

**PACIFIC SALMON COMMISSION
JOINT NORTHERN BOUNDARY
TECHNICAL COMMITTEE**

**U.S./CANADA NORTHERN BOUNDARY AREA
2016 SALMON FISHERIES MANAGEMENT REPORT
AND 2017 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

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EXECUTIVE SUMMARY

This report reviews:

- 1) catch, effort, and management actions in the 2016 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 2017.

2016 FISHERIES

Pink salmon returns were average to strong throughout southern Southeast Alaska, but were below average through much of northern Southeast Alaska inside waters. The southern Southeast Alaska pink salmon harvest was 16.3 million (Districts 101-108, all harvest codes, all gear), which was 75% of the recent ten-year average. For all of Southeast Alaska, excluding the Yakutat area, the pink salmon harvest was 18.4 million fish, which was well below the preseason forecast point estimate of 34 million, but within the 13-55 million 80% confidence interval range of the forecast.

The total 2016 Southeast Alaska pink salmon escapement index of 10.1 million index fish ranked 27th since 1960. Biological escapement goals are in place for three subregions in Southeast Alaska and goals were met in the Southern Southeast and Northern Southeast Outside subregions, but escapements were below goal in the Northern Southeast Inside Subregion. On a finer scale, escapements met or exceeded management targets for 8 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 6.6 million was within the escapement goal range of 3.0 to 8.0 million index fish. The pink salmon harvest of 16.3 million in the Southern Southeast Subregion was 75% of the recent 10-year average. The overall Southeast Alaska pink salmon harvest of 18.4 million fish was approximately 50% of the 2006–2015 average of 38.1 million.

Sockeye salmon harvests in the Alaska boundary area were near or above the 1985–2015 average in the District 101 and 102 traditional purse seine fisheries, and below average in the District 103 and 104 purse seine and District 101 drift gillnet fisheries. The Hugh Smith Lake adult sockeye salmon escapement was 12,900, which was within 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 estimated to be 15,600 fish, which was far below the sustainable escapement goal range of 55,000 to 120,000.

Summer chum salmon harvests in the Alaska boundary area were near or above the 1985–2015 average in the District 101, 102, and 104 traditional purse seine fisheries, and below average in the District 103 purse seine and District 101 drift gillnet fisheries. 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 above average at most index streams in southern Southeast Alaska, and the index of 90,000 in 2015 was well above goal.

Coho salmon harvests in the Alaska boundary area were near or below average in gillnet and purse seine fisheries, with the exception of District 2 purse seine, which was 128% of average. Coho salmon escapement counts and estimates were within or above goal ranges. The combined peak count of 13,420 coho salmon in the 14 surveyed streams in the Ketchikan survey index was above the escapement goal of 4,250–8,500 fish. The total escapement of 978 coho salmon to Hugh Smith Lake was within the biological escapement goal range of 500–1,600 fish.

In Canadian Area 1, there are no longer commercial net interception fisheries on passing salmon stocks. Area 1 pinks experienced a strong brood return in 2014, with a terminal harvest of approximately 600,000 fish and an estimated escapement of over 1 million. Returns from the 2014 brood were very poor, leading to no harvestable surpluses being identified. In addition, no chum salmon surpluses were identified in-season. As such, no terminal chum-directed gillnet or seine fisheries occurred in 2016. Catches in the Area 1/101 troll fishery were above the previous decadal average for coho salmon and below the decadal average for pink salmon.

The Area 3 commercial net fishery anticipated a harvestable surplus of 250,000 Nass sockeye salmon, along with seine opportunities to harvest surpluses associated with an expected above average pink salmon return. With the continued increasing trend in earlier timed Area 3/Nass coho salmon abundance, coho retention was again permitted throughout the fishing season, along with a coho directed troll fishery. Specific measures continue to be in place to rebuild local wild chum and Chinook salmon populations, including time and area closures and retention restrictions.

Sockeye salmon catches were poor from the beginning of the season in Area 3, with CPUEs well below average. Catches of sockeye at the Nass Fishwheels indicated that the Nass sockeye return was much poorer than the pre-season prediction, and was likely to be below the minimum escapement requirement. As such, retention of sockeye by the net fleet was restricted after July 4 for the remainder of the season. Gillnets last fished Area 3 on July 4, while seines continued fishing for pink salmon with a non-possession/non-retention restriction in place. The gillnet fleet harvested 19,508 sockeye in 2016, while seines delivered only 495 sockeye. Pink salmon catches were well above average in Area 3 for seines, with a total harvest of 892,858 pinks, compared to the previous even-year decadal average of 275,000. Due to the early closure of gillnets to protect weak Nass sockeye, the harvest pinks by gillnets was minimal at 6,271 fish.

There were two commercial gillnet openings targeting Skeena Chinook salmon in 2016, with total fishing time of 48 hours and total catch of 392 pieces. The Area 4 net fishery was planned in anticipation of a commercial sockeye salmon surplus of 100,000 and a below average pink salmon return. Due to better than anticipated in-season total return projection of sockeye, a total of 7 openings directed at Skeena sockeye were permitted for the gillnet fleet, between July 8 and August 9. Seine opportunities for Skeena sockeye were limited to an Individual Transferable Quota fishery between August 11 and 15. Retention of pinks and coho was permitted for both

fleets, with non-possession/non-retention of chum, Chinook and steelhead. The total gillnet sockeye salmon harvest of 107,406 was well below the 2005–2015 average of 243,338 pieces. The gillnet fleet also retained 10,707 coho and 70,633 pink salmon during the 2016 Area 4 fishery. The final catch for the seine fleet was 23,548 sockeye, 5,229 coho and 15,264 pink salmon. Sockeye and pink catches were well below the 2006–2015 average for gillnets and seines, while coho catches were above the 10-year average.

Area 5 did not open to commercial seine fishing in 2016 due to lack of identified harvestable pink salmon surpluses, though gillnets fished 4 days in conjunction with Area 4 gillnet openings targeting surplus Skeena sockeye.

The preliminary sockeye salmon net escapement estimate of 277,484 to the Nass exceeded the escapement target of 200,000 and is above the 2006–2015 average of 244,863. The preliminary Skeena sockeye salmon net escapement estimate of 1.25 million was much higher than the 2006 to 2015 average of 973,369, and well above the target escapement of 900,000. Pink salmon returns throughout the North Coast were much lower than expected, based on brood year strength, and it is likely that escapement goals were not met in most cases. As was the case in 2015, early-returning stocks returning to the Nass and Skeena fared much better than later-timed and coastal populations. Some Areas 4 coastal and lower Skeena tributary systems experienced complete failures. Chum salmon escapements in Area 4 have been improving with the added protection provided by management actions, though remain below escapement targets. Escapements to Area 3 continue to improve with management measures in place to reduce impacts to wild chum continued in 2016 as part of the north coast chum rebuilding program.

MANAGEMENT PERFORMANCE

Pacific Salmon Treaty based harvest sharing agreements were renewed in 2009 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 fishery opens the first Sunday in July and in 2016 the initial opening was July 3 (Week 28). The 2016 pre-Week 31 fishing plan for District 104 was based on returns of local Alaskan stocks as well as the Canadian Department of Fisheries and

Oceans (DFO) preseason forecast returns of approximately 1,959,000 Nass and Skeena sockeye salmon. The preseason forecasts of Nass and Skeena sockeye salmon minus an escapement goal of 1.10 million, produced an AAH of approximately 859,000 fish. Using this forecast, the 2016 pre-week 31 AAH was approximately 21,000 Nass and Skeena sockeye salmon in the District 104 purse seine fishery.

In the 2016 Treaty period (Alaska statistical weeks 28-30), 110,346 sockeye were harvested during a 15 and 12-hour opening in Week 28; a 15 and 12-hour opening in Week 29, and one 6-hour opening in week 30 (Table 1). The preliminary estimates of Nass and Skeena sockeye salmon harvested prior to week 31 in the District 104 purse seine fishery was 65,039 fish in 2016. The final number of Nass and Skeena sockeye salmon harvested, and the actual harvest by stock, will not be available until harvest, escapement, and stock composition estimates are finalized for the year.

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 679,000 in 2016 which, minus an escapement goal of 200,000, would result in an AAH of about 479,000. Using this forecast, the 2016 allowable harvest in the District 101 drift gillnet fishery was approximately 66,102 Nass River sockeye salmon. A total of 39,912 sockeye salmon were harvested, which was only 33% of the 1985-2015 average of 119,957 fish and was the third lowest harvest since the inception of the Pacific Salmon Treaty. The preliminary estimate of Nass River sockeye salmon harvested in the District 101 drift gillnet fishery in 2016 was 14,388 fish.

The District 101 drift gillnet fishery opens by regulation on the third Sunday in June, which was June 19 (week 26) in 2016. 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 2016, 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 approximately 30.54 million pinks, the Alaskan Districts 101, 102 and 103 AAH was approximately 19.79 million pinks. The resulting Area 3-1 to 3-4 Canadian commercial net total allowable catch of this AAH was approximately 491,666 pinks of Alaskan Districts 101, 102 and 103 origin.

In the Canadian northern boundary area, pink salmon returns were anticipated to be average to below average for Area 3 and Area 4, based on brood year return strength. Actual returns to Area 3 were below average and well below average for Area 4. The 2016 preliminary Canadian pink salmon catch in Sub-areas 3-1 to 3-4 was 430,435, and the Alaska stock component of this

catch is estimated to be 393,118, or 2.0 % of the AAH. This result is below the annex agreement of 2.49%.

Also in 2016, 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 30.54 million pinks, the resulting Area 1 Canadian commercial troll total allowable catch of this AAH was approximately 406,801 pinks 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 June 18 to July 31 and from August 25 to September 30. Effort directed at pink salmon in Area 1 was minimal in 2016, with pinks being harvested as by-catch in fisheries directed at coho and Chinook. The fishery harvested a total of 32,343 pink salmon, with an estimated 30,953 being of Alaskan origin. This equates to 0.16% of the Alaskan Districts 101, 102 and 103 pink AAH, well below the annex agreement of 2.57%.

2017 FORECASTS

The Southeast Alaska pink salmon harvest in 2017 is predicted to be in the *strong* range, with a point estimate of 43 million fish (80% confidence interval: 27–59 million fish). An actual harvest of 43 million pink salmon would be just above the recent 10-year average harvest of 39 million pink salmon. The 2017 forecast was produced in two steps: 1) a forecast of the trend in the harvest, and 2) the forecast trend adjusted using 2016 juvenile pink salmon abundance data provided by the NOAA Fisheries, Alaska Fisheries Science Center, Auke Bay Laboratories. Formal forecasts are not made for species other than pink salmon in Southeast Alaska.

A below average Nass River sockeye salmon total return of 454,000 (with a 10% probability of the return exceeding 505,000 and a 90% probability the return will exceed 408,000) is expected. The sibling model forecast predicts a 50% probability of approximately 594,000 sockeye salmon returning to the Skeena River in 2017 with a 10% probability of a return exceeding 1.24 million and a 90% probability the return would exceed 285,000. Below average pink salmon returns are anticipated to Areas 3, 4 and 5, based on brood year escapements, while Area 1 pinks will experience an off-year.

INTRODUCTION

This report reviews the 2016 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 2017. The document is submitted to the Pacific Salmon Commission as required in Article IV of the Pacific Salmon Treaty. Weekly catch and effort data is provided by opening, district or area, gear, and species (sockeye, pink, chum, coho, and Chinook salmon) for Northern Boundary Area fisheries for 2016. 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

2016 Salmon Forecast

The 2016 pink salmon harvest in Southeast Alaska was expected to be *strong*, with a point estimate of 34 million fish and a forecast range of 13-55 million fish. Formal forecasts were not made for subregions or for species other than pink salmon in Southeast Alaska.

Review of the 2016 Fishing Season

Commercial fisheries harvested 22.2 million salmon in southern Southeast Alaska in 2016. 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 16.3 million (73%) pink, 4.1 million (18%) chum, 0.9 million coho (4%), 0.8 million (4%) sockeye, and 107,273 (1%) 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 1985–2015 average.)

District 101 Purse Seine Fishery

The District 101 purse seine fishery opened July 3, 2016 for the first of 14 fishing periods (Table 1). The fishery harvested 4,750,752 pink salmon, 95,134 sockeye salmon, 309,695 chum salmon, 29,083 coho salmon, and 1,950 Chinook salmon (Table 1). The number of days that the fishery was open was 62% of average, but the number of boats fishing was 120% of average. The pink salmon harvest of 4,750,752 was 82% of average and catches were above average through late July, but below average in the remaining weeks of the fishery. Sockeye salmon catches peaked in week 31 and the catch of 95,134 fish was very close to the 1985–2015 average. The total chum

salmon catch of 309,695 was right at average and the total coho salmon harvest of 29,083 fish was 75% of average. The harvest of 577 Chinook salmon was 120% of average.

District 102 Purse Seine

Limited portions of District 102 near Kendrick Bay were opened weeks 26–27 (June 19–July 2) to access returns of SSRAA enhanced summer chum salmon returning to Kendrick Bay. The fishery was open for 87 hours in both weeks. A total of 55 purse seine vessels fished in week 26 and 106 purse seine vessels in week 27, harvesting 260,074 chum salmon (Table 2). The traditional seine fishery in District 102 targeting local stocks of pink salmon opened Sunday, July 3 (Week 28). During the traditional fishing period there were 18 openings that were from 12 to 39 hours in duration (Table 2).

The District 102 purse seine fishery harvested 3,144,580 pink salmon, 55,852 sockeye salmon, 794,950 chum salmon, 63,962 coho salmon, and 4,399 Chinook salmon (Table 2). The number of days that the fishery was open was above average early in weeks 26 and 27, but below average in most of the remaining weeks of the fishery. There were minimal openings targeting fall chum salmon and the overall number of days open was 55% of the 1985–2015 average. The number of boats fishing the district was well above average in most weeks due to poor pink salmon returns to northern Southeast Alaska inside waters, which sent more of the fleet to southern Southeast Alaska where opportunity was greater (Table 2).

Pink salmon harvests were near or above average through early August, with a peak weekly harvest of 1,481,227 fish in week 32 (31 July–6 August; Table 2). Pink salmon catches dropped sharply after week 32 and were below average for the remainder of the fishery. The overall pink salmon harvest of 3,144,580 was 75% of the 1985–2015 average. Sockeye salmon catches were below average early in the season, but increased to well above average from mid-July to early August. The total sockeye salmon catch of 55,852 fish was 130% of the 1985–2015 average. Catches of summer-run chum salmon were well above average through early-August, but declined in late August and were very low for fall-run fish. The total chum salmon catch of 794,950 fish was 171% of the 1985–2015 average. Catches of coho salmon were above average in most weeks and the total harvest of 63,962 fish was 128% of the 1985–2015 average. The harvest of 4,399 Chinook salmon was 895% of average.

District 103 Purse Seine

The District 103 purse seine fishery opened July 17, 2016 for the first of ten fishing periods (Table 3). The fishery harvested 1,101,000 pink salmon, 16,640 sockeye salmon, 20,203 chum salmon, 14,602 coho salmon, and 410 Chinook salmon (Table 3). The number of days that the fishery was open and the number of boats fishing (sum of boats per week) were both below average throughout the season.

Pink salmon catches were below average in most weeks of the fishery and the total harvest of 1,101,000 was 27% of the 1985–2015 average. Sockeye salmon catches were generally below average and the total catch of 16,640 fish was 73% of average. The total chum salmon catch of 20,203 fish was 18% of the long-term average. Catches of coho salmon were below average in all

but the first week of the fishery and the total coho salmon harvest of 14,602 fish was 48% of the 1985–2015 average. The harvest of 410 Chinook salmon was 129% of average.

District 104 Purse Seine Fishery

The District 104 purse seine fishery opens by regulation on the first Sunday in July. In 2016, the initial opening was July 3 (Week 28). The pre-week 31 fishing plan for District 104 was based on the preseason DFO forecast returns of approximately 1,959,000 Nass and Skeena sockeye salmon. In the 2016 treaty period (Alaska statistical weeks 28–30), 110,346 sockeye salmon were harvested during 15 and 12-hour openings in weeks 28 and 29, and one 6-hour opening in week 30 (Table 4). A total of 106 purse seine vessels fished at some time in the district during the treaty period. The preliminary estimates of Nass and Skeena sockeye salmon harvested prior to week 31 in the District 104 purse seine fishery was 65,039 fish in 2016. The final number of Nass and Skeena sockeye salmon harvested, and the actual catch by stock, will not be available until catch, escapement, and stock composition estimates are finalized for the year.

In 2016, a total of 3,659,894 pink salmon, 405,989 sockeye salmon, 348,647 chum salmon, 123,696 coho salmon, and 12,206 Chinook salmon were harvested in the District 104 purse seine fishery (Table 4). The number of days that the fishery was open was well below the 1985-2015 average, and the number of boats fishing was above average during the first two weeks of the season and then dropped below average for the remainder of the fishery. Chinook salmon harvests were well above average in most weeks of the fishery, and the harvest of 12,206 fish was 180% of the 1985-2015 average. Sockeye salmon harvests were above average early in the season and the treaty period (week 28-30) harvest of 110,346 was 110% of the 1985–2015 average. The total sockeye salmon harvest of 405,989 was 84% of the 1985–2015 average of 482,000 fish. Harvests of coho salmon were far above average in weeks 28 and 29 and then dropped below average for the remainder of the season and the overall harvest was close to the long-term average. Pink salmon harvests started off strong, but were well below average during the normal peak weeks of the fishery—the overall harvest was only 43% of the long-term average. Chum salmon harvests also started off very strong in weeks 28 and 29, but were below average through the remainder of the season. The total chum salmon harvest of 348,647 fish was 115% of average.

Districts 105, 106, and 107 Purse Seine Fisheries

For the 2016 season, the combined Districts 105, 106, and 107 traditional state managed purse seine fisheries harvested 1.07 million pink salmon, 224,847 chum salmon, 10,102 coho salmon, 20,777 sockeye salmon, and 649 Chinook salmon.

District 101 Drift Gillnet Fishery

The 2009 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 2016 season, DFO forecast a total return of 679,000 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 19 in 2016. 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 35 (August 21) management was based on the strength of wild stock fall chum and coho salmon.

The District 101 drift gillnet fishery opened Sunday June 19 (Week 26) in 2016. 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 75, which was 69% of the 1985–2015 average of 109 boats. A total of 39,912 sockeye salmon were harvested, which was only 33% of the 1985–2015 average of 119,957 fish and was the third lowest harvest since the inception of the Pacific Salmon Treaty. Harvests of sockeye salmon were below treaty period averages until late in the season. The cumulative sockeye salmon harvest prior to the initiation of the PSMP in Week 30 was 14,686 fish, or about 38% of the season's total sockeye salmon harvest. The final number of Nass River sockeye harvested in the District 101 drift gillnet fishery will not be available until catch, escapement, and stock composition estimates are finalized for the 2016 season. The preliminary estimate of Nass River sockeye salmon harvested in the District 101 drift gillnet fishery in 2016 was 14,388 fish.

Pink salmon catches were near or above average throughout the season and the total harvest of 561,021 fish in the District 101 drift gillnet fishery was 110% of the average of 508,481 fish. Chum salmon catches were below average for summer-run fish, but were above average from late August to the end of the season. The total chum salmon harvest of 273,608 fish was 90% of average. Coho salmon catches were below or near average for most weeks of the season and the total harvest of 46,393 fish was 94% of the treaty period average. The Chinook salmon harvest was near average throughout the season and the catch of 1,191 was 80% of the treaty-period average.

District 106 Drift Gillnet Fishery

The 2016 harvest in the District 106 commercial gillnet fishery included 358,309 pink salmon, 122,101 coho salmon, 130,236 chum salmon, 106,649 sockeye salmon, and 2,094 Chinook salmon (Table 6). The number of hours open to fishing and the number of boats participating in the fishery were near average. Chinook salmon catches were below average from mid-June to early July, but were near or above average through the remainder of the season. Sockeye salmon catches were

well above average from early July to early August. The total sockeye salmon catch of 106,649 fish was 124% of the recent ten-year average. Catches of coho salmon were below average in most weeks through early September, but were above average in the final three weeks of the season. The overall harvest of 122,101 coho salmon was 85% of the recent ten-year average of 144,000 fish. Pink salmon catches were well above average from early July to early August, and the overall harvest of 358,309 fish was 135% of the recent ten-year average. Chum salmon catches were below average overall and the harvest of 130,236 fish was 74% of average.

Annette Island Reserve Fisheries

In 2016, the Annette Island purse seine fishery harvested 1,145,221 pink salmon, 152,374 chum salmon, 18,387 sockeye salmon, 10,142 coho salmon, and 876 Chinook salmon. The 2016 Annette Island drift gillnet fishery harvested 243,342 chum salmon, 273,022 pink salmon, 3,798 sockeye salmon, 35,677 coho salmon, and 855 Chinook salmon (Tables 7-8).

Pink, Sockeye, and Chum Salmon Escapements

Escapements of pink salmon were generally strong throughout southern Southeast Alaska, but were below average throughout much of northern Southeast Alaska inside waters. The total 2016 Southeast Alaska pink salmon escapement index of 10.08 million fish ranked 27th since 1960. Biological escapement goals were met in the Southern Southeast and Northern Southeast Outside subregions, but escapements in the Northern Southeast Inside Subregion were below goal in 2016 (Table 9). On a finer scale, escapements met or exceeded management targets for 8 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 of 6.6 million was within the escapement goal range of 3.0 to 8.0 million fish. The pink salmon harvest of 16.3 million in the Southern Southeast Subregion was 75% of the recent 10-year average. The overall Southeast Alaska pink salmon harvest of 18.4 million fish was approximately 50% of the 2006–2015 average of 38.1 million.

Sockeye salmon returns throughout Southeast Alaska were mixed in 2016, and escapement targets were met for 11 of the 13 sockeye salmon systems with formal escapement goals. The Hugh Smith Lake adult sockeye salmon escapement was 12,900, which was within 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 estimated to be 15,600 fish, which was far below the sustainable escapement goal range of 55,000 to 120,000.

For summer-run chum salmon, lower bound sustainable escapement goals were met for two of the three subregions in Southeast Alaska. In Southeast Alaska, runs are broken into summer and fall runs. 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 above average at most index streams in southern Southeast Alaska, and the index of 90,000 in 2016 was well above goal. 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 just reached 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 2009 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 Alaska Department of Fish and Game's (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 preliminary total return of Nass and Skeena river sockeye in 2016 is currently estimated at 1,994,130 fish. This return would have allowed a treaty-period catch in the District 104 purse seine fishery of approximately 894,130 Nass and Skeena river sockeye salmon. The 2016 total catch of sockeye salmon during the District 104 treaty period was 110,346 fish. Annual AAH fishery performance in the District 104 fishery is presented in Table 10 with bilaterally accepted numbers through 2015 and preliminary run reconstruction estimates for 2016. The preliminary estimates of Nass and Skeena sockeye salmon harvested prior to week 31 in the District 104 purse seine fishery was 65,042 fish in 2016. The final number of Nass and Skeena sockeye salmon harvested in the 2016 District 104 treaty-period will not be available until catch, escapement, stock composition, and run reconstruction estimates are finalized for that year.

District 101 Drift Gillnet Fishery

The 2009 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 preliminary total return of Nass River sockeye salmon in 2016 is currently estimated at 438,311 sockeye salmon. This return allows a catch in the District 101 gillnet fishery of 32,887 Nass River sockeye salmon. The 2016 total catch of sockeye salmon in the District 101 gillnet fishery was 39,912 fish, which was only 33% of the 1985-2015 average of 120,000 fish and was the third lowest catch 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 2015 and preliminary run reconstruction estimates for 2016. The preliminary estimate of Nass River sockeye salmon harvested in the District 101 drift gillnet fishery in 2016 was 14,388 fish. The final number of Nass River sockeye salmon harvested in the 2016 District 101 gillnet fishery will not be available until catch, escapement, and stock composition estimates are finalized for the year.

2017 Southeast Alaska Pink Salmon Forecast

The Southeast Alaska pink salmon harvest in 2017 is predicted to be in the *strong* range, with a point estimate of 43 million fish (80% confidence interval: 27–59 million fish). An actual harvest of 43 million pink salmon would be just above the recent 10-year average of 39 million pink salmon. The 2017 forecast was produced in two steps: 1) a forecast of the trend in the harvest, and 2) the forecast trend adjusted using 2016 juvenile pink salmon abundance data provided by the NOAA Fisheries, Alaska Fisheries Science Center, Auke Bay Laboratories. Formal forecasts are not made for species other than pink salmon in Southeast Alaska.

NORTHERN BRITISH COLUMBIA

2016 Salmon Forecast

Area 1 Expectations

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

Pink This was an on-year for Haida Gwaii, with surpluses expected for harvest in inside waters based on brood year strength.

Chum Fishing opportunities were dependent on surpluses identified in-season.

Area 3 Expectations

Sockeye A below average Nass sockeye total return of 575,000 (with a 25% probability of the return exceeding 667,000 and a 75% probability the return would exceed 496,000) was expected to provide modest commercial fishing opportunities.

Pink An above average return was expected based on average brood year escapements.

Chum Area 3 chum stocks remain below target levels. 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 1.28 million sockeye returning to the Skeena in 2016 with a 10% probability of the return exceeding 1.88 million and a 75% probability the return would exceed 870,000. A minimal Skeena sockeye directed commercial fishery was anticipated in Area 4.

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

Chum Skeena chum escapements are depressed and there was no chum retention in Area 4.

Area 5 Expectations

Sockeye The sibling model forecast predicted a 50% probability of approximately 1.28 million sockeye returning to the Skeena in 2016 with a 10% probability of the return exceeding 1.88 million and a 75% probability the return would exceed 870,000. A minimal Skeena sockeye directed commercial fishery was anticipated in Area 5.

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

Chum Local chum stocks are depressed with no surplus anticipated.

Review of 2016 Fishing Season - Net and Troll Fisheries

Area 1

Commercial net interception fisheries on passing salmon stocks no longer occur in Area 1, focussing instead on local pink and chum salmon stocks (Figure 3). Pink returns to Area 1 streams were a complete failure. As such, there were no fisheries directed at pink salmon in 2016. In addition, no chum salmon surpluses were identified in-season in Area 1 (Tables 12 and 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. The directed Chinook salmon fishery in portions of Area 1 was opened from June 21st to July 31st, and again from August 25th to September 30th. The coho and pink salmon directed troll fishery in Dixon Entrance was opened from July 1st to September 30th. Chum salmon retention was restricted throughout the season, while sockeye salmon by-catch retention was permitted in portions of Area 1 and 101 from July 1st to September 30th.

The preliminary catch estimate for the Area 1 portion (includes Area 101) of the 2016 troll fishery is 554 sockeye, 154,267 coho, 32,343 pink and 133,436 Chinook salmon (Table 14).

See Table 33 for Area 1 escapements.

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, with the first exploratory fishery of 2016 taking place on June 7th. 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 2016, fishwheel operations commenced May 31st and closed for the season on September 9th. No sampling days were lost to high water in 2016, and water levels through the season were the lowest since the program started. 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 2016, all Area 3 net fisheries operated with a non-retention/non-possession restriction for steelhead, with similar restrictions in place for chum salmon for all but eight openings in restricted locations and times. Retention of Chinook salmon was restricted for gillnets at the start of the season in some localised areas to protect weak stocks, with requested release of Chinook salmon for the rest of the area. In addition, all seine fisheries were also conducted with an additional non-retention/non-possession restriction for Chinook salmon. Due to conservation concerns for Kwinageese sockeye salmon, pre-season planning called for the marine commercial gillnets to be closed from July 19th to July 25th and for the seine fishery to be operated under a required mandatory release restriction (non-retention/non-possession) for sockeye salmon during the Kwinageese closure period. Due to in-season concerns for the Nass sockeye aggregate, all gillnet fishing ceased after July 4th and seines operated under mandatory release of sockeye during pink directed openings after July 4th.

The 2016 Area 3 exploratory gillnet fishery began with 2 consecutive 16-hour openings on June 7th and 8th (Week 24) in portions of 3-3, 3-4, 3-7 and 3-12 to assess Nass River sockeye salmon run strength. A less than average The 2 day combined effort gillnet fleet sizes of 117 vessels (a combined 78 boat days effort) participated with a retained catch of only 813 sockeye salmon. The sockeye salmon CPUE was well below average for this week resulting in no further opportunities for the week. Chum salmon appeared in the catch this week

In Week 25, two consecutive 16-hour openings (June 13th and 14th), were permitted in Area 3 to target Nass sockeye salmon. Open portions for Area 3 expanded this week to allow for further assessment of Nass sockeye salmon stock strength. Sockeye salmon CPUEs decreased from the previous week, with a total catch of 953 sockeye salmon, with minor by-catches of coho salmon. As was the case during the previous week, a majority of the gillnet fleet fished the inside waters north of China Hat, and accumulated a combined effort of 93 boat-days.

With continued poor catches of sockeye both in the commercial fishery and the Nass fish wheels over the previous two weeks leading to a continually declining Total Return to Canada (TRTC) estimate for Nass sockeye, only two 16-hour gillnet openings were permitted in Week 26 to target Nass sockeye, with a majority of the fleet fishing the inner portions of Area 3. Sockeye CPUE's increased over previous weeks, but remained relatively low when compared to previous decadal data for the week. In addition, indication of abundance at the Nass fish wheels continued to show a declining trend in total return to Canada estimation. Restrictions on Chinook salmon retention were relaxed, though area-specific closures to protect non-Nass stocks remained in place, and

release of all live specimens was requested. Continued low sockeye CPUEs and a total catch of only 3,807 sockeye salmon provided further indications of a poorer than anticipated return of Nass sockeye. Due to increased encounters with chum salmon, retention was permitted starting this week in portions of subareas 3-3 and 3-7, with 2,125 being harvested during the 2 day opening. As in previous years, a proportion of the chum salmon catch was otolith sampled for post-season analysis to determine the hatchery contribution to the total catch. Previous otolith thermal mark analysis indicated relatively high proportions of passing US hatchery chum salmon compared to wild chum. This was a week earlier than the previous 2 years. In addition to sockeye and chum, the fleet also harvested 96 coho, 2 pink, 2,125 chum and 168 Chinook salmon while accumulating 159 boat-days of effort.

Gillnet catches of sockeye salmon doubled and pink salmon first appeared in numbers during two 16-hour gillnet openings permitted in Week 27, though effort remained low due to poor fishing success. Escapement of sockeye salmon through the Nass fish wheels remained well below average, with a continued downgrading of the upper Nass sockeye TRTC. Chum salmon by-catch retention was again permitted in portions of subareas 3-3 and 3-7, with catches increasing significantly. With a combined effort of 179 boat days (Tables 15 to 17), the total weekly gillnet harvest was 7,305 sockeye, 557 coho, 883 pink, 5,663 chum and 285 Chinook salmon.

Sockeye CPUEs at the Nass fish wheels continued to be well below average, leading to a further downgrading of the TRTC estimate. By the end of this week, the upper Nass sockeye salmon escapement estimate dropped below the minimum escapement requirement, leading to a decision by fisheries management to restrict impacts in commercial fisheries. As such, gillnets fishing in Area 3 ceased after July 4. This means that gillnets were permitted to fish only a single opening in Week 28 to target passing Nass sockeye salmon, while retaining coho, chum, Chinook and pink salmon. Although sub-areas 3-3 and 3-4 were also open, the majority of the gillnet fleet was again confined itself to the open portions of sub-areas 3-7 and 3-12, and chum salmon retention was again permitted only in the Wales Island shoreline area. CPUEs for sockeye, coho and pink salmon increased significantly over the previous week while fishing only 73 boat days of effort, resulting in a total catch of 6,630 sockeye, 1,098 coho, 5,383 pink, 1,939 chum and 98 Chinook salmon. This was the first week the seine fleet was permitted to fish Area 3, with a single opening around Wales Island targeting pink salmon and with retention of sockeye, coho and chum salmon also being permitted. Minimal seine effort occurred during this week (12 boat-days) and 495 sockeye, 556 coho, 3,939 pink and 11,175 chum salmon were harvested (Tables 18 to 20).

Sockeye catches at the Nass fishwheels continued to be poorer than anticipated. Based on fish wheel catches and average run timing to July 10th, and assuming mean run timing, the predicted upper Nass sockeye escapement had dropped to 194,000. The minimum escapement target for upper Nass sockeye is 250,000. Nisga'a Fish and Wildlife fisheries managers decided that, due to the extremely poor projected return, all Treaty economic fisheries impacting sockeye salmon were

suspended. Chum retention remained permitted within the restrictive boundaries by the seine fleet in Week 29, with four 16-hour openings being provided for seines to target abundant pink salmon. Pink CPUEs increase significantly this week, while decreasing nearly 50% for chum salmon over the previous week. Fishing effort for the seine fleet remained low at 31 boat days, with a combined catch of 5,554 coho, 209,523 pink and 30,452 chum salmon.

In 2011, it was confirmed that a rock fall barrier in the Kwinageese River was preventing nearly all sockeye and Chinook salmon from migrating further upstream to traditional spawning grounds. Concrete blocks were placed downstream of the barrier to raise the water level below the falls to allow fish passage. The 2016 sockeye salmon return was believed to be impacted from the barrier. Consequently, gillnet fishing would have been closed and sockeye salmon retention prohibited for seines during the peak Kwinageese migration period (July 19 to 25). As sockeye salmon retention was prohibited after July 4 for both fleets, the Kwinageese closure time was not instituted as extra protection had already been enforced.

Sockeye and Chinook salmon catches at the Nass fish wheels declined again during the previous week, resulting in an upper Nass sockeye escapement estimates dropping from 194,000 to 174,000 for sockeye and from 26,000 to 15,000 for Chinook. As of July 20, chum salmon retention was restricted for the remainder of the season. The seine fleet fished three 16-hour openings during Week 30, for a combined total effort of 37 boat days for a total harvest of 6,148 coho, 323,254 pink and 17,772 chum (Tables 18 to 20). This was the peak week for pink salmon CPUEs, averaging approximately 8,736/boat day. In addition, 14,283 sockeye and 17,352 chum salmon were released back to the water.

With an increase in sockeye catches at the Nass fish wheels over the previous week, the in-season total return estimate for upper Nass sockeye salmon climbed to 207,000 by July 24th. As such, sockeye salmon retention in Area 3 commercial fisheries remained restricted. Chum salmon retention was also not permitted. The seine fleet was allowed to fish three 16-hour seine openings in Week 31 with only coho and pink salmon retention being permitted. A portion of subarea 3-3, along with subareas 3-4, 3-7 and 3-12 were open to fishing, and the total weekly seine effort of 49 boat days yielded a combined catch of 6,256 coho and 298,834 pink salmon (Tables 18 to 20).

Fishing effort decreased significantly in Area 3 due to the very restrictive harvesting measures being enforced during Week 32. A single 16-hour opening was permitted and with a minimal effort of 7 boat days, the fleet harvested 473 coho and 35,193 pink salmon. Catches of sockeye salmon at the fish wheels dropped significantly during the week and by week's end the escapement estimate was downgraded to 154,000, well below the upper Nass escapement target of 250,000.

Week 33 was the final for seine fishing in Area 3. With continued poorer than required escapements past the Nass River fish wheels, sockeye retention remained restricted. In addition,

retention of chum, Chinook and steelhead also remained restricted, leaving only coho and pink salmon to harvest, with CPUEs for both species declining significantly the previous week. A single 16-hour opening was permitted, with catches of 791 coho and 22,115 pink salmon with an effort of 5 boat days.

In 2016, the total gillnet fishing effort was 574 boat days, well below the 1990–1999 average effort of 2,845 boat days and the 2006–2015 decadal average effort of 1,432 boat days. The total Area 3 seine effort of 141 boat days is also well below the 1990–1999 average of 1,271 boat days and the 2006–2015 average of 182 boat days. For gillnets there was a total of 9 openings and 6 days (24 hour equivalent) fishing, while seines fished 13 openings for a combined total of 8.7 days (24 hour equivalent), well below the 1990–1999 averages of 28 and 15 days fishing, respectively, and similar to the 2006–2015 averages of 11 and 8 days, respectively (Table 32). The delivered catches of 19,508 and 495 sockeye salmon by the gillnet and seine fleets, respectively, were well below the pre-season expected harvest levels and the decadal averages of 114,000 and 31,022, respectively. With the poor earlier return of sockeye salmon, the fishery directed at sockeye ceased on July 4th for both fleets. As a result, gillnets were closed to all fishing in Area 3 after July 4th, and retention of sockeye salmon was restricted for all seine openings after July 4th. With such an early closure for gillnets, the harvest of 1,867 coho, 6,271 pink, 9,727 chum and 830 Chinook salmon are all well below the decadal averages (2,838 coho, 36,801 pink, 22,501 chum and 1,791 Chinook). The higher than anticipated seine harvest of 892,858 pinks was much higher than pre-season expectations and the 2006 - 2014 even year's average of 275,417. The seine catches of 19,778 coho and 59,399 chum salmon are more than double the decadal averages of 7,368 and 26,711, respectively.

Well above average early in-season coho indicators suggested early Nass area coho salmon returns were strong enough to support retention throughout the Area 3 net fisheries and a directed coho troll fishery in Areas 3 and 103. Pink salmon catches during Area 3 net fisheries and the earlier portion of the Nass fish wheel program indicated early pink returns to Area 3 were better than anticipated, allowing retention during Areas 3/103 troll fisheries targeting coho, with retention of pink salmon also being permitted. The poor return of Nass sockeye salmon led to sockeye non-retention for the Areas 3/103 troll fishery. Total catch from the Areas 3 and 103 troll fisheries was 10,937 coho and 753 pink salmon, with a combined effort of 351 boat days over 83 days open to fishing (Table 21). These catches are below the decadal average of 36,864 coho and 1,006 pinks salmon (2006 – 2014 even year average).

Total Nisga'a Treaty and Harvest Agreement catches in both the Nass River and the marine approach areas included 46,858 sockeye, 8,234 coho, 12,157 pink, 2,486 chum and 5,331 Chinook salmon. Due to the poor return of Nass sockeye, no Nisga'a In-land Economic Demonstration Fishery occurred in 2016. Meanwhile, the Gitanyow First Nation harvested 13,428 sockeye, 18 coho and 114 Chinook salmon as part of their food, social and ceremonial (FSC) fisheries in the Nass River

system. Due to the poor escapement to the Meziadin system, which is the main harvesting area for the Gitanyow First Nation, no In-land Economic Demonstration Fishery took place there, with harvests being restricted to constitutionally protected Food, Social and Ceremonial fisheries.

The end of season preliminary total return to Canada (TRTC) estimates for Nisga'a Treaty accounting are 355,122 sockeye, 263,727 coho, 255,775 pink, 69,228 chum and 17,422 Chinook salmon. Coho and chum escapements were above the 2000–2015 mean escapement values, while sockeye, Chinook and pink escapements were below the 2000–2015 mean values.

The preliminary post-season sockeye salmon escapement estimate to the upper Nass River of 277,484 exceeded the escapement target of 250,000. The Meziadin River escapement of 109,868 was well below both the 2000-09 decadal average (163,686) and the desired escapement target (160,000). The Kwinageese River sockeye salmon escapement of 19,797 is the best escapement observed since the Kwinageese Weir Program began in 2002, while the Gingit Creek sockeye salmon AUC escapement estimate was less than half the previous year, at 8,250 adults.

Area 4

The well below average pre-season sibling model forecasted total return of 1.3 million (90% probability range 614,000 – 2.7 million) Skeena River sockeye salmon was expected to provide minimal opportunities for commercial harvesters. Due to the poor brood return for Skeena River pink salmon, the anticipated return was expected to be poor with no directed fisheries. 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 May 25th to September 19th. The earlier than normal start to the test fishery was to assess the early-timed Skeena Chinook salmon return.

Area 4 gillnet and seine fisheries operated with a non-retention/non-possession restriction for chum salmon and steelhead. Chinook salmon retention by the seine fleet remained prohibited for the entire season. Further management actions for both fleets included mandatory operational revival boxes, and time and area fishing restrictions. Further restrictions for the gillnet fleet included daylight-only fisheries and the further restriction requiring the use of half-length nets and 20 minute soak time limitations to further limit impacts to stocks of concern after August 1.

The first Area 4 Chinook-directed gillnet opportunity took place on June 17th, being 18 hours in duration. The second opportunity, a 30 hour opening, took place between June 24th and 25th. The total catch was 392 Chinook salmon for the two openings (Table 22). Due to the poor CPUEs during these Chinook openings, and poor catches at the Tyee Test Fishery, Chinook salmon retention in all remaining Area 4 gillnet opening was restricted.

The sibling relationship model predicted a well below average Skeena sockeye salmon return of 1.3 million (50% probability), with a 90% probability of 640,000 million and a 10% probability of exceeding 2.7 million. Based on the estimated escapement past the Tyee Test Fishery and assumed average run-timing, the in-season total return to Canada estimate first exceeded the threshold required to initiate a commercial net fishing opportunity for targeting Skeena sockeye salmon in early July. Abundance of sockeye salmon decreased as the season progressed but then started to rebound by the end of July and into August, with indications of a later pulse of sockeye entering the outer portions of Areas 3/4/5 in early to mid-August. In addition, 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 7 days later than the average date of July 21st. Later run-timing for Skeena sockeye entering the outer portion of Areas 3, 4 and 5 has most recently been observed for return years 2014, 2015, and now 2016, and the 2016 return was the latest observed in recent history.

Pink catches at Tyee through the early component of the aggregate return gave indications that the Skeena pink return would be better than pre-season projections. But, as was the case in 2015, escapements plummeted part way through the aggregate return and did not improve. In 2016, this occurred after the end of July, 2 weeks earlier than in 2015, resulting in no harvestable surplus being identified for seines, though retention of pinks was permitted during the seine sockeye Individual Transferable Quota opportunity. The observed escapement of mid to lower Skeena tributary pinks was very poor and for some of the major contributing systems, like the Lakelse River, was the poorest on record. Upper Skeena pink populations fared better but were still well below target and brood year return strength.

For gillnets, the Skeena sockeye harvesting season began in early July as the result of early return strength seen at the Tyee Test Fishery. By late June, an early push of sockeye past the test site led to the total return estimate exceeding the minimum requirement to trigger commercial opportunities. The initial opening occurred on July 8th, for 16 hours. A relatively small fleet harvested 10,568 sockeye, 5,389 coho and 11,765 pinks with 154 boat days of effort.

During the following week (Week 29), a second one day opportunity was permitted for gillnets, with sockeye catches again being poorer than anticipated, at 10,248 pieces, along with 1,072 coho and 8,440 pinks. Effort remained relatively poor at 133 boat days.

It was not until the end of Week 30 that further opportunities were permitted for gillnets, following a positive showing of sockeye passing Tyee. This and the following week are peak sockeye migration time into the outer portions of the marine fishing area, based on average run timing. Sockeye catches improved over the previous two openings but remained below average for this time of the year. With a combined effort of 172 boat days over two consecutive openings, the fleet

harvested 38,119 sockeye, along with 1,933 coho and 27,512 pink salmon. Most of these fish were harvested during the first day of the two day opening.

Further opportunities did not occur for another two weeks (Week 32). With an estimated 336,000 sockeye migrating past Tyee between July 29 and August 4, a two day opening was announced to begin August 5th. As this opportunity occurred after August 1st, additional restrictive fishing measures were put in place to minimize fishery-related impacts to Skeena chum and steelhead. These include reducing overall net length by half and limiting set times to 20 minutes from beginning of the set to the start of net retrieval. The fleet harvested 38,138 sockeye salmon during the two days, along with 1,736 coho and 18,217 pink salmon. Most of the combined effort of 182 boat days occurred on the first day of the two day opening.

The final opening occurred during the following week (Week 33), with a single 16-hour opportunity to catch the remaining north coast gillnet sockeye Total Allowable Catch. While still operating under the additional restrictive fishing measures, the fleet harvest another 10,333 sockeye, along with 577 coho and 4,699 pink salmon with 88 boat days of effort.

Seines were provided the final opportunity to harvest the remaining Skeena sockeye the following week through an Individual Transferable Quota fishery. Of the 33,614 sockeye salmon allocated to the seine fleet, a total of 23,548 were caught over the five day opening. In addition to sockeye, 5,229 coho and 15,264 pink salmon were also harvested. Total effort for this Individual Transferable Quota fishery was 20 boat days. This opening straddled Weeks 33 and 34, and was the final opportunity for commercial net fishing in Area 4.

During the 2016 season, the Area 4 gillnet fleet was permitted to fish a total 48 hours during two Chinook salmon directed openings, along with an additional eight openings (16 hours each) directed at passing Skeena River sockeye salmon. Total effort for the season was 853 boat days, while the combined harvest consisted of 107,406 sockeye, 10,707 coho, 70,633 pink and 392 Chinook salmon. Averages for the previous decade include 1,543 boat days effort and average catches of 265,705 sockeye, 1,651 coho, 125,883 pink and 2,306 Chinook salmon. Meanwhile, the seine fleet was permitted a 5 day sockeye Individual Transferable Quota opportunity, with a combined effort of 20 boat days and a harvest of 23,548 sockeye, 5,229 coho and 15,264 pink salmon. This compares to the previous decadal average of 141 boat days effort and delivered catches of 100,162 sockeye, 2,299 coho and 182,772 pink salmon.

Portions of Area 104 were open to troll for coho and pink salmon retention from July 15th to September 30th, with a short window for sockeye retention. The Area 104 total hauled catch for the 2016 troll season was 38,741 coho, 3,297 pink and 35 sockeye salmon (Table 24). Compared to, coho (23,157) and pink (1,465) are higher than the decadal average while being lower than the sockeye decadal average of 89 pieces.

Skeena River sockeye salmon retention limits for freshwater recreational fisheries was set at two per day for the beginning of the 2016 season, and remained as such for the remainder of the season. By early September, an Excess to Spawning Salmon Requirement opportunity began in Babine, resulting in the daily retention limit for sockeye salmon in Babine Lake being increased to four per day until the recreational fishery closed on September 15th. The total estimated recreational sockeye harvest in Babine Lake was 1,085 pieces. An additional 2,365 sockeye were harvested by recreational fishers in the lower Skeena River main stem.

First Nation's Food, Social and Ceremonial fisheries throughout the Skeena River mainstem and marine approach waters reported a harvest of 136,945 sockeye, 5,564 coho, 3,788 pink, 237 chum and 3,629 Chinook salmon. In addition, the Lake Babine Nation harvested 77,839 sockeye salmon during terminal Excess to Spawning Salmon Requirement Fisheries in Babine Lake and in the Fulton River. Economic Development Fisheries, which included First Nations harvests in both in-river and estuarine environments, harvested 30,989 sockeye and 2,074 pink salmon.

In-season 50% probability estimates of Skeena River sockeye salmon TRTC after July 1st indicated an estimate of between 1.3 and 2.8 million, with a steady increasing trend over the early portion of the return, a significant drop during July, and a significant anomalously late-arriving proportion. The preliminary post-season run-reconstructed Skeena River sockeye salmon TRTC was estimated to 1.48 million, or just above the 50% probability pre-season forecast of 1.28 million but within the 90 percentile bounds of the pre-season return estimate (613,000–2.7 million). The Skeena River sockeye salmon reconstructed net escapement estimate of 1.09 million was equivalent to the 2000 to 2009 average of 1.0 million and slightly above the target escapement of 900,000.

Escapement to the Pinkut spawning channels and river was 83,619 effective spawners, of which 65,019 were loaded into the spawning channel and, 18,600 into the creek. As such, egg targets for the spawning channels were achieved. At the Fulton River facility, egg deposition targets were reached in both spawning channels. The combined escapement to Fulton River spawning channels #1 and #2 and the Fulton River above the fence totalled 405,062 effective spawners, of which 20,000 were loaded into Channel #1, 114,428 into Channel #2 and 270,814 into the river above the fence. An estimated 75,000 adults were locked out below the counting fence, where 45,000 of them would be considered successful spawners. The proportion of jacks returning to both the Pinkut and Fulton facilities was extremely low and near the lowest on record, at 38 and 491, respectively. The escapement of 5,435 sockeye jacks past the Babine counting facility is the lowest since the facility began operations in 1946, and represents 0.6% of the 2016 aggregate sockeye escapement past the facility.

Approximately 90% of the 2016 Skeena aggregate return were sockeye from Babine Lake (compared to an average ~86%) and 10% non-Babine based on DNA sampling at Tyee.

Preliminary spawning ground accounting at Babine Lake indicated approximately 80% of the aggregate escapement into Babine Lake were sockeye from the Babine Lake Development Project enhancement facilities, primarily Fulton River.

The aggregate Area 4 pink salmon escapement estimate of 49,932 (Table 30) is the poorest on record and extremely poor when compared to the brood year (1.48 million). Escapement into the Lakelse River, the main contributor to pink salmon production in the Skeena river system (typically in excess of 1 million) had an observed escapement of ~7,500. Escapements of Area 4 chum salmon populations continue to be well below levels for Maximum Sustained Yield, consistent with observations made in recent years. Coho salmon escapements throughout the Skeena River were below average, especially for populations comprising the later component, as was the case in 2015. Meanwhile the aggregate Chinook salmon escapement was below the 2006-2015 average.

Area 5

Management of the Area 5 fishery during July is based on Skeena River sockeye salmon abundance. 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.

Pre-season expectations were for poor returns of Area 5 pink salmon and well below average for Skeena River sockeye salmon. Given the poor returns of north coast pinks and Skeena sockeye, no Area 5 commercial net opportunities for pinks occurred in 2016. The limited opportunities to harvest Skeena sockeye in Area 4 led to only 4 openings in Area 5, with a total harvest of 478 sockeye, 158 coho and 1,152 pinks and a total effort of 5 boat days. Decadal averages for these species include 3,344 sockeye, 40 coho and 3,009 pinks.

For the troll fleet, portions of Area 105 were opened from July 15th to September 30th to target coho and pink salmon. A combined total effort of 91 boat days was reported in Areas 5 and 105, with a minimal harvest of 5,042 coho and 224 pink salmon (Table 27). The coho harvest was nearly half the decadal average of 9,834, while the pink catch was well above the decadal average of 11 pieces.

Management Performance Relative to Treaty Requirements

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

For 2016, 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 30.54 million pink salmon, the Alaskan Districts 101, 102 and 103 AAH was approximately 19.79 million pinks. The resulting Area 3-1 to 3-4 Canadian commercial net total allowable catch of this AAH was approximately 491,666 pink salmon of Alaskan Districts 101, 102 and 103 origin.

In the Canadian northern boundary area, pink salmon returns were anticipated to be average to below average for Area 3 and Area 4, based on brood year return strength. Actual returns to Area 3 were below average and well below average for Area 4. The 2016 preliminary Canadian pink salmon catch in Sub-areas 3-1 to 3-4 was 430,435, and the Alaska stock component of this catch is estimated to be 393,118, or 2.0 % of the AAH. This result is below the annex agreement of 2.49%.

Area 1 Pink Troll Fishery (Preliminary)

For 2016, 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 30.54 million pink salmon, the resulting Area 1 Canadian commercial troll total allowable catch of this AAH was approximately 406,801 pinks 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 June 18 to July 31 and from August 25 to September 30. Effort directed at pink salmon in Area 1 was minimal in 2016, with pinks being harvested as by-catch in fisheries directed at coho and Chinook. The fishery harvested a total of 32,343 pink salmon, with an estimated 30,953 being of Alaskan origin. This equates to 0.16% of the Alaskan District 101, 102 and 103 pink AAH, well below the annex agreement of 2.57%.

The pattern of total Area 1 weekly pink salmon troll catch in 2016 is illustrated in Table 14.

2017 Salmon Forecast Northern British Columbia

Expectations and fishing plans for 2017 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 31.

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 even-year cycle on Haida Gwaii means that no harvestable surplus is anticipated in 2017.

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 An average Nass River sockeye salmon total return to Canada of 454,000 (with a 10% probability of the return exceeding 505,000 and a 90% probability the return will exceed 408,000) is expected to provide well below average commercial fishing opportunities.

Pink A below average return is expected based on an odd-year 5-year average forecast. As a result, minimal pink salmon directed opportunities are likely to occur in 2017.

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 sibling model forecast predicts a 50% probability of approximately 594,000 sockeye salmon returning to the Skeena River in 2017 with a 10% probability of the return exceeding 1.24 million and a 90% probability the return will exceed 405,000. No harvestable surpluses are anticipated.

Pink A below average return is expected based on brood year escapements. Pink salmon targeted fisheries in Area 4 are not anticipated.

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. No fisheries are anticipated in 2017.

Pink A below average return is expected based on brood year escapements. Pink salmon targeted fisheries in Area 5 are not anticipated.

Chum Local chum salmon stocks are depressed, and no surplus is anticipated.

TABLES

Table 1.—Weekly commercial catch and fishing effort by opening in the 2016 Alaska District 101 purse seine fishery (preliminary).

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
28	July 3, 2016	July 3, 2016	36	15	540	177	903	866	78,985	28,162	109,093
28B	July 7, 2016	July 7, 2016	55	15	825	217	2,660	1,075	223,082	26,803	253,837
29	July 10, 2016	July 10, 2016	50	15	750	192	2,398	1,011	235,672	27,124	266,397
29B	July 14, 2016	July 14, 2016	53	15	795	127	3,436	780	214,994	16,730	236,067
30	July 17, 2016	July 17, 2016	51	15	765	168	2,953	1,452	303,757	20,358	328,688
30B	July 21, 2016	July 21, 2016	65	15	975	201	4,959	1,563	440,645	27,084	474,452
31	July 24, 2016	July 24, 2016	94	15	1,410	190	16,471	3,078	594,569	53,335	667,643
31B	July 28, 2016	July 28, 2016	100	15	1,500	207	17,918	2,204	692,994	29,442	742,765
32	July 31, 2016	August 1, 2016	56	39	2,184	168	14,095	3,244	531,243	20,831	569,581
32B	August 4, 2016	August 5, 2016	55	39	2,145	80	7,488	2,421	384,082	17,559	411,630
33	August 8, 2016	August 9, 2016	57	39	2,223	69	7,448	3,519	407,284	18,241	436,561
33B	August 12, 2016	August 12, 2016	66	15	990	94	7,228	2,621	248,462	9,561	267,966
34	August 15, 2016	August 15, 2016	71	15	1,065	40	5,132	3,206	234,790	7,203	250,371
34B	August 18, 2016	August 18, 2016	70	15	1,050	20	2,045	2,043	160,193	7,262	171,563
Season Total			169	282	17,217	1,950	95,134	29,083	4,750,752	309,695	5,186,614

Table 2.–Weekly commercial catch and fishing effort by opening in the 2016 Alaska District 102 purse seine fishery (preliminary).

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
26	June 19, 2016	June 22, 2016	55	87	4,785	771	461	2,497	2,769	116,029	122,527
27	June 26, 2016	June 29, 2016	106	87	9,222	1,704	725	4,871	39,681	144,045	191,026
28	July 3, 2016	July 3, 2016	68	15	1,020	347	878	4,973	35,330	79,660	121,188
28B	July 4, 2016	July 4, 2016	11	15	165	45	103	1,179	3,354	18,467	23,148
28C	July 7, 2016	July 7, 2016	32	15	480	90	613	2,362	19,195	51,410	73,670
29	July 10, 2016	July 10, 2016	47	15	705	216	1,583	4,071	115,269	83,048	204,187
30	July 14, 2016	July 14, 2016	38	15	570	255	1,552	3,394	136,722	48,894	190,817
30B	July 17, 2016	July 17, 2016	61	15	915	212	4,768	4,077	334,020	46,956	390,033
31	July 21, 2016	July 21, 2016	55	15	825	148	3,646	5,123	154,743	49,744	213,404
31B	July 24, 2016	July 24, 2016	22	15	330	45	1,502	1,106	63,646	13,979	80,278
32	July 28, 2016	July 28, 2016	16	15	240	88	1,903	1,997	163,095	11,342	178,425
32B	July 31, 2016	August 1, 2016	56	39	2,184	111	12,451	6,684	876,252	37,985	933,483
33	August 4, 2016	August 5, 2016	84	39	3,276	127	15,448	6,304	630,219	20,144	672,242
33B	August 8, 2016	August 9, 2016	50	39	1,950	84	5,381	6,028	352,959	14,126	378,578
34	August 12, 2016	August 12, 2016	32	15	480	138	2,460	2,272	124,828	6,065	135,763
35	August 15, 2016	August 15, 2016	22	15	330	16	1,993	1,891	72,255	4,802	80,957
36	September 1, 2016	September 1, 2016	16	12	192	2	274	1,169	16,163	14,347	31,955
37	September 8, 2016	September 8, 2016	15	12	180	0	100	2,069	3,131	17,339	22,639
38	September 15, 2016	September 15, 2016	15	12	180	0	8	932	896	10,516	12,352
39	September 21, 2016	September 21, 2016	10	12	120	0	3	963	53	6,052	7,071
Season Total			177	504	28,149	4,399	55,852	63,962	3,144,580	794,950	4,063,743

Table 3.–Weekly commercial catch and fishing effort by opening in the 2016 Alaska District 103 purse seine fishery (preliminary).

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
30	July 17, 2016	July 17, 2016	17	15	255	153	3,015	1,909	38,296	2,212	45,585
30B	July 21, 2016	July 21, 2016	7	15	105	107	526	3,203	38,152	1,335	43,323
31	July 24, 2016	July 24, 2016	5	15	75	2	209	222	14,406	491	15,330
31B	July 28, 2016	July 28, 2016	3	15	45	2	571	284	20,915	512	22,284
32	July 31, 2016	August 1, 2016	23	39	897	43	4,309	2,443	283,537	4,000	294,332
32B	August 4, 2016	August 5, 2016	19	39	741	31	3,237	1,180	193,275	2,277	200,000
33	August 8, 2016	August 9, 2016	41	39	1,599	70	4,046	3,122	295,477	6,217	308,932
33B	August 12, 2016	August 12, 2016	28	15	420	0	364	720	101,129	1,192	103,405
34	August 15, 2016	August 15, 2016	22	15	330	1	209	1,127	79,535	1,447	82,319
34B	August 18, 2016	August 18, 2016	8	15	120	1	154	392	36,278	520	37,345
Season Total			73	222	4,587	410	16,640	14,602	1,101,000	20,203	1,152,855

^aOpenings with fewer than three permits; confidential information so data combined in catch table.

Table 4.—Weekly commercial catch and fishing effort by opening in the 2016 Alaska District 104 purse seine fishery (preliminary).

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
28	July 3, 2016	July 3, 2016	14	15	210	578	11,917	3,905	61,938	45,480	123,818
28B	July 7, 2016	July 7, 2016	82	12	984	918	16,034	16,380	250,125	60,300	343,757
29	July 10, 2016	July 10, 2016	77	15	1,155	1,348	26,127	22,224	424,441	66,254	540,394
29B	July 14, 2016	July 14, 2016	71	12	852	1,112	45,554	27,394	734,522	52,747	861,329
30	July 17, 2016	July 17, 2016	37	6	222	174	10,714	4,054	99,457	7,229	121,628
31	July 24, 2016	July 24, 2016	42	15	630	237	17,571	5,005	164,401	8,371	195,585
31B	July 28, 2016	July 28, 2016	49	15	735	1,196	53,211	12,281	408,116	20,049	494,853
32	July 31, 2016	August 1, 2016	69	39	2,691	2,256	120,948	13,988	671,348	32,590	841,130
32B	August 4, 2016	August 5, 2016	62	39	2,418	1,556	56,500	6,641	402,943	22,242	489,882
33	August 8, 2016	August 9, 2016	46	39	1,794	743	20,791	4,538	190,863	13,058	229,993
33B	August 12, 2016	August 12, 2016	48	15	720	1,303	11,896	3,166	94,133	7,185	117,683
34	August 15, 2016	August 15, 2016	41	15	615	327	7,642	1,841	91,256	6,603	107,669
34B	August 18, 2016	August 18, 2016	32	15	480	458	7,084	2,279	66,351	6,539	82,711
								123,69	3,659,89	348,64	4,550,43
Season Total			134	252	13,506	12,206	405,989	6	4	7	2

Table 5.—Weekly commercial catch and fishing effort by opening in the 2016 Alaska District 101 drift gillnet fishery (preliminary).

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
26	June 19, 2016	June 23, 2016	42	96	4,031	336	3,882	481	162	19,767	24,628
27	June 26, 2016	June 30, 2016	45	96	4,319	311	4,138	783	10,312	26,722	42,266
28	July 3, 2016	July 7, 2016	57	96	5,471	153	3,286	2,121	34,097	35,428	75,085
29	July 10, 2016	July 14, 2016	48	96	4,607	103	3,380	1,390	48,067	24,022	76,962
30	July 17, 2016	July 21, 2016	40	96	3,839	36	3,200	629	84,243	15,050	103,158
31	July 24, 2016	July 28, 2016	44	96	4,223	11	3,945	995	83,336	22,811	111,098
32	July 31, 2016	August 5, 2016	43	120	5,159	24	2,581	1,248	69,669	10,590	84,112
33	August 7, 2016	August 12, 2016	41	120	4,919	37	7,257	1,896	100,799	9,805	119,794
34	August 14, 2016	August 18, 2016	41	96	3,935	29	4,121	2,098	71,556	6,893	84,697
35	August 21, 2016	August 25, 2016	41	96	3,935	92	2,227	3,971	47,196	17,188	70,674
36	August 28, 2016	September 1, 2016	39	96	3,743	29	871	6,293	10,124	21,268	38,585
37	September 4, 2016	September 8, 2016	44	96	4,223	16	899	10,416	1,356	24,924	37,611
38	September 11, 2016	September 15, 2016	42	96	4,032	6	109	6,532	101	21,585	28,333
39	September 18, 2016	September 22, 2016	32	96	3,072	7	10	4,786	3	12,248	17,054
40	September 25, 2016	September 29, 2016	22	96	2,112	1	6	2,754	0	5,307	8,068
Season Total			75	1,488	61,623	1,191	39,912	46,393	561,021	273,608	922,125

Table 6.—Weekly commercial catch and fishing effort by opening in the 2016 Alaska District 106 drift gillnet fishery (preliminary).

Week	Openings	Closures	Effort			Catch					
			Boats	Hours	Boat Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
25	June 13, 2016	June 15, 2016	31	48	1,488	191	1,235	512	44	2,203	4,185
26	June 20, 2016	June 23, 2016	45	72	3,239	178	5,836	2,509	238	2,185	10,946
27	June 26, 2016	June 29, 2016	54	72	3,887	338	9,536	4,497	2,610	6,501	23,482
28	July 3, 2016	July 6, 2016	55	72	3,959	301	16,025	6,831	12,314	11,576	47,047
29	July 10, 2016	July 14, 2016	56	96	5,375	209	14,842	6,317	38,366	26,171	85,905
30	July 17, 2016	July 21, 2016	64	96	6,143	170	16,951	5,639	62,332	13,377	98,469
31	July 24, 2016	July 27, 2016	64	72	4,607	115	14,196	4,212	76,520	16,777	111,820
32	July 31, 2016	August 3, 2016	76	72	5,470	214	15,539	6,130	90,697	17,910	130,490
33	August 7, 2016	August 10, 2016	52	72	3,743	174	5,700	3,503	37,148	5,017	51,542
34	August 14, 2016	August 17, 2016	66	72	4,751	29	4,039	6,856	22,866	5,006	38,796
35	August 21, 2016	August 23, 2016	73	48	3,503	73	1,809	5,586	8,510	3,036	19,014
36	August 28, 2016	August 30, 2016	55	48	2,639	13	592	6,732	5,100	3,806	16,243
37	September 4, 2016	September 6, 2016	61	48	2,927	1	286	7,945	1,364	4,240	13,836
38	September 11, 2016	September 13, 2016	69	48	3,311	12	53	21,468	191	5,561	27,285
39	September 18, 2016	September 21, 2016	74	72	5,327	19	5	15,000	6	3,700	18,730
40	September 25, 2016	September 28, 2016	32	72	2,303	27	0	10,239	0	1,954	12,220
41	October 2, 2016	October 4, 2016	15	48	720	23	0	3,674	0	302	3,999
Season Total			138	1,128	63,390	2,087	106,644	117,650	358,306	129,322	714,009

Table 7.—Weekly commercial catch and fishing effort by opening in the 2016 Annette Island Reserve purse seine fishery (preliminary).

Week	Openings	Closures	Effort		Catch					
			Boats ¹	Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
26	June 19, 2016	June 19, 2016	1	15	102	19	76	51	2,584	2,832
26B	June 24, 2016	June 24, 2016	1	15	126	95	135	1,901	6,128	8,385
27	June 27, 2016	June 27, 2016	1	15	88	134	118	3,391	4,161	7,892
27B	June 30, 2016	June 30, 2016	1	6	95	119	57	4,147	6,145	10,563
28	July 3, 2016	July 3, 2016	1	15	84	258	136	16,597	9,922	26,997
28B	July 7, 2016	July 7, 2016	1	12	67	366	200	22,808	7,864	31,305
28C	July 9, 2016	July 9, 2016	1	15	12	27	1	15	21,919	21,974
29	July 11, 2016	July 11, 2016	1	15	26	699	228	55,976	6,459	63,388
29B	July 14, 2016	July 14, 2016	1	15	95	804	286	78,847	5,936	85,968
29C	July 16, 2016	July 16, 2016	1	8	8	31	21	2,959	14,681	17,700
30	July 17, 2016	July 17, 2016	1	15	29	825	289	95,396	9,773	106,312
30B	July 19, 2016	July 19, 2016	1	12	29	753	239	137,402	8,205	146,628
30C	July 22, 2016	July 22, 2016	1	15	13	1,036	200	87,081	6,738	95,068
30D	July 23, 2016	July 23, 2016	1	7	1	0	11	107	6,001	6,120
31	July 24, 2016	July 25, 2016	1	39	21	3,190	785	111,902	10,364	126,262
31B	July 29, 2016	July 29, 2016	1	15	17	2,107	260	79,463	3,572	85,419
31C	July 30, 2016	July 30, 2016	1	7	4	2	7	31	4,012	4,056
32	July 31, 2016	July 31, 2016	1	15	12	2,104	367	94,476	3,298	100,257
32B	August 2, 2016	August 2, 2016	1	15	4	1,036	460	60,355	2,275	64,130
32C	August 4, 2016	August 5, 2016	1	39	12	2,150	578	95,810	3,937	102,487
33	August 8, 2016	August 9, 2016	1	39	14	549	463	48,387	2,391	51,804
34	August 14, 2016	August 14, 2016	1	15	11	855	498	82,795	1,910	86,069
34B	August 16, 2016	August 16, 2016	1	15	6	586	378	46,472	1,283	48,725
35	August 21, 2016	August 21, 2016	1	15	0	116	551	17,679	955	19,301
37	September 4, 2016	September 4, 2016	1	15	0	487	1,639	978	1,006	4,110
37B	September 8, 2016	September 8, 2016	1	15	0	38	704	195	561	1,498
38	September 12, 2016	September 12, 2016	1	15	0	0	0	0	0	0
38B	September 15, 2016	September 15, 2016	1	15	0	0	641	0	134	775
39	September 19, 2016	September 19, 2016	1	15	0	0	395	0	62	457
39B	September 22, 2016	September 22, 2016	1	15	0	1	419	0	98	518
40	September 26, 2016	September 26, 2016	1	15	0	0	0	0	0	0
Season Total				499	876	18,387	10,142	1,145,221	152,374	1,327,000

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 2016 Annette Island Reserve gillnet fishery (preliminary).

Week	Openings	Closures	Effort		Catch					
			Boats ¹	Hours	Chinook	Sockeye	Coho	Pink	Chum	Total
25	June 12, 2016	June 16, 2016	1	96	206	41	58	86	10772	11,163
26	June 19, 2016	June 24, 2016	1	120	308	152	81	884	22,350	23,775
27	June 26, 2016	June 30, 2016	1	96	139	223	70	14,425	24,668	39,525
28	July 3, 2016	July 7, 2016	1	96	72	197	76	13,082	38,468	51,895
28B	July 5, 2016	July 5, 2016	1	12	0	0	0	0	0	0
29	July 10, 2016	July 14, 2016	1	96	42	561	83	28,509	21,727	50,922
29B	July 13, 2016	July 13, 2016	1	16	0	0	0	0	0	0
30	July 17, 2016	July 22, 2016	1	120	38	754	107	43,716	25,851	70,466
30B	July 20, 2016	July 20, 2016	1	16	0	0	0	0	0	0
31	July 24, 2016	July 29, 2016	1	120	30	605	122	39,299	30,342	70,398
31B	July 27, 2016	July 27, 2016	1	15	0	0	0	0	0	0
32	July 31, 2016	August 5, 2016	1	120	12	447	196	30,531	13,652	44,838
32B	August 3, 2016	August 3, 2016	1	15	0	0	0	0	0	0
33	August 7, 2016	August 11, 2016	1	96	3	93	88	24,425	3,035	27,644
34	August 14, 2016	August 18, 2016	1	96	2	184	251	45,571	6,321	52,329
34B	August 16, 2016	August 16, 2016	1	7	0	0	0	0	0	0
35	August 21, 2016	August 24, 2016	1	72	1	199	1,089	17,166	3,213	21,668
36	August 28, 2016	September 1, 2016	1	96	2	140	2,380	11,652	12,768	26,942
37	September 4, 2016	September 8, 2016	1	96	0	171	7,109	3,315	12,269	22,864
38	September 11, 2016	September 15, 2016	1	96	0	28	8,595	348	8,192	17,163
39	September 18, 2016	September 22, 2016	1	96	0	2	7,762	13	7,261	15,038
40	September 25, 2016	September 29, 2016	1	96	0	1	6,226	0	2,213	8,440
41	October 2, 2016	October 6, 2016	1	96	0	0	1,384	0	240	1,624
Season Total				1,785	855	3,798	35,677	273,022	243,342	556,694

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 2016 (in millions).

Stock group	District	Pink salmon index 2016	Management target		Met minimum escapement	Recent 10-year average
E Behm	101	2.18	0.67	1.77	+	1.80
Portland	101	0.44	0.1	0.28	+	0.41
W Behm	101	0.72	0.25	0.66	+	0.61
Kasaan	102	0.81	0.24	0.64	+	0.92
Moirá	102	0.06	0.05	0.13		0.17
E Dall	103	0.26	0.13	0.36		0.30
Hetta	103	0.55	0.3	0.79		0.78
Klawock	103	0.65	0.42	1.11		0.98
Sea Otter Sound	103	0.11	0.1	0.28		0.20
Affleck Canal	105	0.10	0.14	0.38	–	0.25
Shipley Bay	105	0.08	0.11	0.28	–	0.17
Burnett	106	0.10	0.05	0.14		0.11
Ratz Harbor	106	0.07	0.04	0.12		0.12
Totem Bay	106	0.06	0.05	0.13		0.07
Whale Pass	106	0.07	0.07	0.18		0.10
Anan	107	0.22	0.21	0.57		0.34
Union Bay	107	0.07	0.05	0.12		0.10
Stikine	108	0.03	0.02	0.06		0.04
District Total	101	3.34	1.02	2.71	+	2.81
District Total	102	0.87	0.29	0.77	+	1.10
District Total	103	1.56	0.95	2.54		2.25
District Total	105	0.19	0.25	0.66	–	0.42
District Total	106	0.31	0.21	0.57		0.40
District Total	107	0.29	0.26	0.69		0.44
District Total	108	0.03	0.02	0.06		0.04
Southern Southeast Alaska Total		6.60	3.00	8.00		7.47

Table 10.—Preliminary annual allowable harvest (AAH) calculations for the Alaska District 104 Week 27-30 purse seine fishery, 1999-2016.

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 ^a	1,994,130	1,100,000	894,130	21,906	110,346	65,039	43,133	-97,767

^a Preliminary information pending completion of run reconstruction analyses.

Table 11.—Preliminary annual allowable harvest (AAH) calculations for the Alaska District 101 gillnet fishery, 1999-2016.

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 ^a	438,311	200,000	238,311	32,887	39,912	14,388	-18,499	-281,580

^a Preliminary information pending completion of run reconstruction analyses.

Table 12.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 1 gillnet fishery (preliminary).

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

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 13.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 1 seine fishery (preliminary).

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

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 14.—Weekly commercial catch and fishing effort in the 2016 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**
24	62	Jun. 11	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
25	63	Jun. 18	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0	0
26	64	Jun. 25	0	35	298	4	36,737	37,074	471	120	5
27	71	Jul. 02	2	119	1,321	1	25,485	26,928	529	168	7
28	72	Jul. 09	2	932	3,419	0	18,880	23,233	463	168	7
29	73	Jul. 16	43	48,331	7,649	2	7,666	63,691	485	168	7
30	74	Jul. 23	143	42,931	7,929	12	9,946	60,961	501	168	7
31	75	Jul. 30	179	25,120	7,882	CLOSED	13,608	46,789	479	168	7
32	81	Aug. 06	74	5,149	1,688	CLOSED	2,563	9,474	109	168	7
33	82	Aug. 13	82	8,476	869	CLOSED	CLOSED	9,427	162	168	7
34	83	Aug. 20	19	2,847	909	CLOSED	CLOSED	3,775	76	168	7
35	84	Aug. 27	2	4,977	255	CLOSED	4,732	9,966	203	168	7
36	91	Sept. 03	3	10,876	118	CLOSED	10,328	21,325	398	168	7
37	92	Sept. 10	5	3,779	6	CLOSED	3,096	6,886	154	168	7
38	93	Sept. 17	0	681	0	CLOSED	336	1,017	36	168	7
39	94	Sept. 24	0	12	0	CLOSED	59	71	8	168	7
40	101	Oct. 01	0	2	0	CLOSED	0	2	1	144	6
Totals			554	154,267	32,343	19	133,436	320,619	4,075	2,448	102

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

**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 2016 Canadian Area 3 Entrance (subareas 1-4) gillnet fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
24	62	Jun.11	7	3	1	CLOSED	1	12	3	32	2
25	63	Jun. 18	47	2	0	CLOSED	2	51	6	32	2
26	64	Jun. 25	204	7	1	439	1	652	8	32	2
27	71	Jul. 02	214	55	40	1140	5	1,454	8	32	2
28	72	Jul. 09	183	80	112	896	0	1,271	3	16	1
29	73	Jul. 16	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	CLOSED	0	0
30	74	Jul. 23	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	CLOSED	0	0
31	75	Jul. 30	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	CLOSED	0	0
Totals			655	147	154	2,475	9	3,440	28	144	9

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 16.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 3 Inside (subareas 7-17) gillnet fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
24	62	Jun.11	806	3	1	CLOSED	82	892	75	32	2
25	63	Jun. 18	906	108	1	CLOSED	194	1,209	88	32	2
26	64	Jun. 25	3603	89	1	1,686	167	5,546	151	32	2
27	71	Jul. 02	7091	502	843	4523	280	13,239	162	32	2
28	72	Jul. 09	6447	1018	5271	1,043	98	13,877	70	16	1
29	73	Jul. 16	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0
30	74	Jul. 23	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0
31	75	Jul. 30	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0
Totals			18,853	1,720	6,117	7,252	821	34,763	546	144	9

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 17.—Weekly commercial catch and fishing effort in the 2016 Canadian total Area 3 gillnet fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
24	62	Jun.11	813	6	2	CLOSED	83	904	78	16	1
25	63	Jun. 18	953	110	1	CLOSED	196	1,260	94	32	2
26	64	Jun. 25	3,807	96	2	2,125	168	6,198	159	32	2
27	71	Jul. 02	7,305	557	883	5,663	285	14,693	170	32	2
28	72	Jul. 09	6,630	1,098	5,383	1,939	98	15,148	73	32	2
29	73	Jul. 16	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0
30	74	Jul. 23	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0
31	75	Jul. 30	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0
Totals			19,508	1,867	6,271	9,727	830	38,203	574	144	9

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 18.—Weekly commercial catch and fishing effort in the 2016 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**
28	72	Jul. 09	495	511	3,828	9,778	CLOSED	14,612	10	16	1
29	73	Jul. 16	CLOSED	3,433	100,947	19,129	CLOSED	123,509	17	64	4
30	74	Jul. 23	CLOSED	2,190	168,884	9,963	CLOSED	181,037	22	48	3
31	75	Jul. 30	CLOSED	1,945	129,436	CLOSED	CLOSED	131,381	9	48	3
32	81	Aug. 06	CLOSED	350	16,605	CLOSED	CLOSED	16,955	3	16	1
33	82	Aug.13	CLOSED	684	10,581	CLOSED	CLOSED	11,265	1	16	1
Totals			495	9,113	430,281	38,870	0	478,759	62	208	13

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 19.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 3 Inside (subareas 7-17) seine fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
28	72	Jul. 09	CLOSED	45	111	1,397	CLOSED	1,553	2	16	1
29	73	Jul. 16	CLOSED	2,121	108,576	11,323	CLOSED	122,020	14	64	4
30	74	Jul. 23	CLOSED	3,958	154,370	7,809	CLOSED	166,137	15	48	3
31	75	Jul. 30	CLOSED	4,311	169,398	CLOSED	CLOSED	173,709	40	48	3
32	81	Aug. 06	CLOSED	123	18,588	CLOSED	CLOSED	18,711	4	16	1
33	82	Aug.13	CLOSED	107	11,534	CLOSED	CLOSED	11,641	4	16	1
Totals			0	10,665	462,577	20,529	0	493,771	79	208	13

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 20.—Weekly commercial catch and fishing effort in the 2016 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**
28	72	Jul. 09	495	556	3,939	11,175	CLOSED	16,165	12	16	1
29	73	Jul. 16	CLOSED	5,554	209,523	30,452	CLOSED	245,529	31	64	4
30	74	Jul. 23	CLOSED	6,148	323,254	17,772	CLOSED	347,174	37	48	3
31	75	Jul. 30	CLOSED	6,256	298,834	CLOSED	CLOSED	305,090	49	48	3
32	81	Aug. 06	CLOSED	473	35,193	CLOSED	CLOSED	35,666	7	16	1
33	82	Aug.13	CLOSED	791	22,115	CLOSED	CLOSED	22,906	5	16	1
Totals			495	19,778	892,858	59,399	0	972,530	141	208	13

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 21.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 3/103 troll fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
25	63	Jun. 18	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
26	64	Jun. 25	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
27	71	Jul. 02	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
28	72	Jul. 09	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
29	73	Jul. 16	CLOSED	655	0	CLOSED	CLOSED	655	4	168	7
30	74	Jul. 23	CLOSED	0	0	CLOSED	CLOSED	0	0	168	7
31	75	Jul. 30	CLOSED	287	57	CLOSED	CLOSED	344	4	168	7
32	81	Aug. 06	CLOSED	141	41	CLOSED	CLOSED	182	4	168	7
33	82	Aug. 13	CLOSED	3,242	456	CLOSED	CLOSED	3,698	69	168	7
34	83	Aug. 20	CLOSED	1,228	132	CLOSED	CLOSED	1,360	62	168	7
35	84	Aug. 27	CLOSED	704	38	CLOSED	CLOSED	742	28	168	7
36	91	Sept. 03	CLOSED	1,658	26	CLOSED	CLOSED	1,684	53	168	7
37	92	Sept. 10	CLOSED	1,646	3	CLOSED	CLOSED	1,649	44	168	7
38	93	Sept. 17	CLOSED	985	CLOSED	CLOSED	CLOSED	985	47	168	7
39	94	Sept. 24	CLOSED	349	CLOSED	CLOSED	CLOSED	349	32	168	7
40	101	Oct. 01	CLOSED	42	CLOSED	CLOSED	CLOSED	42	4	144	6
Totals			0	10,937	753	0	0	11,690	351	1,992	83

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 22.—Weekly commercial catch and fishing effort in the 2016 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**
23	61	Jun.04	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
24	62	Jun.11	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
25	63	Jun. 18	CLOSED	CLOSED	CLOSED	CLOSED	113	113	34	18	1
26	64	Jun. 25	CLOSED	CLOSED	CLOSED	CLOSED	279	279	90	30	2
27	71	Jul. 02	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
28	72	Jul. 09	10,568	5,389	11,765	CLOSED	CLOSED	27,722	154	16	1
29	73	Jul. 16	10,248	1,072	8,440	CLOSED	CLOSED	19,760	133	16	1
30	74	Jul. 23	38,119	1,933	27,512	CLOSED	CLOSED	67,564	172	32	2
31	75	Jul. 30	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
32	81	Aug. 06	38,138	1,736	18,217	CLOSED	CLOSED	58,091	182	32	2
33	82	Aug. 13	10,333	577	4,699	CLOSED	CLOSED	15,609	88	16	1
Totals			107,406	10,707	70,633	0	392	189,138	853	160	10

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 23.—Weekly commercial catch and fishing effort in the 2016 Canadian total Area 4 seine fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye***	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
29	73	Jul. 16	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
30	74	Jul. 23	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
31	75	Jul. 30	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
32	81	Aug. 06	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
33	82	Aug. 13	17,618	3,287	11,487	CLOSED	CLOSED	32,392	14	72	3
34	83	Aug. 20	5,930	1,942	3,777	CLOSED	CLOSED	11,649	6	24	2
35	84	Aug. 27	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
Totals			23,548	5,229	15,264	0	0	44,041	20	96	5

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

***Sockeye catches were from validated landings as part of the Individual Transferable Quota fishery.

Table 24.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 4/104 troll fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
25	63	Jun. 18	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
26	64	Jun. 25	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
27	71	Jul. 02	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
28	72	Jul. 09	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
29	73	Jul. 16	1	3,884	120	CLOSED	CLOSED	4,005	12	168	7
30	74	Jul. 23	6	7,149	420	CLOSED	CLOSED	7,575	24	168	7
31	75	Jul. 30	21	11,886	2,077	CLOSED	CLOSED	13,984	43	168	7
32	81	Aug. 06	4	7,336	295	CLOSED	CLOSED	7,635	43	168	7
33	82	Aug. 13	3	5,643	254	CLOSED	CLOSED	5,900	51	168	7
34	83	Aug. 20	0	973	34	CLOSED	CLOSED	1,007	16	168	7
35	84	Aug. 27	0	951	0	CLOSED	CLOSED	951	6	168	7
36	91	Sept. 03	0	574	7	CLOSED	CLOSED	581	3	168	7
37	92	Sept. 10	0	312	0	CLOSED	CLOSED	312	3	168	7
38	93	Sept. 17	0	33	0	CLOSED	CLOSED	33	1	168	7
39	94	Sept. 24	0	0	0	CLOSED	CLOSED	0	0	168	7
40	101	Oct. 01	0	0	0	CLOSED	CLOSED	0	0	144	6
Totals			35	38,741	3,207	0	0	41,983	202	1,992	83

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 25.—Weekly commercial catch and fishing effort in the 2016 Canadian total Area 5 gillnet fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
27	71	Jul. 02	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
28	72	Jul. 09	62	108	146	CLOSED	CLOSED	316	1	16	1
29	73	Jul. 16	314	39	693	CLOSED	CLOSED	1,046	3	16	1
30	74	Jul. 23	102	11	313	CLOSED	CLOSED	426	1	32	2
31	75	Jul. 30	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
Totals			478	158	1,152	0	0	1,788	5	64	4

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 26.—Weekly commercial catch and fishing effort in the 2016 Canadian total Area 5 seine (preliminary).

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

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 27.—Weekly commercial catch and fishing effort in the 2016 Canadian Area 5/105 troll fishery (preliminary).

Julian Week	Stat Week	Ending Date	Sockeye	Coho	Pink	Chum	Chinook	Total	Boat Days*	Hours Open	Days Fishing**
25	63	Jun. 18	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
26	64	Jun. 25	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
27	71	Jul. 02	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
28	72	Jul. 09	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	0	0	0
29	73	Jul. 16	0	0	0	CLOSED	CLOSED	0	0	168	7
30	74	Jul. 23	0	9	0	CLOSED	CLOSED	9	1	168	7
31	75	Jul. 30	0	232	132	CLOSED	CLOSED	364	4	168	7
32	81	Aug. 06	0	1,329	61	CLOSED	CLOSED	1,390	12	168	7
33	82	Aug. 13	1	2,660	20	CLOSED	CLOSED	2,681	51	168	7
34	83	Aug. 20	0	748	8	CLOSED	CLOSED	756	17	168	7
35	84	Aug. 27	0	61	3	CLOSED	CLOSED	64	4	168	7
36	91	Sept. 03	0	3	0	CLOSED	CLOSED	3	2	168	7
37	92	Sept. 10	0	0	0	CLOSED	CLOSED	CLOSED	0	168	7
38	93	Sept. 17	0	0	0	CLOSED	CLOSED	CLOSED	0	168	7
39	94	Sept. 24	0	0	0	CLOSED	CLOSED	CLOSED	0	168	7
40	101	Oct. 01	0	0	0	CLOSED	CLOSED	CLOSED	0	144	6
Totals			1	5,042	224	0	0	5,267	91	1,992	83

2016 catch figures are based on Phone-in (FOS) estimates.

* Boat Days are represented in 24-hour format.

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

Table 28.—Annual allowable harvest (AAH) calculations for Canadian Area 3 Entrance (1-4) net fishery, 2007–2016.

	Year									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<u>Annual Allowable Harvest (AAH) of Alaska District 101, 102, and 103 Pink Salmon:</u>										
Total Run	52,342,831	25,728,121	38,891,939	23,621,861	20,770,059	31,674,423	80,810,736	50,784,488	20,541,455	30,543,683
Actual Escapement	23,578,584	13,669,062	16,095,463	12,113,776	11,519,923	14,216,273	32,020,713	22,042,385	8,508,770	15,081,340
Escapement Requirement [Dist 101-103 escapement goal]	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000
Annual Allowable Harvest (AAH)	41,592,831	14,978,121	28,141,939	12,871,861	10,020,059	20,924,423	70,060,736	40,034,488	12,032,685	19,793,683
<u>Actual Number and %AAH of Alaska Pink Salmon Harvested in Canadian Area 3(1-4) Net Fishery:</u>										
Total Pink Harvest in Area 3(1-4) Net	1,740,271	12,082	432,861	36,334	201,754	150,740	1,249,570	450,671	80,266	430,435
Actual Number of Alaskan Pink Harvested	1,421,812	10,580	276,270	21,353	180,930	127,120	1,149,166	347,104	77,331	393,118
Actual %AAH	3.42%	0.07%	0.98%	0.17%	1.81%	0.61%	1.64%	0.87%	0.64%	1.99%
<u>Overage/Underage Based on the 2.49% AAH Stipulated in the Treaty:</u>										
Allowable % AAH	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%
Allowable Harvest	1,035,661	372,955	700,734	320,509	249,499	521,018	1,744,512	996,859	299,614	492,863
Overage [Positive]/Underage (Negative)	386,150	-362,375	-424,464	-299,156	-68,569	-393,898	-595,346	-649,755	-222,290	-99,745
Cumulative Overage/Underage	-406,536	-768,912	-1,193,376	-1,492,532	-1,561,101	-1,954,999	-2,550,345	-3,200,100	-3,422,390	-3,522,135

Table 29.—Annual allowable harvest (AAH) calculations for Canadian Area 1/101 troll fishery, 2007–2016.

	Year									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<u>Annual Allowable Harvest (AAH) of Alaska District 101, 102, and 103 Pink Salmon:</u>										
Total Run	52,342,831	25,728,121	38,891,939	23,621,861	20,770,059	31,674,423	80,810,736	50,784,488	20,541,455	30,543,683
Actual Escapement	23,578,584	13,669,062	16,095,463	12,113,776	11,519,923	14,216,273	32,020,713	22,042,385	8,508,770	15,081,340
Escapement Requirement	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000	10,750,000
Annual Allowable Harvest (AAH)	41,592,831	14,978,121	28,141,939	12,871,861	10,020,059	20,924,423	70,060,736	40,034,488	12,032,685	19,793,683
<u>Actual Number and % AAH of Alaska Pink Salmon Harvested in Canadian Area 1 Troll Fishery</u>										
Total Pink Harvest in Area 1 Troll	61,276	23,243	61,522	17,950	44,193	48,223	84,216	31,775	41,551	32,343
Actual Number of Alaskan Pink Harvested	55,418	21,171	50,392	12,708	41,631	44,739	80,590	26,798	39,462	30,953
Actual % AAH	0.13%	0.14%	0.18%	0.10%	0.42%	0.21%	0.12%	0.07%	0.33%	0.16%
<u>Overage/Underage Based on the 2.57% AAH Stipulated in the Treaty:</u>										
Allowable % AAH	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%	2.57%
Allowable Harvest	1,068,936	384,938	723,248	330,807	257,516	537,758	1,800,561	1,028,886	309,240	508,698
Overage (Positive)/Underage (Negative)	-1,013,518	-363,766	-672,855	-318,099	-215,885	-493,019	-1,719,971	-1,002,089	-269,784	-477,745
Cumulative Overage/Underage	-6,582,678	-6,946,444	-7,619,300	-7,937,399	-8,153,284	-8,646,302	-10,366,273	-11,368,362	-11,638,146	-12,115,891

Table 30.—Escapements to Canadian Areas 3, 4, and 5 in 2016 (preliminary).

Area	Sockeye	Coho	Pink	Chum	Chinook
3	277,484	191,096	275,997	63,857	10,192
4	882,225	24,224	49,932	UKN	31,297
5	7,048	UKN	5,943	UKN	UKN
Totals	1,166,757	215,320	331,872	63,857	41,489

Table 31.—Pre-season salmon forecast, for Canadian Areas 1, 3, 4, and 5 in 2017.

Area	Species	Forecasted Return to Canada
Area 1	Sockeye	UNK
	Pink	Off-year
Area 3	Sockeye	454,000
	Pink	Below Average
Area 4	Sockeye	594,000
	Pink	Below Average
Area 5	Sockeye	UNK
	Pink	Below Average

Table 32.—Annual gillnet and seine effort for Canadian Areas 1, 3, 4, and 5, 1980-2016.

YEAR	GEAR	AREA 1		AREA 3		AREA 4		AREA 5	
		BOAT	DAYS*	BOAT	DAYS	BOAT	DAYS	BOAT	DAYS
		DAYS	FISHING	DAYS	FISHING	DAYS	FISHING	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
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

YEAR	GEAR	AREA 1		AREA 3		AREA 4		AREA 5	
		BOAT	DAYS*	BOAT	DAYS	BOAT	DAYS	BOAT	DAYS
		DAYS	FISHING	DAYS	FISHING	DAYS	FISHING	DAYS	FISHING
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
Avg 06-15	GN	1	0	1,432	11	1,543	6	14	4
	SN	2	1	182	8	141	7	12	3
	Total	2	2	1,614	18	1,685	13	26	7
AVG 00-09	GN	3	1	2,283	13	2,892	10	50	6
	SN	1	0	266	12	256	10	36	9
	TOTAL	3	2	2,549	25	3,149	20	86	15
AVG 90-99	GN	104	17	2,845	28	8,705	20	290	17
	SN	142	9	1,271	15	242	8	126	11
	TOTAL	246	26	4,116	43	8,947	28	416	28
AVG 80-89	GN	56	13	1,877	23	8,728	21	451	16
	SN	164	14	1,353	21	347	7	203	15
	TOTAL	220	27	3,231	45	9,075	28	654	31

* BOAT DAYS are represented in 24-hour format.

*DAYS FISHING are represented in 24-hour format.

Table 33.—Annual salmon escapements for Canadian Area 1 (2016 is preliminary).

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
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 06-15	13,908	UNK	544,200	10,871	UNK

Table 34.—Annual escapements for Canadian Area 3 (2016 is preliminary).

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
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 06-15	197,363	130,348	348,997	22,547	18,770

Table 35. Annual escapements for Canadian Area 4 (2016 is preliminary).

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
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 06-15	973,369	46,316	685,007	1,383	35,248

Table 36.—Annual escapements for Canadian Area 5 (2016 is preliminary).

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
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 06-15	11,533	839	73,607	1,639

FIGURES

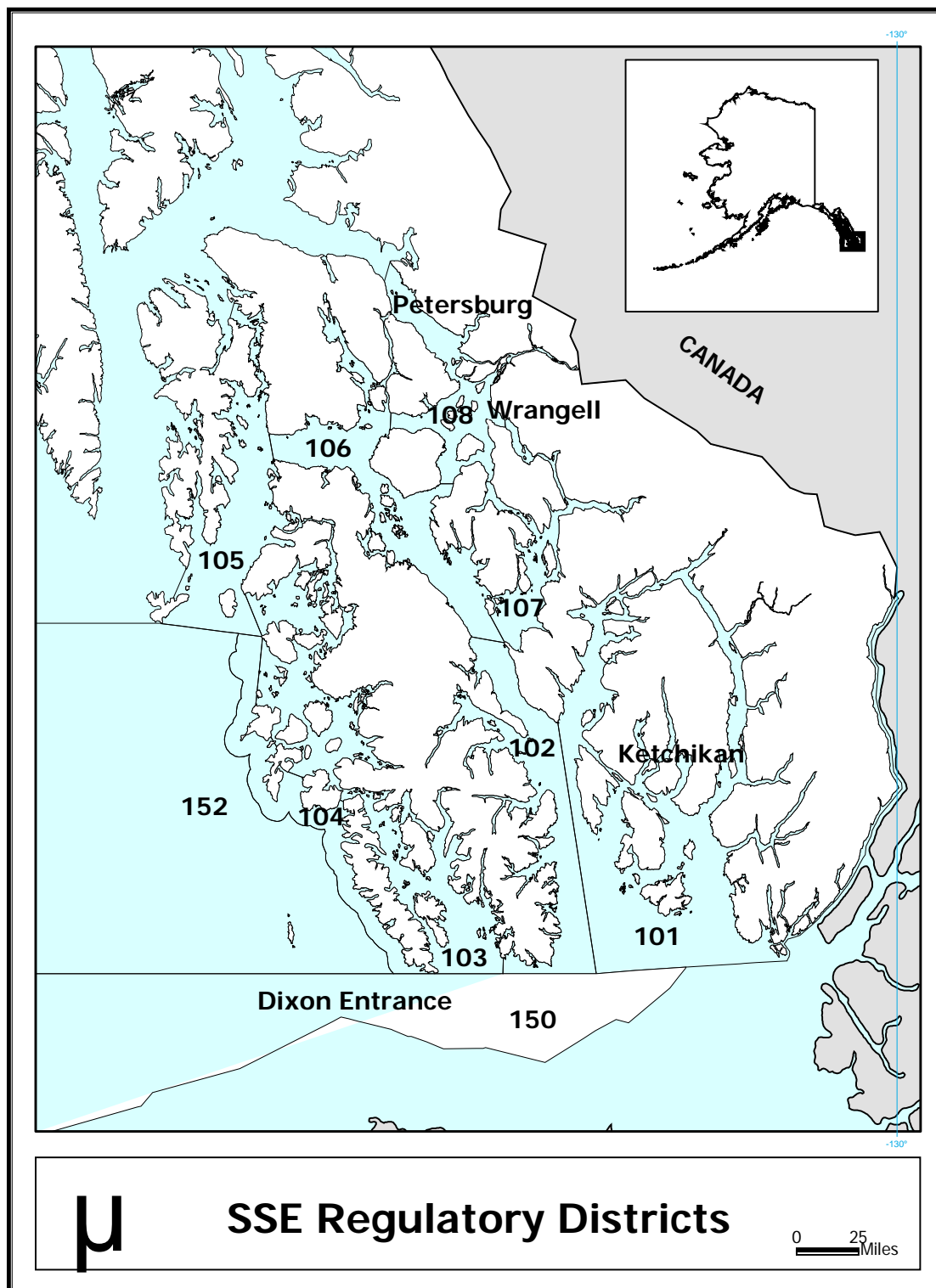


Figure 1.—Alaska Department of Fish and Game southern Southeast Alaska regulatory districts.

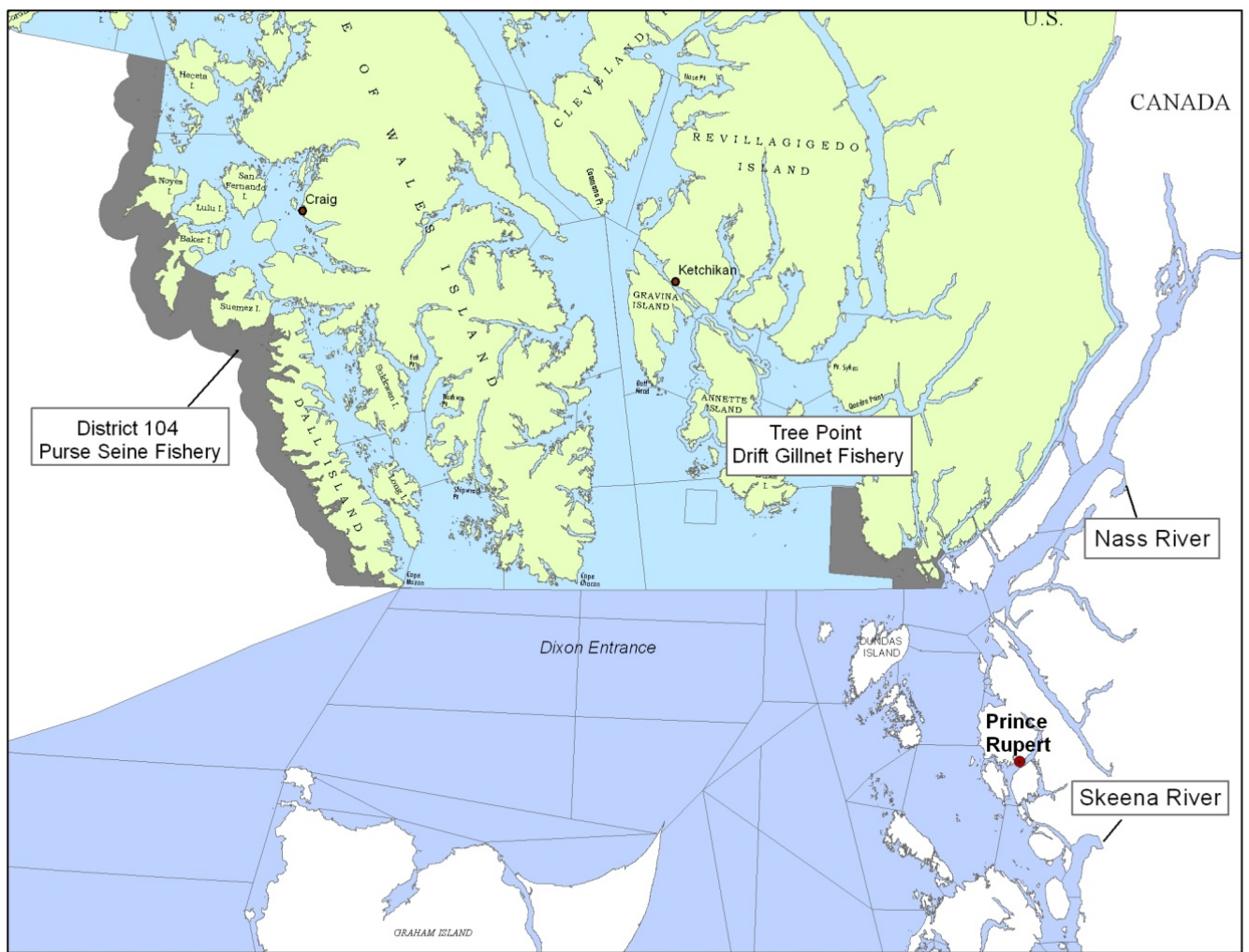


Figure 2.—Alaska District 101 drift gillnet and District 104 purse seine treaty fisheries.

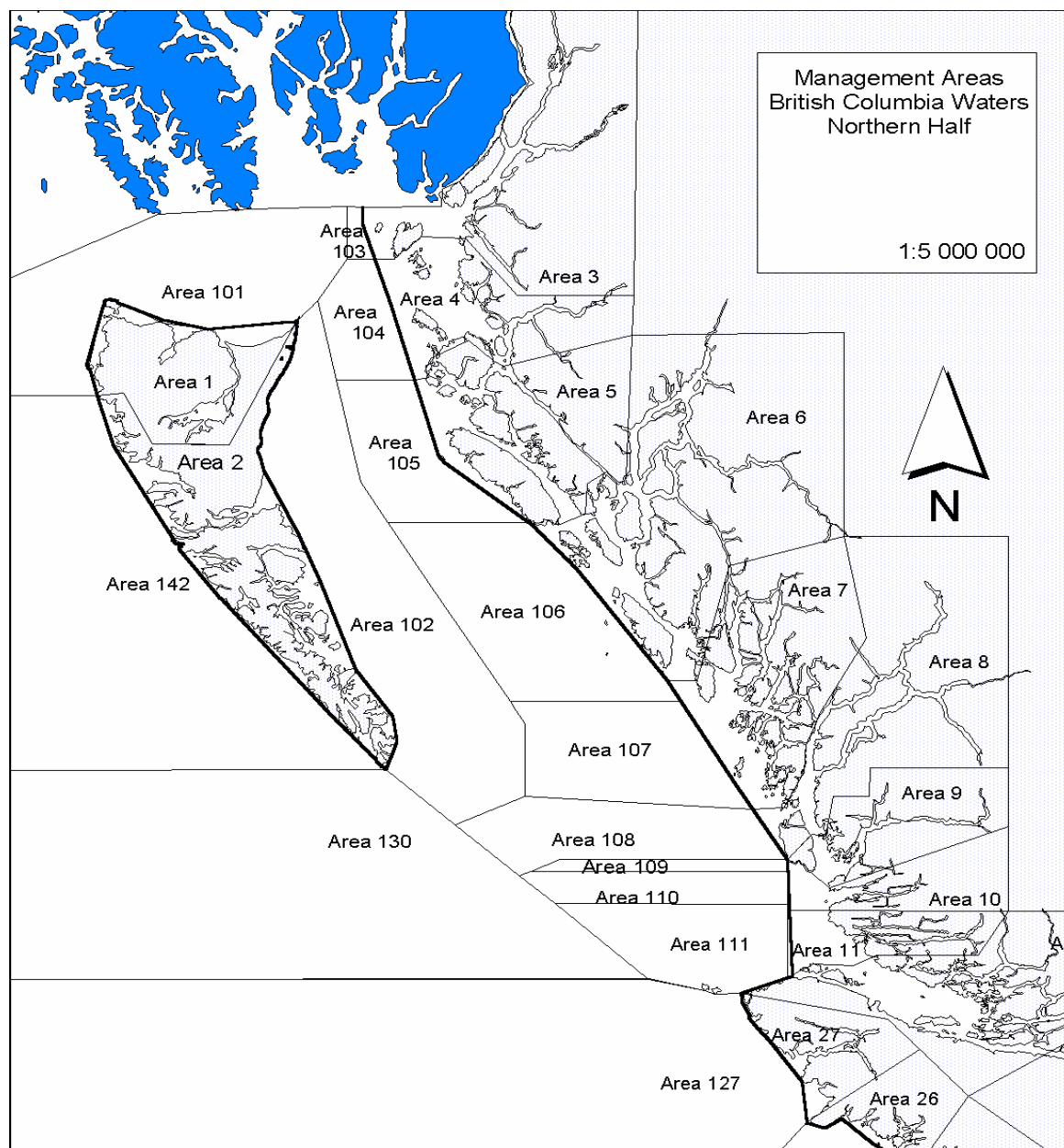


Figure 3.—Canadian Statistical Areas 1-10, northern British Columbia.

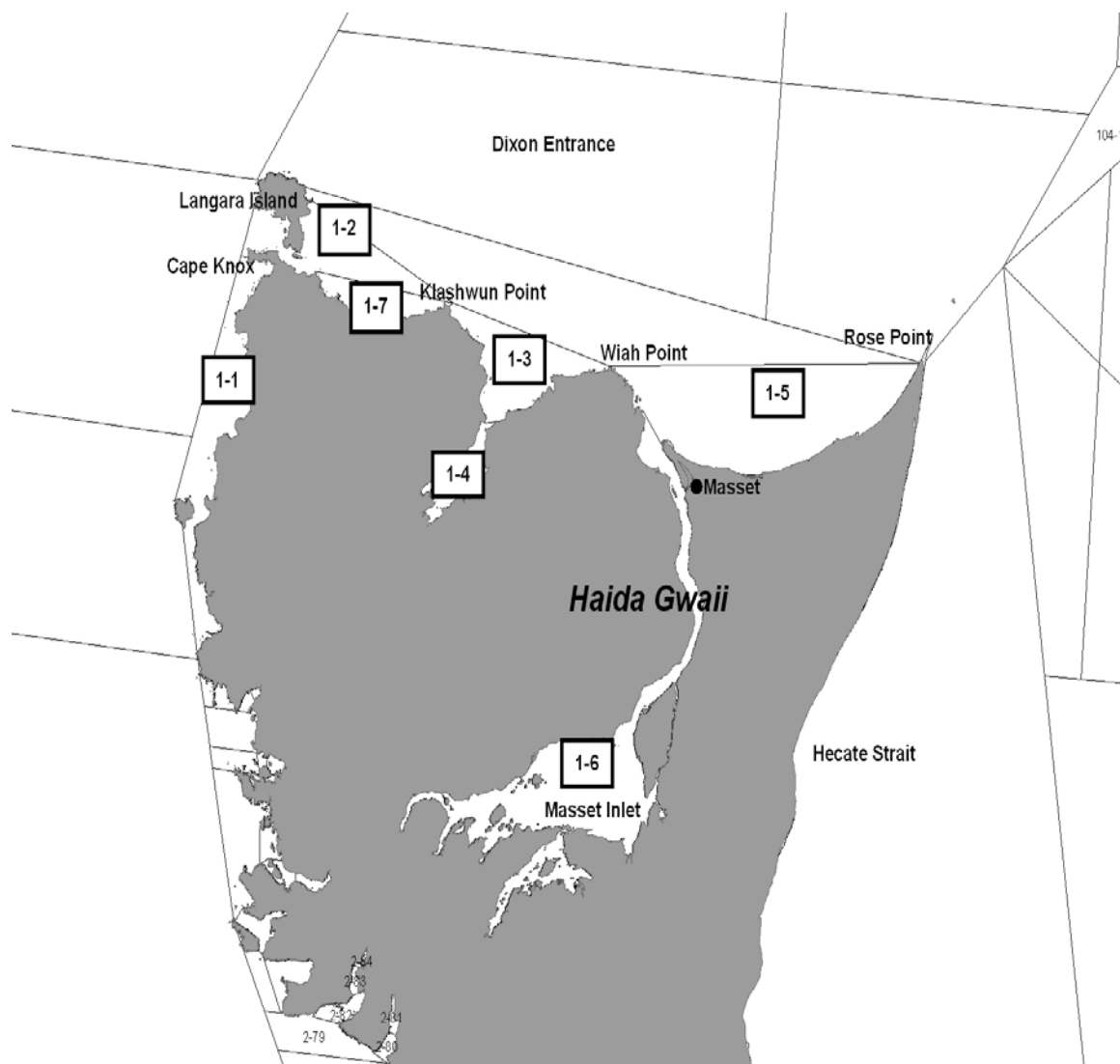


Figure 4.—Canadian Statistical Area 1 management sub-areas.

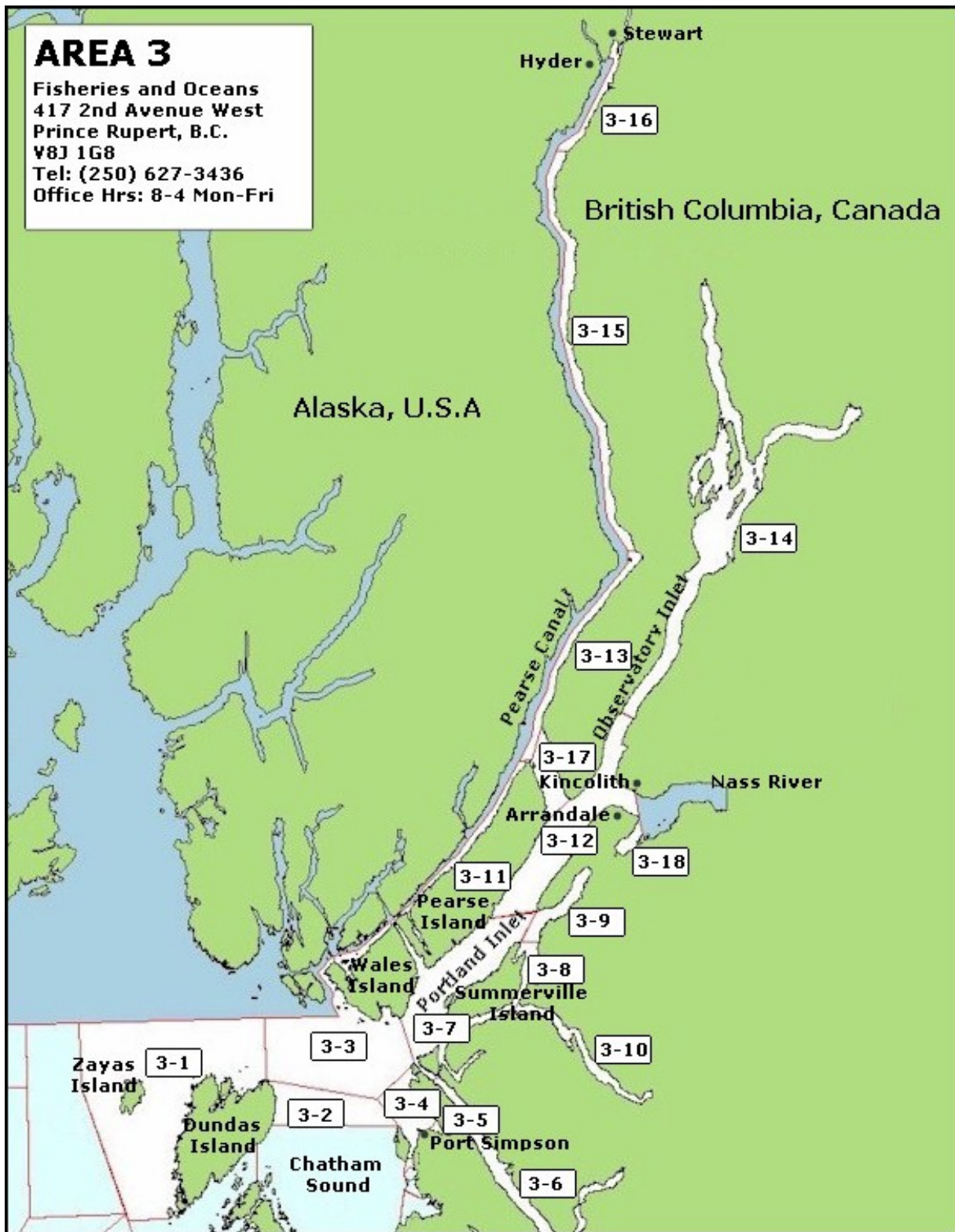


Figure 5.—Canadian Statistical Area 3 management sub-areas.

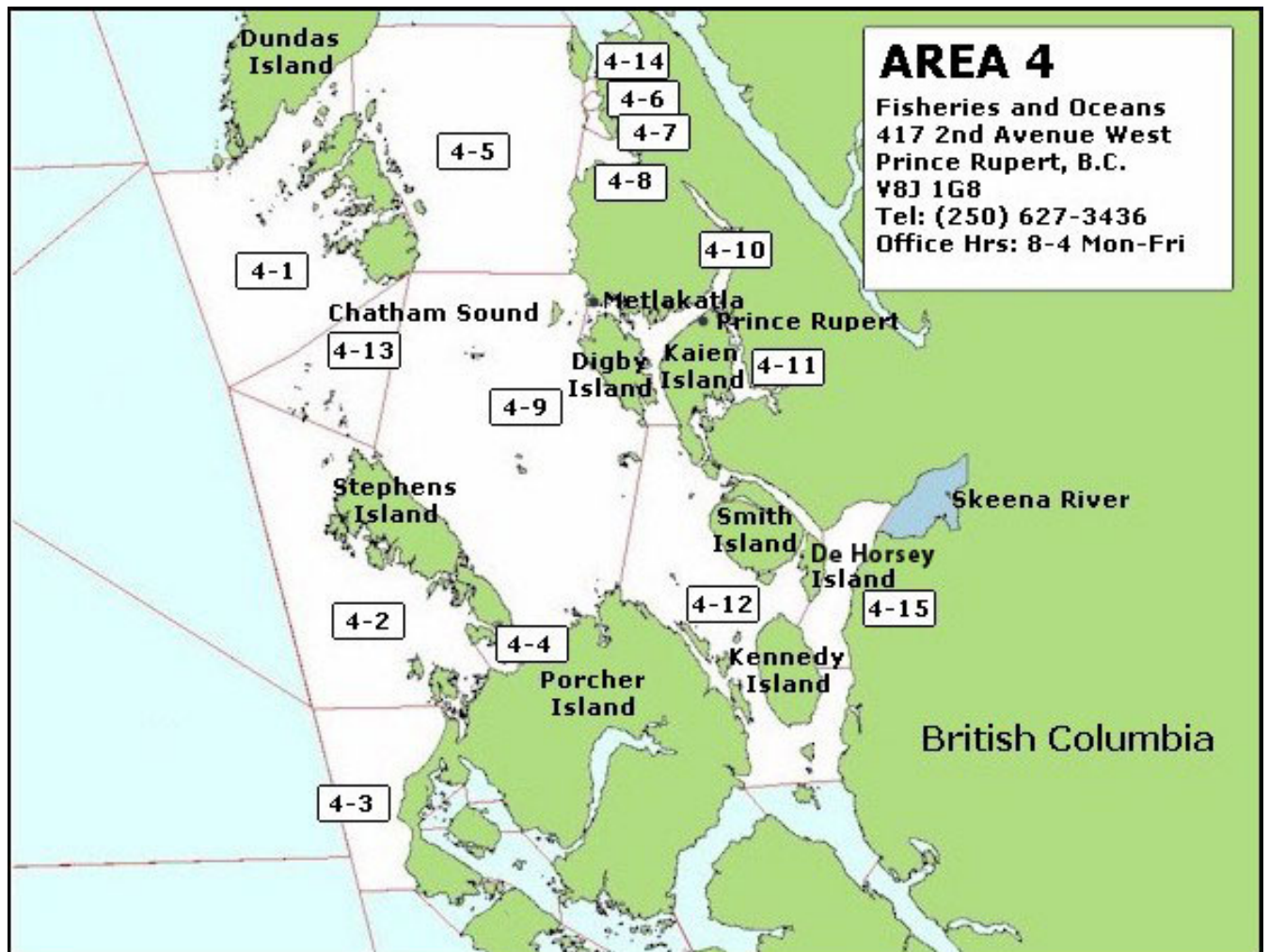


Figure 6.—Canadian Area 4 management sub-areas.

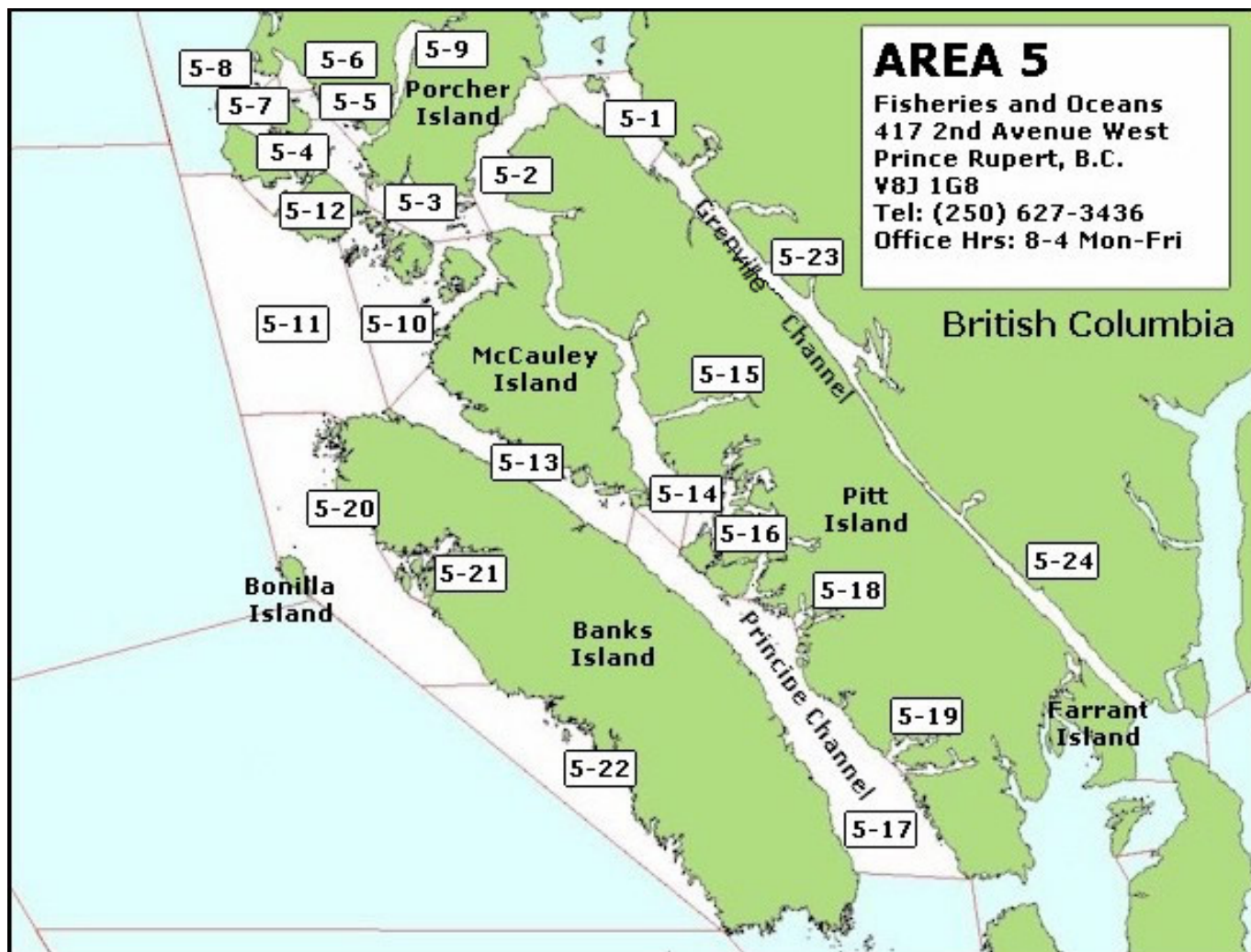


Figure 7.—Canadian Statistical Area 5 management sub-areas.