,850	11,071	13,053
1977	951,805	37,634	976,527	10,927	29,018
1978	424,075	49,963	724,597	8,153	22,676
1979	1,166,236	24,494	515,563	5,705	18,488
1980	542,164	31,587	745,367	25,007	23,400
1981	1,424,509	26,692	1,187,835	9,385	24,524
1982	1,140,737	24,521	739,247	4,626	16,990
1983	893,724	24,978	2,610,074	1,667	23,602
1984	1,055,215	50,409	1,037,698	29,764	35,864
1985	2,174,806	19,974	2,042,150	12,198	52,407
1986	716,312	54,587	2,323,944	12,780	59,719
1987	1,324,128	32,739	3,180,414	7,652	60,948
1988	1,417,543	11,293	828,090	108,921	68,307
1989	1,137,994	44,126	4,675,527	20,331	57,192
1990	989,566	76,662	2,611,520	6,343	55,541
1991	1,232,568	52,544	4,797,937	4,680	52,792
1992	1,550,109	34,703	821,950	11,290	67,118
1993	1,629,426	23,192	663,888	10,052	68,286
1994	1,026,816	33,830	242,285	7,967	22,611
1995	1,720,292	16,293	1,641,489	7,928	34,390
1996	1,727,147	14,759	2,025,648	8,404	73,684
1997	985,097	6,333	484,476	22,250	42,539
1998	521,417	39,044	272,871	14,664	46,774
1999	624,366	71,787	1,095,352	2,650	43,775
2000	1,394,177	29,922	260,481	4,650	51,804
2001	1,508,045	74,254	1,017,612	8,620	81,504
2002	610,851	46,129	232,451	3,060	44,771
2003	1,211,762	50,484	1,517,355	1,782	56,758
2004	923,187	32,303	653,350	2,020	39,552
2005	704,559	77,732	1,213,770	2,335	29,496
2006	1,172,699	50,332	116,367	685	36,682
2007	1,042,717	26,792	632,243	474	37,054
2008	867,676	33,145	69,898	510	34,615
2009	667,603	88,215	2,515,312	1,330	36,476
2010	662,755	44,956	325,404	1,117	42,339
2011	890,829	34,338	268,774	3,705	34,190
2012	1,100,573	29,771	241,029	2,254	34,213
2013	411,373	53,671	960,000	1,347	26,757
2014	1,646,038	55,626	1,480,946	1,028	28,496
2015	1,271,427	UNK	240,101	UKN	41,658
2016	882,225	24,224	49,932	UKN	31,297
2017	887,647	16,753	465,109	700	17,413
2018	1,490,159	23,372	17,652	856	29,408
2019	570,999	27,245	297,437	1174	23,248
2020	1,448,135	10,735	31,025	71	9,660
AVG 70-79	768,217	46,523	1,021,657	13,885	23,577
AVG 80-89	1,182,713	32,091	1,937,035	23,233	42,295
AVG 90-99	1,200,680	36,915	1,465,742	9,623	50,751
AVG 00-09	1,010,328	50,931	822,884	2,547	44,871
AVG 10-19	981,403	34,440	434,638	1,523	30,902

Table 33.—Annual salmon escapements for Canadian Area 5, 1970-2020.

YEAR	SOCKEYE	COHO	PINK	CHUM
1970	23,750	10,600	139,850	12,250
1971	55,225	9,975	80,761	25,625
1972	24,400	21,820	280,725	17,725
1973	32,425	18,000	56,375	18,975
1974	43,925	18,450	337,075	34,025
1975	50,000	33,000	170,375	10,075
1976	19,050	21,475	348,450	19,625
1977	11,400	25,410	110,275	32,170
1978	28,650	18,650	264,850	13,775
1979	16,000	17,275	43,000	13,950
1980	16,800	11,525	225,825	9,350
1981	16,000	18,025	121,850	3,120
1982	19,450	2,620	70,300	7,370
1983	12,450	4,300	81,025	4,596
1984	17,150	8,175	162,450	6,830
1985	37,250	4,350	177,075	11,765
1986	25,000	22,289	313,900	16,450
1987	26,550	6,000	127,950	10,175
1988	33,400	7,775	162,000	12,750
1989	21,900	1,000	178,500	4,750
1990	5,676	5,006	202,244	3,607
1991	32,035	2,981	70,160	4,113
1992	22,895	3,982	41,161	731
1993	33,150	1,925	39,475	1,795
1994	6,800	800	44,725	870
1995	8,700	UNK	90,900	3,880
1996	24,100	UNK	270,100	3,200
1997	28,400	500	68,750	2,260
1998	10,450	900	161,250	9,250
1999	23,500	1,150	313,450	900
2000	22,600	800	278,150	1,070
2001	21,500	323	395,650	3,080
2002	9,700	1,400	409,810	4,965
2003	42,850	1,010	233,825	4,110
2004	18,200	355	88,330	2,670
2005	14,000	770	277,400	2,600
2006	22,600	285	31,880	2,575
2007	14,150	215	114,700	1,125
2008	2,900	650	29,080	2,226
2009	35	544	164,350	3,998
2010	5,232	1,179	40,704	1,273
2011	1,760	1,330	41,975	732
2012	3,590	740	81,708	649
2013	28,592	946	17,174	912
2014	21,274	1,664	205,862	1,846
2015	15,198	UKN	8,635	1,052
2016	7,048	UKN	5,943	UKN
2017	11,550	UNK	4,958	UNK
2018	1,051	398	1,410	1,136
2019	3,999	147	4,198	1,113
2020	825	234	1,742	66
AVG 70-79	30,483	19,466	183,174	19,820
AVG 80-89	22,595	8,606	162,088	8,716
AVG 90-99	19,571	2,156	130,222	3,061
AVG 00-09	16,854	635	202,318	2,842
AVG 10-19	9,929	915	41,257	1,089

Table 34.—Annual allowable harvest (AAH) calculations for Canadian Area 3 Entrance (1-4) net fishery, 1999-2020. The pink salmon escapement requirement in Alaskan districts 101, 102, and 103 is 10,750,000.

Year	AAH of Alaska District 101, 102, 103 Pink Salmon			Actual Number and % AAH of Alaska Pink Salmon Harvested in Canadian Area 3 (1-4) Net Fishery			Overage/Underage Based on the 2.49% AAH stipulated in the treaty		
	Total Run	Actual Escapement	AAH	Total Pink Harvest in Area 3 (1- 4) Net	Actual Number of Alaskan Pink Harvested	Actual % AAH	Allowable Harvest	Overage (Positive)/ Underage (Negative)	Cumulative Overage/ Underage
1999	53,011,083	19,900,203	42,261,083	2,224,180	1,276,329	3.02%	1,052,301	224,028	224,028
2000	22,935,854	11,936,450	12,185,854	89,980	67,465	0.55%	303,428	-235,963	-11,934
2001	62,126,912	21,903,643	51,376,912	1,155,691	911,959	1.78%	1,279,285	-367,326	-379,260
2002	43,056,270	20,178,163	32,306,270	1,163,645	766,390	2.37%	804,426	-38,036	-417,296
2003	42,771,456	20,047,003	32,021,456	924,183	668,100	2.09%	797,334	-129,234	-546,530
2004	34,999,070	16,769,261	24,249,070	559,034	448,730	1.85%	603,802	-155,072	-701,602
2005	43,651,072	17,519,566	32,901,072	894,890	690,317	2.10%	819,237	-128,920	-830,522
2006	11,524,695	8,532,450	2,992,245	143,733	112,342	3.75%	74,507	37,836	-792,687
2007	52,342,831	23,578,584	41,592,831	1,740,271	1,421,812	3.42%	1,035,661	386,150	-406,536
2008	25,728,121	13,669,062	14,978,121	12,082	10,580	0.07%	372,955	-362,375	-768,912
2009	38,891,939	16,095,463	28,141,939	432,861	276,270	0.98%	700,734	-424,464	-1,193,376
2010	23,621,861	12,113,776	12,871,861	36,334	21,353	0.17%	320,509	-299,156	-1,492,532
2011	20,770,059	11,519,923	10,020,059	201,754	180,930	1.81%	249,499	-68,569	-1,561,101
2012	31,674,423	14,216,273	20,924,423	150,740	127,120	0.61%	521,018	-393,898	-1,954,999
2013	80,810,736	32,020,713	70,060,736	1,249,570	1,149,166	1.64%	1,744,512	-595,346	-2,550,345
2014	50,784,488	22,042,385	40,034,488	450,671	347,104	0.87%	996,859	-649,755	-3,200,100
2015	20,541,455	8,508,770	12,032,685	80,266	77,331	0.64%	299,614	-222,290	-3,422,390
2016	30,543,683	15,081,340	19,793,683	430,435	393,118	1.99%	492,863	-99,745	-3,522,135
2017	21,573,460	13,215,600	10,823,460	231,197	207,268	1.91%	269,504	-62,236	-3,582,072
2018	13,437,220	9,573,382	3,863,838	68,764	58,001	1.50%	96,210	-38,208	-3,620,280
2019	26,975,678	11,507,785	16,225,678	24,251	22,963	0.14%	404,019	-381,056	-4,001,336
2020	17,358,249	11,857,328	6,608,249	1,816	1,703	0.03%	164,545	-162,842	-4,164,179

Table 35.—Annual allowable harvest (AAH) calculates for Canadian Area 1/101 troll fishery, 1999-2020. The pink salmon escapement requirement in Alaskan districts 101, 102, and 103 is 10,750,000.

Year	AAH of Alaska District 101, 102, 103 Pink Salmon			Actual Number and % AAH of Alaska Pink Salmon Harvested in Canadian Area 1 Troll Fishery			Overage/Underage Based on the 2.57% AAH Stipulated in the Treaty		
	Total Run	Actual Escapement	AAH	Total Pink Harvest in Area 1 Troll	Actual Number of Alaskan Pink Harvested	Actual % AAH	Allowable Harvest	Overage (Positive)/ Underage (Negative)	Cumulative Overage/ Underage
1999	53,011,083	19,900,203	42,261,083	31,013	25,125	0.06%	1,086,110	-1,060,984	-1,060,984
2000	22,935,854	11,936,450	12,185,854	73,358	56,042	0.46%	313,176	-257,134	-1,318,119
2001	62,126,912	21,903,643	51,376,912	132,709	116,490	0.23%	1,320,387	-1,203,896	-2,522,015
2002	43,056,270	20,178,163	32,306,270	22,918	17,723	0.05%	830,271	-812,548	-3,334,563
2003	42,771,456	20,047,003	32,021,456	74,160	61,284	0.19%	822,951	-761,668	-4,096,231
2004	34,999,070	16,769,261	24,249,070	22,198	19,499	0.08%	623,201	-603,702	-4,699,933
2005	43,651,072	17,519,566	32,901,072	27,768	23,098	0.07%	845,558	-822,460	-5,522,393
2006	11,524,695	8,532,450	2,992,245	34,854	30,134	1.01%	76,901	-46,767	-5,569,160
2007	52,342,831	23,578,584	41,592,831	61,276	55,418	0.13%	1,068,936	-1,013,518	-6,582,678
2008	25,728,121	13,669,062	14,978,121	23,243	21,171	0.14%	384,938	-363,766	-6,946,444
2009	38,891,939	16,095,463	28,141,939	61,522	50,392	0.18%	723,248	-672,855	-7,619,300
2010	23,621,861	12,113,776	12,871,861	17,950	12,708	0.10%	330,807	-318,099	-7,937,399
2011	20,770,059	11,519,923	10,020,059	44,193	41,631	0.42%	257,516	-215,885	-8,153,284
2012	31,674,423	14,216,273	20,924,423	48,223	44,739	0.21%	537,758	-493,019	-8,646,302
2013	80,810,736	32,020,713	70,060,736	84,216	80,590	0.12%	1,800,561	-1,719,971	-10,366,273
2014	50,784,488	22,042,385	40,034,488	31,775	26,798	0.07%	1,028,886	-1,002,089	-11,368,362
2015	20,541,455	8,508,770	12,032,685	41,551	39,456	0.33%	309,240	-269,784	-11,638,146
2016	30,447,094	15,081,340	19,697,094	32,343	30,949	0.16%	506,215	-475,267	-12,113,413
2017	21,573,460	13,215,600	10,823,460	33,299	31,471	0.29%	278,163	-246,692	-12,360,104
2018	13,437,220	9,573,382	3,863,838	27,194	24,478	0.63%	99,301	-74,822	-12,434,926
2019	26,975,678	11,507,785	16,225,678	56,182	53,950	0.33%	417,000	-363,050	-12,797,976
2020	17,358,249	11,857,328	6,608,249	133,167	111,616	1.69%	169,832	-58,216	-12,856,192

Table 36.—Pre-season salmon forecast for Canadian Areas 1, 3, 4, and 5 in 2021.

Area	Species	Forecasted Return to Canada
Area 1	Sockeye Pink	Below Average – Average Below Average/Poor
Area 3	Sockeye Pink	318,000 (50% probability; sibling regression model) Below Average
Area 4	Sockeye Pink	1,696,972 (50% probability; sibling regression model) Below Average
Area 5	Sockeye Pink	UNK Below Average

FIGURES

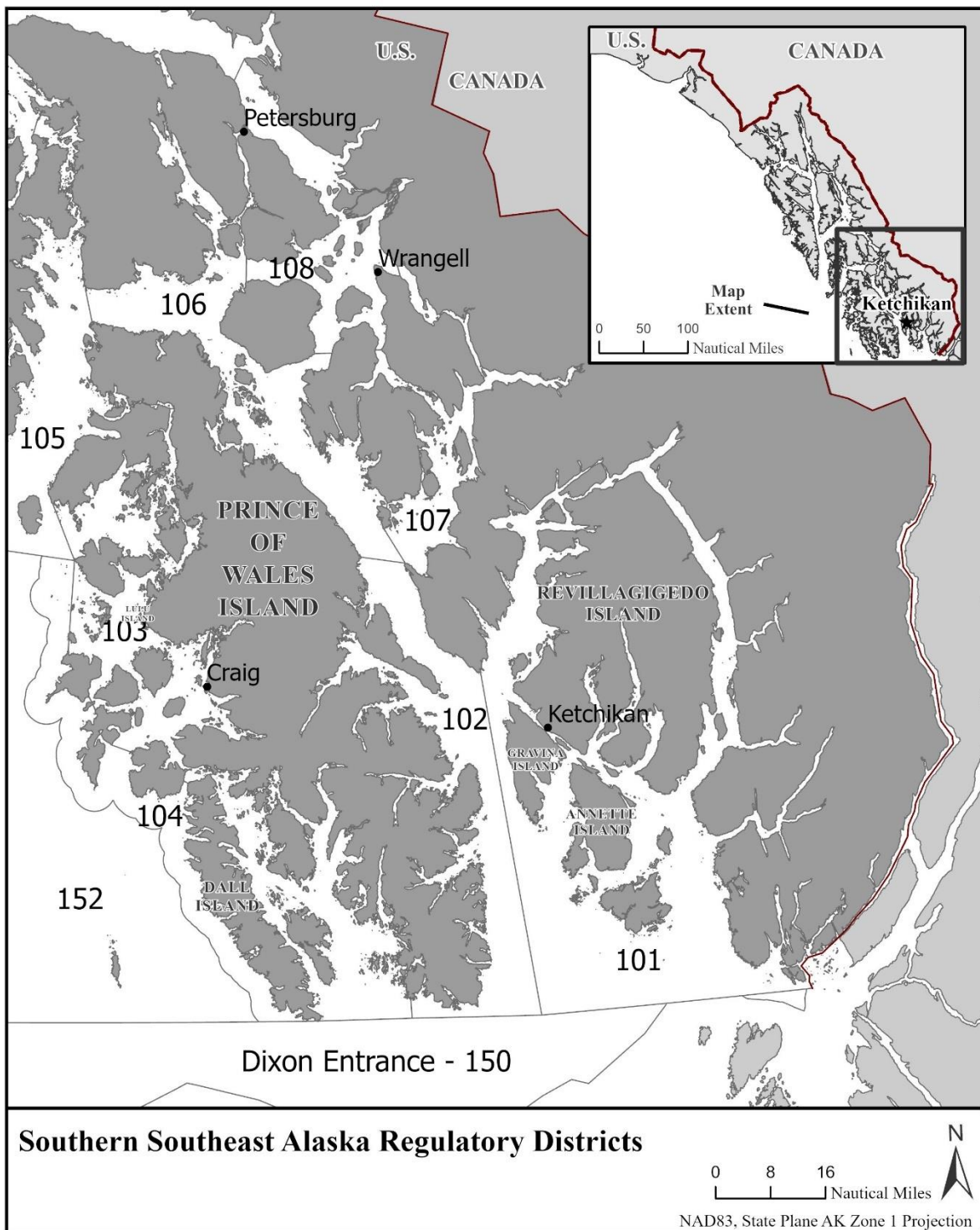


Figure 1.—Alaska Department of Fish and Game southern Southeast Alaska regulatory districts.

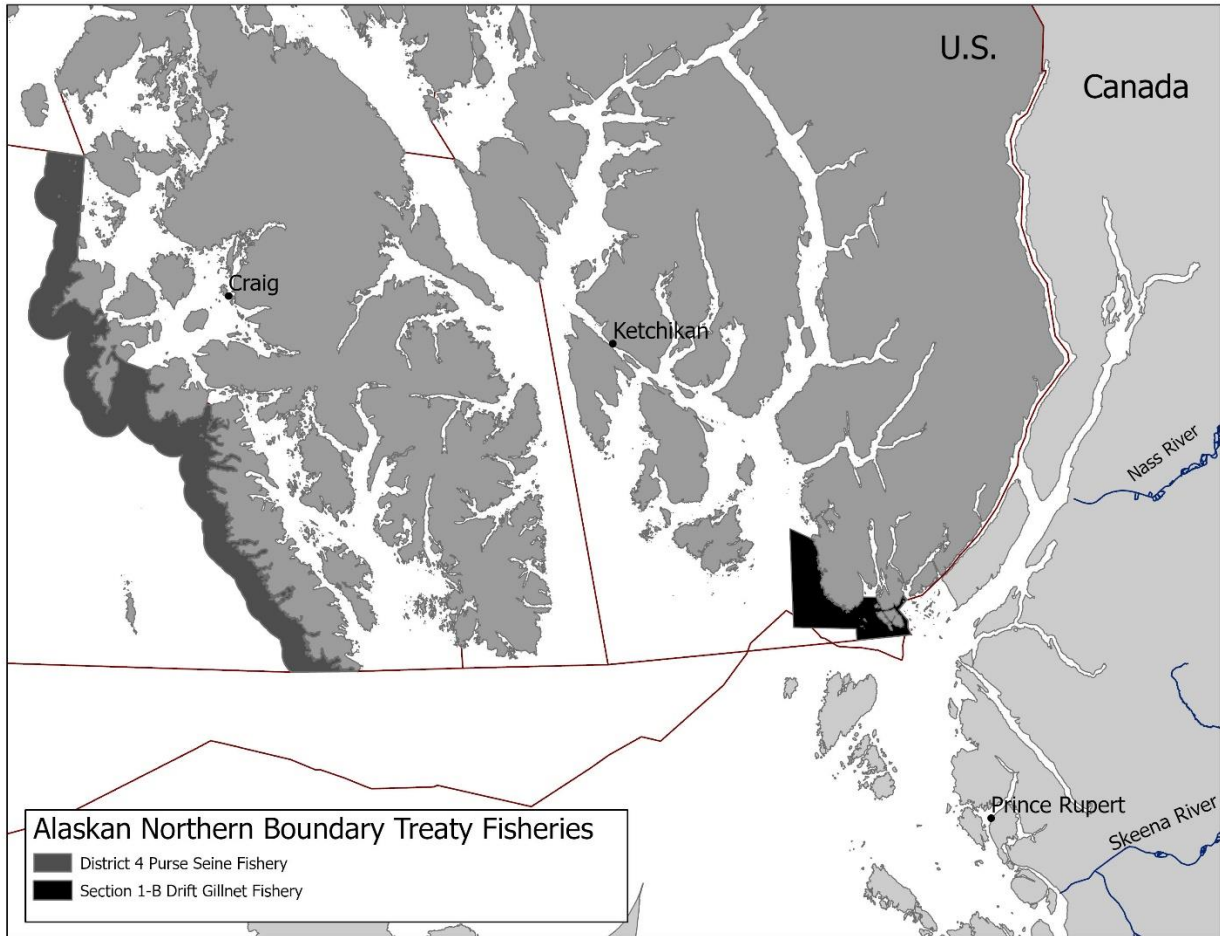


Figure 2.—Alaska District 101 drift gillnet and District 104 purse seine treaty fisheries.

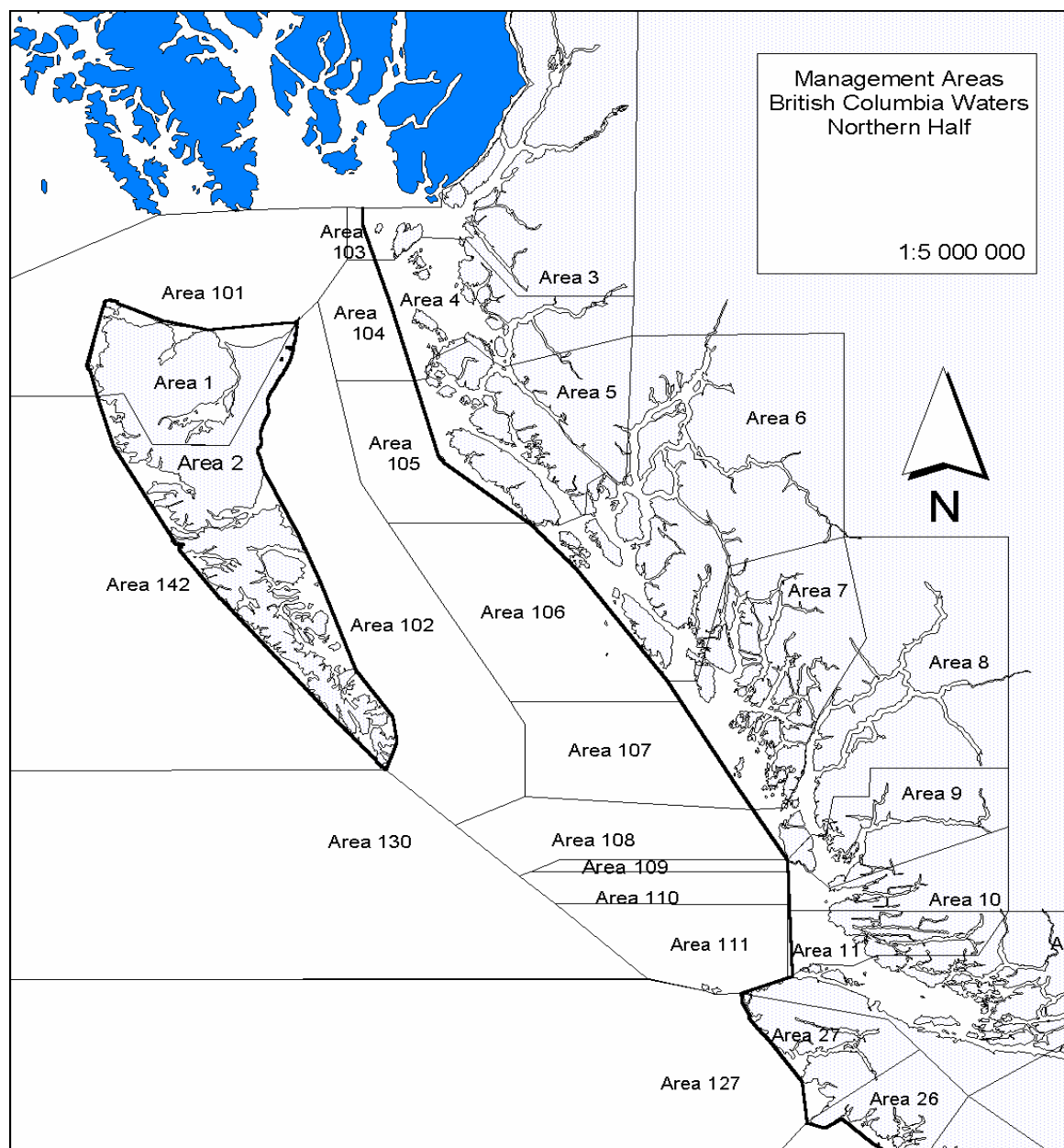


Figure 3.—Canadian Statistical Areas 1-10, northern British Columbia.

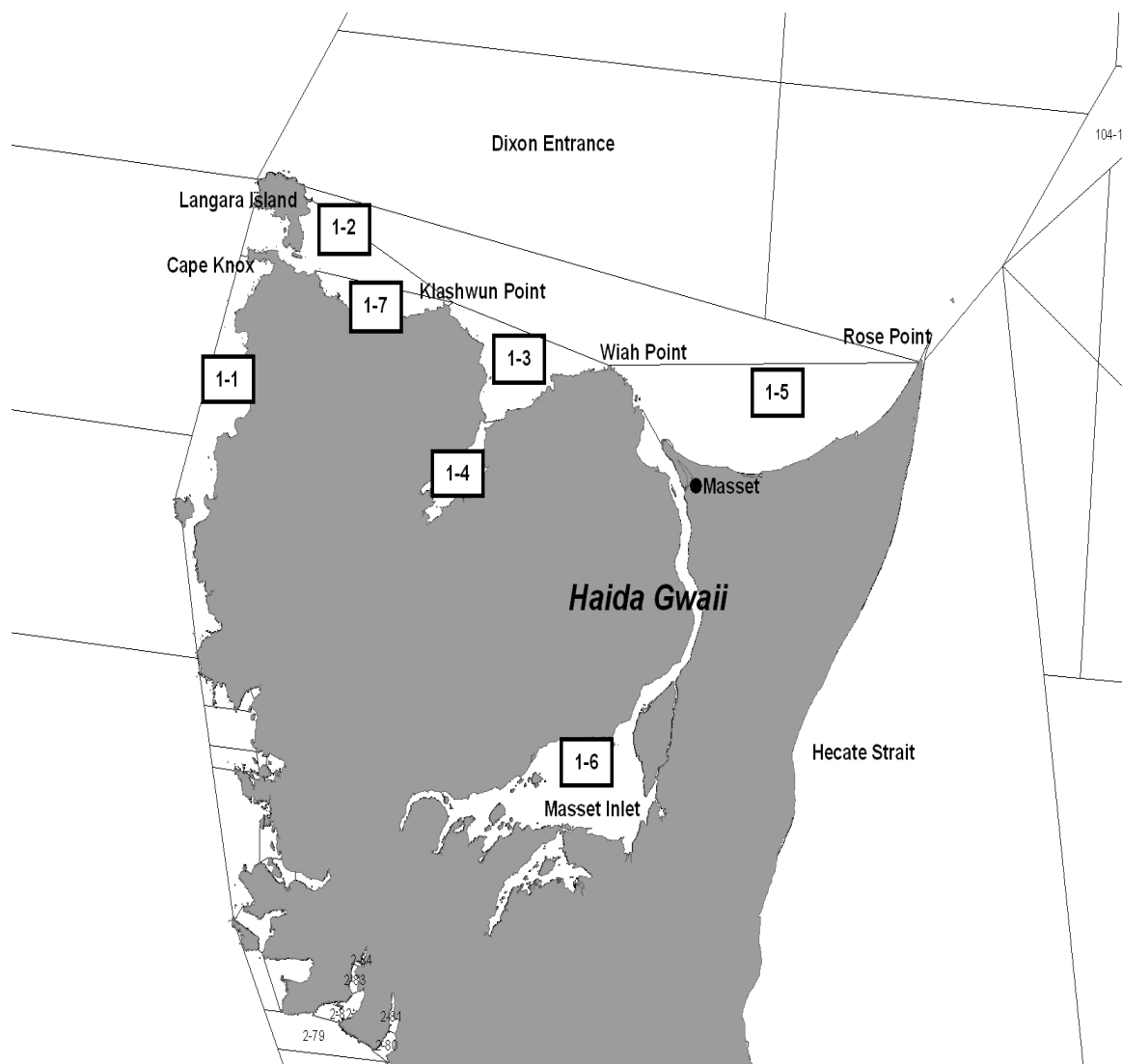


Figure 4.—Canadian Statistical Area 1 management sub-areas.

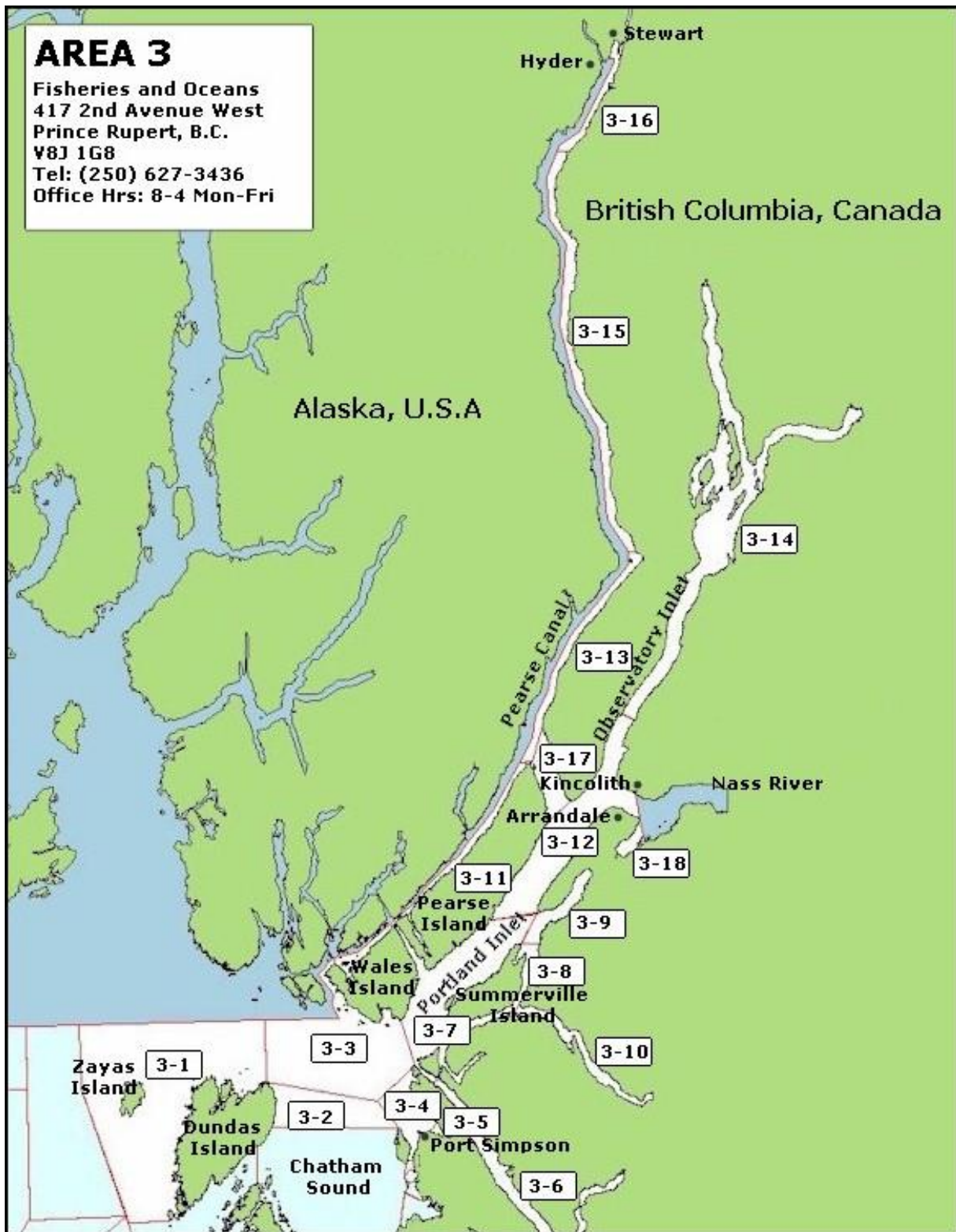


Figure 5.—Canadian Statistical Area 3 management sub-areas.

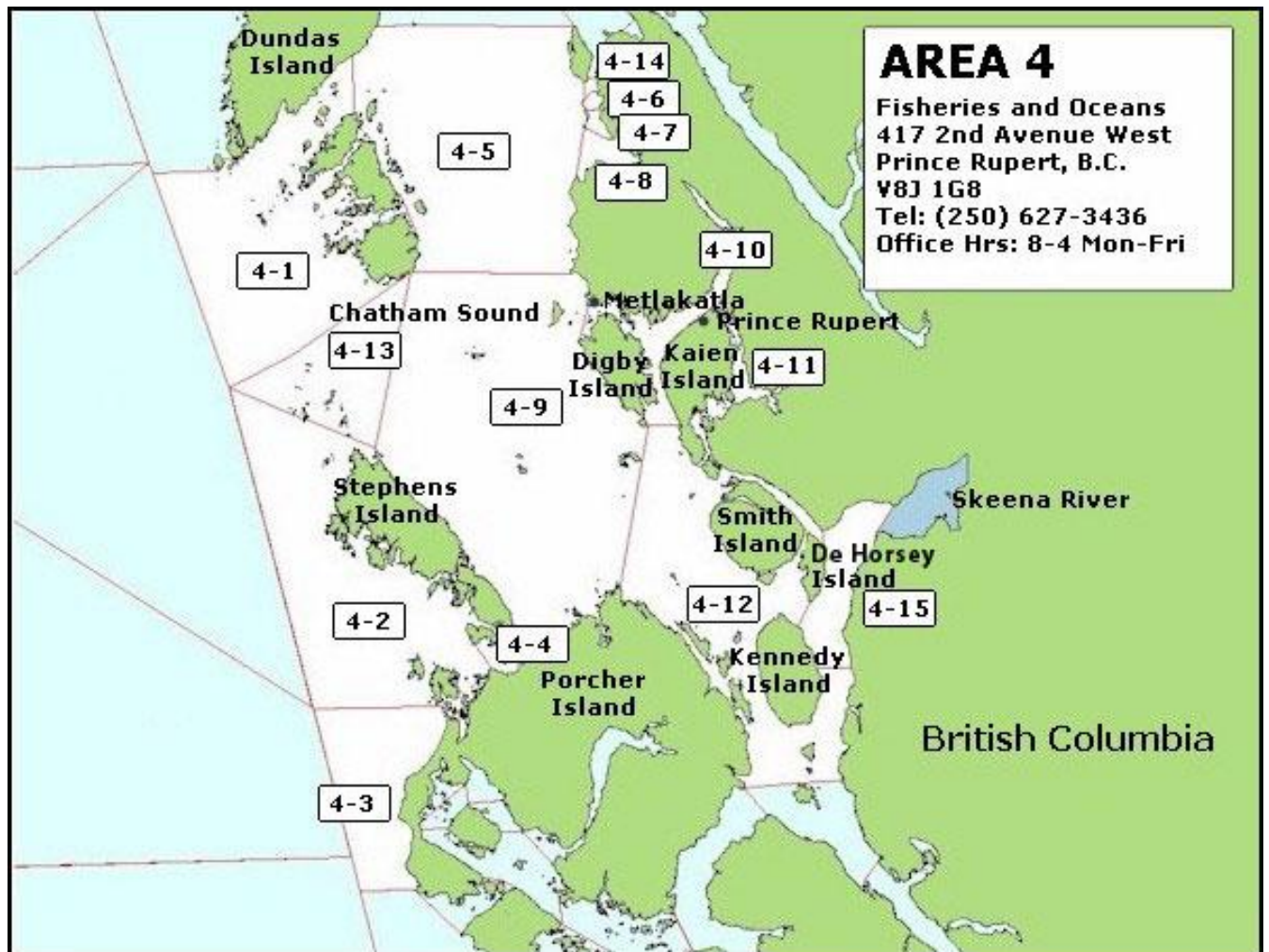


Figure 6.–Canadian Area 4 management sub-areas.

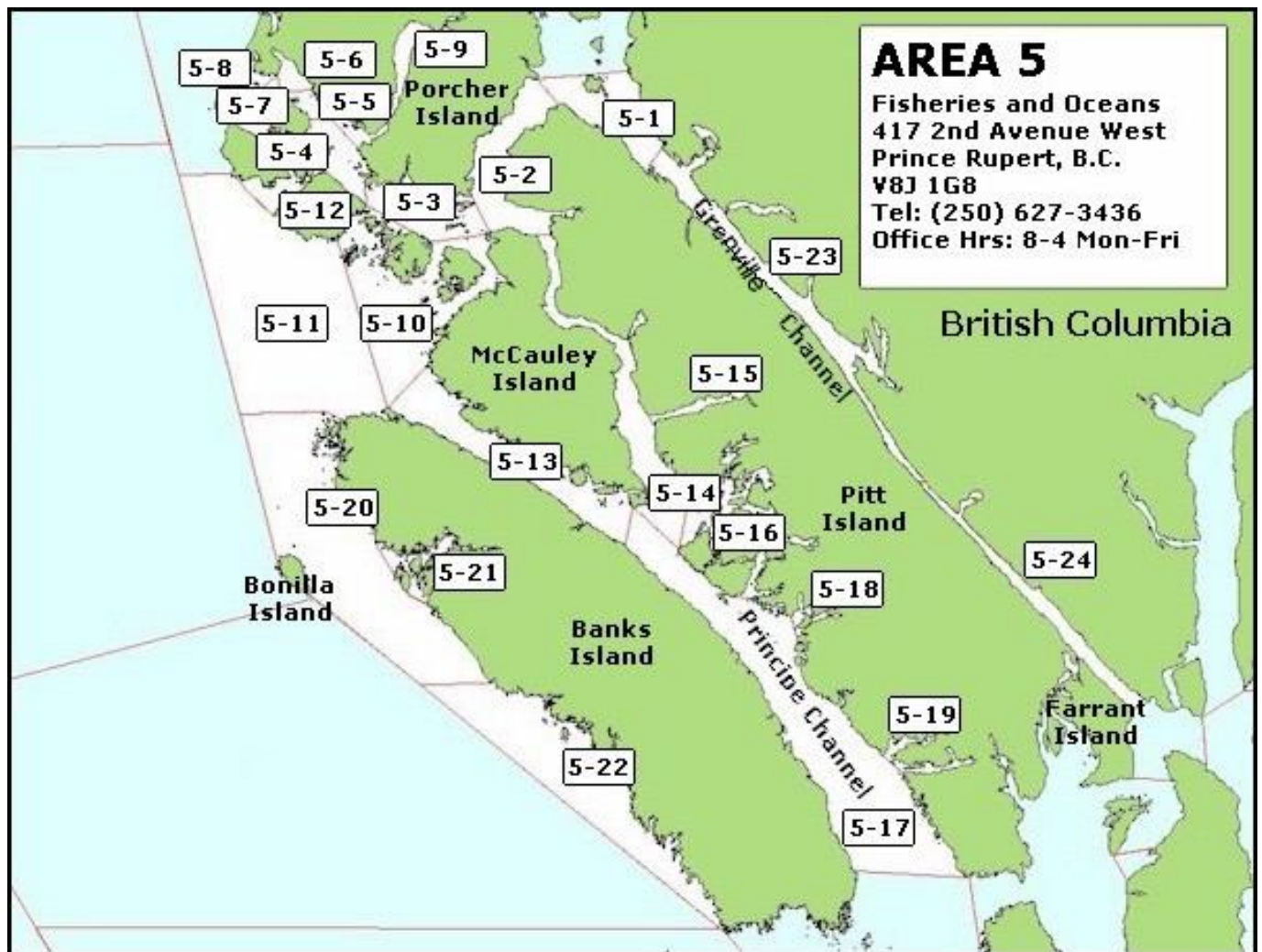


Figure 7.—Canadian Statistical Area 5 management sub-areas.