2018 Post Season Review

Salmon

North Coast Areas 1-6
&
Central Coast Areas 7-10

Fisheries and Oceans Canada

Pêches et Océans Canada

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The Chinook fishery re-opened on August 20th with approximately 80 vessels participating in the last week of August with effort dropping to less than 20 participants after the first week of September. CPUEs in the second fishery averaged 20 chinook / vessel / day for the end of August. The fishery closed for the balance of the season on September 30th with a total validated catch of 24,182 Chinook from August 20th to September 30th and a total season catch of 70,276 pieces. The estimated WCVI harvest rate associated with this catch is 2.2%, based on the in-season estimates using the Effort Harvest Rate Management Tool. Impacts of the Area F troll on stocks of concern will be measured post season and were not available before completion of this summary.

2018 Expectations and Results

2018 EXPECTATIONS & RESULTS
AREAS 1 TO 10

1. Preseason Expectations

Expected	Area		Sockeye	Coho	Pink	Chum	Chinook
Return	1-2W		unk	unk	Poor	Poor	unk
	3	[1]	377,000	223,000	635,000	33,000	19,000
	4		645,000	Below Avg	good	Very Poor	Below Avg
	5		unk	unk	good	Modest	unk
	6		unk	unk	good	Modest	unk
	7	[6]	unk	unk	poor	Good	unk
	8		very poor	unk	average	Good	Average
	9		148,800	NA	NA	NA	NA
	10		81,576	NA	NA	NA	NA
Interim Target	1		147,000	unk	1,152,000	62,000	unk
Escapement [2]	2E		26,000	unk	728,075	468,000	unk
	2W		15,000	unk	411,550	180,000	unk
	3	[3]	200,000	60,000	225,000	45,000	15,000
	4	[4]	900,000	unk	2,097,800	20,000	unk
	5		50,500	unk	254,500	NA	unk
	6		63,850	unk	1,344,450	520,000	unk
	7		24,200	NA	440,720	311,950	NA
	8		NA	NA	1,475,400	267,450	NA
	9		200,000	NA	342,450	150,700	22,700
	10		100,000	NA	NA	NA	NA
Total			1,726,550	unk	8,471,945	2,025,100	unk
Food, Social and Ceremonial Alloc.	1-2W		20,000	5,000	2,500	2,500	3,000
	3-6 North		209,250	8,650	32,425	4,975	15,860
	6 South-10		50,000	8,470	13,270	12,520	7,970
Total			279,250	22,120	48,195	19,995	26,830
Treaty Nisga'a	3	[5]	57,000	17,800	65,000	2,640	4,000

1 - Nisga'a Fisheries Sockeye and Chinook sibling forecasts

2 - Target Escapements are based on subjective spawning capacity with some reference to historic esc. and subsequent returns

3 - Skeena and Nass sockeye and Skeena pink escapement targets are the product of stock recruitment analysis.

4 - Chinook targets for the Skeena and Nass Rivers are the PST stock rebuilding goals

5 - Nisga'a Treaty + Harv. Agr. allocation based on pre-season forecast TRTC of "Nass Area" salmon stocks (overage/underage not included)

6 - Area 7 & 8 Chinook are based on the Bella Coola/Atnarko preseason outlook

2018 EXPECTATIONS & RESULTS
AREAS 1 TO 10

2. Post Season Catch (preliminary)

Commercial	Area	Sockeye	Coho	Pink	Chum	Chinook
Troll	1	Closed	10,870	25,914	415	5,329
In-season Hail	2W	Closed	840	761	63	1,865
	3	Closed	Closed	401	Closed	Closed
	6	Closed	367	0	Closed	Closed
	7	Closed	0	0	Closed	Closed
	8	Closed	0	0	Closed	Closed
	101	Closed	125,803	27	2,506	57,752
	102	Closed	915	0	Closed	Closed
	103	Closed	6,914	2,543	Closed	Closed
	104	Closed	27,901	0	Closed	Closed
	105	Closed	20	9	Closed	Closed
	142	Closed	3,284	1,241	191	5,330
Total		0	176,914	30,896	3,175	70,276

	Area	Sockeye	Coho	Pink	Chum	Chinook
Gillnet	1	Closed	Closed	Closed	Closed	Closed
In-season Hail	2E	Closed	Closed	Closed	Closed	Closed
	2W	Closed	Closed	Closed	Closed	Closed
	3	11,627	93	818	8,506	Closed
	4	79,225	Closed	10,917	Closed	Closed
	5	NA	NA	NA	NA	NA
	6	Closed	Closed	Closed	Closed	Closed
	7	0	0	0	0	0
	8	3,563	0	5,464	263,850	5,162
	9	Closed	Closed	Closed	Closed	Closed
	10	Closed	Closed	Closed	Closed	Closed
Total		94,415	93	17,199	272,356	5,162

	Area	Sockeye	Coho	Pink	Chum	Chinook
Seine	1	Closed	Closed	Closed	Closed	Closed
In-season Hail	2E	Closed	Closed	Closed	Closed	Closed
	2W	Closed	Closed	Closed	Closed	Closed
	3	159	4,125	101,267	38,365	Closed
	4	24,374	Closed	5,940	Closed	Closed
	5	Closed	Closed	Closed	Closed	Closed
	6	Closed	Closed	Closed	Closed	Closed
	7	0	0	0	0	0
	8	0	0	43,650	212,171	0
	9	Closed	Closed	Closed	Closed	Closed
	10	Closed	Closed	Closed	Closed	Closed
Total		24,533	4,125	150,857	250,536	Closed

	Area	Sockeye	Coho	Pink	Chum	Chinook
CSAF Demonstration	3	Closed	Closed	Closed	Closed	Closed
Fisheries	4	20,827	Closed	100	Closed	Closed
	5	Closed	Closed	Closed	Closed	Closed
Total		20,827	Closed	100	Closed	Closed

Sport	Area	Sockeye	Coho	Pink	Chum	Chinook	Jacks	Steelhead
Tidal	1	160	24,295	1,750	725	19,250	UNK	UNK
	2E	0	2,150	0	0	450	UNK	UNK
	2W	10	7,755	200	225	17,000	UNK	UNK
	3,4	32	10,438	1,391	176	5,822	UNK	UNK
	5,6	UNK	UNK	UNK	UNK	UNK	UNK	UNK
	7	0	3,639	39	62	3,484	0	0
	8	0	4,895	410	27	1,553	UNK	UNK
	9	0	7,535	171	35	2,438	UNK	UNK
	10	0	73	1	1	218	0	0
Total		202	60,780	3,962	1,251	50,215	UNK	UNK
Freshwater								
Babine Lake	4	UNK	UNK	UNK	UNK	UNK	UNK	UNK
Babine River	4	UNK	UNK	UNK	UNK	UNK	UNK	UNK
Middle Skeena	4	UNK	UNK	UNK	UNK	UNK	UNK	UNK
Lower Skeena	4 [9]	UNK	UNK	UNK	UNK	UNK	UNK	UNK
Total		UNK	UNK	UNK	UNK	UNK	UNK	UNK

9 - Skeena River from Terrace area downstream; data from LGL Limited Lower Skeena Creel Survey

2018 EXPECTATIONS & RESULTS
AREAS 1 TO 10

2. Post Season Catch (preliminary) cont'd

First Nations		Area	Sockeye	Coho	Pink	Chum	Chinook	Jacks	Steelhead
FSC*	Terminal	1	NA	NA	NA	NA	NA	NA	NA
	Interception	1	NA	NA	NA	NA	NA	NA	NA
	Terminal	2E	NA	NA	NA	NA	NA	NA	NA
	Interception	2E	NA	NA	NA	NA	NA	NA	NA
	Terminal	2W	NA	NA	NA	NA	NA	NA	NA
	Interception	2W	NA	NA	NA	NA	NA	NA	NA
	Tidal	3	NA	NA	NA	NA	NA	NA	NA
	Non-tidal	3	NA	NA	NA	NA	NA	NA	NA
	Tidal	4	NA	NA	NA	NA	NA	NA	NA
	Non-tidal	4	74,726	2,754	2,785	745	5,888	2040	3,217
	Tidal	5	NA	NA	NA	NA	NA	NA	NA
	Tidal	6	NA	NA	NA	NA	NA	NA	NA
	Tidal	7	2,067	459	260	2,374	739	0	0
	Tidal	8	1,521	118	3	74	23	0	0
	Non-tidal	8	119	358	108	779	1,567	4	12
	Tidal	9	0	0	0	0	0	0	0
	Non-tidal	9	1,830	13	15	34	28	0	2
	Tidal	10	180	4	10	12	2	0	0
	Total		80,443	3,706	3,181	4,018	8,247	2,044	3,231
Treaty - Nisga'a (all catch)		3	46,615	2,691	1,002	89	4,735	0	398

ESSR		Area	Sockeye	Coho	Pink	Chum	Chinook	Jacks	Steelhead
		2E	Closed	Closed	Closed	Closed	Closed	Closed	Closed
		3	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Babine Lake	4	192,712	Closed	Closed	Closed	Closed	Closed	Closed
	Moricetow n Canyon	4	Closed	Closed	110	Closed	Closed	Closed	Closed
		6	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	Total		192,712	0	110	0	0	0	0

*Data set is not complete

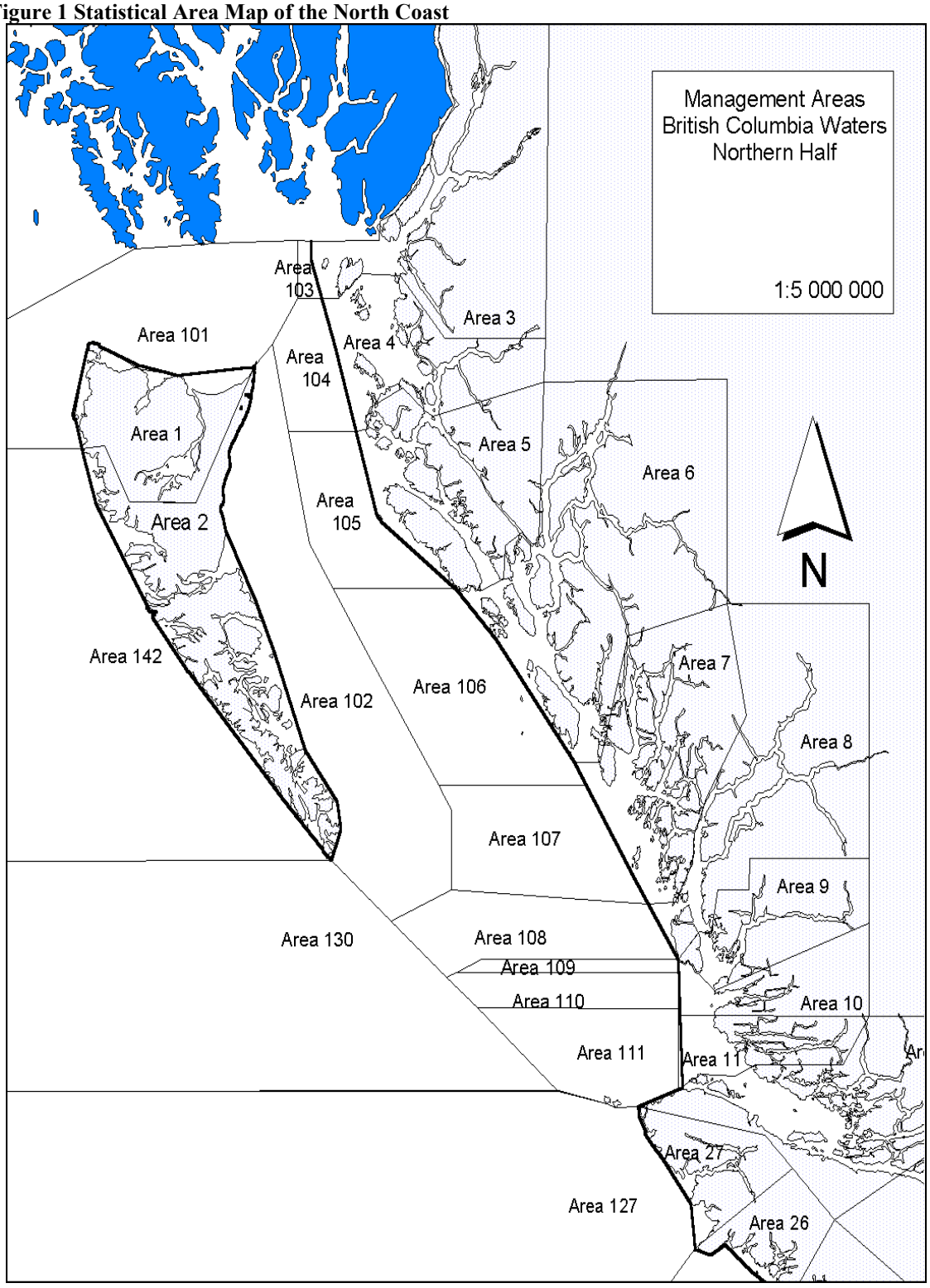
2018 EXPECTATIONS & RESULTS
AREAS 1 TO 10

3. Commercial Fishery Statistics

Gillnet	Area	Date of First Fishery	Date of Last Fishery	Closed for Balance	Days Fishing	Total Boat Days
	1	Closed	Closed	Closed	Closed	Closed
	2E	Closed	Closed	Closed	Closed	Closed
	2W	Closed	Closed	Closed	Closed	Closed
	3	Jun 25	Jul 3		4	379
	4	Jul 24	Aug 10		10	625
	5	Jul 24	Jul 25		2	2
	6	Closed	Closed	Closed	Closed	Closed
	7	Jul 31	Aug 7	Oct 19	2	0
	8	Jun 4	Aug 14	Oct 15	7	222
	9	Closed	Closed	Closed	Closed	Closed
	10	Closed	Closed	Closed	Closed	Closed
Seine						
	1	Closed	Closed	Closed	Closed	Closed
	2E	Closed	Closed	Closed	Closed	Closed
	2W	Closed	Closed	Closed	Closed	Closed
	3	Jul 5	Jul 20		5	159
	4	Aug 1	Aug 19		15	52
	5	Closed	Closed	Closed	Closed	Closed
	6	Closed	Closed	Closed	Closed	Closed
	7	Jul 31	Aug 7	Oct 19	2	28
	8	Jul 16	Aug 14	Oct 15	14	1370
	9	Closed	Closed	Closed	Closed	Closed
	10	Closed	Closed	Closed	Closed	Closed
Troll	Area F	Jul 10	Sept. 30	Sept. 30	82	4276

Statistical Area Map of the North Coast

Figure 1 Statistical Area Map of the North Coast



Commercial Troll Fishery Review

2018 SALMON LICENSE AREA F TROLL SUMMARY

ITQ Chinook Troll Fishery

Escapements of northern Chinook salmon have declined dramatically in recent years. Reduced survival rates and productivity have been observed from South East Alaska, British Columbia and Washington State. This has led to the need for significant conservation measures to be implemented across all northern fisheries in 2018 that reduced exploitation rates in the range of 25% to 35%. To achieve the required fishery reductions, fishery reductions were implemented in commercial troll and recreational fisheries in northern BC.

Actions specific for the Area F Troll fishery included delaying the fishery opening until July 10 and closing of eastern portions of Dixon Entrance. The fishery was also restrained by a maximum harvest rate of 3.2% on WCVI Chinook. The in-season harvest rate of WCVI Chinook was estimated by an Effort – Harvest Rate Management Tool.

The Chinook fishery opened with approximately 120 vessels participating in the first week. The average CPUE in the first 3 days of the fishery was 46.5 chinook / vessel / day and then varied around the decadal mean as it declined through the season.

The estimated harvest rate of WCVI chinook accumulated at a rate of approximately 0.05% per day in July. The fishery closed to retention of Chinook on August 6th to avoid incidences of WCVI which are known to be high in August. The validated catch to August 6th was 46,094 Chinook with an estimated WCVI harvest rate of 1.45%.

The Chinook fishery re-opened on August 20th with approximately 80 vessels participating in the last week of August with effort dropping to less than 20 participants after the first week of September. CPUEs in the second fishery averaged 20 chinook / vessel / day for the end of August. The fishery closed for the balance of the season on September 30th with a total validated catch of 24,182 Chinook from August 20th to September 30th and a total season catch of 70,276 pieces. The estimated WCVI harvest rate associated with this catch is 2.2%, based on the in-season estimates using the Effort Harvest Rate Management Tool. Impacts of the Area F troll on stocks of concern will be measured post season and were not available before completion of this summary.

Table **1 Area F Troll Chinook ITQ and AABM Summary**

Area F Troll				
Licence Summary		Allocation / Catch Summary		
No. Licences			No. Chinook	
Total Area F	241		TAC	ITQ
		Season Start:	93,900	390
DFO Inventory				
Total-	21	Unavailable ITQ:	8,182	
Active Fishing	139	Available TAC:	85,718	
		Troll Catch:	70,276	
AABM Review			**Preseason**	**Catch**
		Area 1-2 Recreational:	37,400	36,700
		Area F Troll:	93,900	70,276
		Total AABM:	**131,300**	**106,976**

Note: Northern B.C. AABM Chinook Fishery includes the Area F Troll and Area 1-2 Recreational fisheries as defined in the Pacific Salmon Treaty.

Coho Troll Fishery

The A-B Line directed coho fishery opened on July 1st with retention of pink salmon. The directed coho fishery opened on July 10th concurrently with the Chinook ITQ fishery under similar fishing boundaries and constraints as last year.

The fleet concentrated in Dixon Entrance from Langara to Rose Spit. Average CPUE during the first week of the fishery was 41 coho per day per vessel with approximately 120 vessels participating. CPUE was significantly below average during the opening in July as the fleet concentrated on Chinook which opened concurrently with Coho. CPUE then increased to near the decadal average however remained below average for the remainder of the season. The total catch of coho was approximately half of last year at 176,914 pieces for the season by Area F Troll.

Area 3

Inseason coho returns to the Nass River Fishwheels indicated low returns in 2018. Area F Troll opportunities for Coho in Area 3 were therefore not permitted.

Table 2 Estimated Troll Total Catch by Area and Species

	End		Chinook		Coho		Pink		Sockeye		Chum	
WEEK	Date	Effort	Kept	Rel.	Kept	Rel.	Kept	Rel.	Kept	Rel.	Kept	Rel.
25	23-Jun	0	0	0	0	0	0	0	0	0	0	0
26	30-Jun	0	0	0	0	0	0	0	0	0	0	0
27	7-Jul	25	0	146	714	6	266	0	0	4	0	14
28	14-Jul	598	21,309	3,041	18,678	8	1,825	280	0	865	0	158
29	21-Jul	638	7,499	3,694	39,662	6	5,941	1,153	0	1,854	0	157
30	28-Jul	585	7,613	3,500	45,458	70	8,032	2,403	0	2,054	0	512
31	4-Aug	388	6,038	2,093	17,148	15	4,461	1,941	0	2,038	0	176
32	11-Aug	281	3,635	1,851	12,986	13	4,690	1,257	0	1,962	0	203
33	18-Aug	300	0	3,850	18,228	3	3,568	706	0	740	0	538
34	25-Aug	540	10,501	2,293	13,882	15	1,833	722	0	781	482	2,072
35	1-Sep	431	7,364	1,148	5,975	11	259	145	0	561	900	588
36	8-Sep	247	3,022	522	2,780	1	20	6	0	351	1,194	426
37	15-Sep	123	2,265	272	859	1	2	0	0	33	456	144
38	22-Sep	92	901	126	435	0	0	0	0	4	138	31
39	30-Sep	27	129	65	109	0	0	0	0	1	5	6
	Total		**70,276**	**22,601**	**176,914**	**150**	**30,896**	**8,613**	**0**	**11,248**	**3,175**	**5,026**

Central Coast Limited Effort Coho Demo Fishery

2018 was the third year of this demonstration fishery which originated as part of the work to implement updates to the Commercial Salmon Allocation Framework (CSAF). The purpose of this demonstration fishery was to permit a small scale opportunity for a limited number of vessels to access coho and pink salmon in Areas 6, 7 and 8, and to gather stock composition data where there is currently poor biological information available. Effort was limited to a maximum of 4 vessels in Area 6, 3 vessels in Area 7, and 2 vessels per day in Area 8 for 2 week periods during the month of August.

The demo fishery was open for the month of August 1st with a total of 2 different vessels fishing in Area 6 and 0 vessels fishing in areas 7-8. Coho CPUE's were below average which resulted in poor participation in the fishery. Total catch by this demo was 367 Coho and 9 Pinks. Fishers were required to pay for extra monitoring costs associated with this fishery which included DNA sampling of 25% of offloads. Due to the low catch and subsequently low DNA sample size, useful catch composition of catch is not anticipated for 2018.

Table 3. Summary of catch and effort for the Central Coast Limited Effort Coho Demo

		Period		Area
		Aug. 1-15	Aug. 16-31	Total
Area 6	# Vessels	2	1	3
	Vessel*Days	11	9	20
	Coho	203	164	367
	Pink	9	0	9
Area 7-8	# Vessels	0	0	0
	Vessel*Days	0	0	0
	Coho	0	0	0
	Pink	0	0	0
Period	# Vessels	2	1	**3**
Total	Vessel*Days	11	9	**20**
	Coho	203	164	**367**
	Pink	9	0	**9**

Haida Demonstration Fishery opening August 9, 2018.

This demonstration fishery was proposed and reviewed in 2017 as part of the work to implement updates to the Commercial Salmon Allocation Framework (CSAF). Coho were allocated to this fishery based on 6 Area F Troll PICFI licences. The allocation of coho was calculated based on the proportion of available Area F licences (6/241) against the in-season catch of coho by Area F Troll. This fishery opened August 24th and was limited to vessels, less than 25 feet in length, that are designated by the Haida Fisheries on behalf of the Haida Nation. While this fishery was implemented in the 2018 season, there was no effort in this fishery for 2018.

Highlights of the 2018 North Coast Troll Fishery

Jan. 19 Area F Harvest Committee – 2017 Post Season Meeting

Mar. 29 The Pacific Salmon Commission's (PSC) Chinook Technical Committee (CTC) completed calibration 1804 to determine the Abundance Indices (AI's) for the three fisheries in the Aggregate Abundance Based Management (AABM) regime. The preseason NBC AABM Chinook AI was 1.01 with a TAC of 131,300 Chinook. (37,400 recreational + 93,900 Area F troll)

Apr. 10 Area F Harvest Committee Consultation on IFMP

Jun. 14 FN0483 – List of Area F licence holders exempt from retaining salmon heads for Salmon Head Recovery Program.

Jun. 15 FN0493 – Chinook and Coho head retention and delivery requirements

Jun. 15 FN0494 - Area F Mandatory Reporting requirements

Jun. 15 FN0495 – AB Line opening for Coho and Pink Salmon – July 1 2018

Jun. 22 FN0516 – Chinook ITQ opening – Area F Area 1, 101, 2 and 142 – July 10, 2018

Jun. 25 FN0520 – Coho and Pink opening – Area F Area 1,2,101,102,103,104,105, 106 and 142 – July 10, 2018.

Jun. 27 FN0524 – Expression of Interest for Central Coast Coho Limited Effort Fishery

Jul. 1 Dixon Entrance A-B Line Pink and Coho Opening (FN0495 – released Jun. 15)

Management Strategy

Open Areas

- Subareas 101-4, 101-5 and that portion of Subarea 101-3 north of 54 degrees 24 minutes North latitude.

- That portion of subarea 101-8 that lies outside a line that begins at 54 degrees 41.000 minutes North and 131 degrees 39.000 minutes West then to 54 degrees 37.000 minutes North and 131 degrees 35.000 minutes West then to 54 degrees 37.000 minutes North and 131 degrees 31.000 minutes West then to 54 degrees 41.000 minutes North and 131 degrees 35.000 minutes West then to the beginning point.

- That portion of subarea 101-9 that lies outside a line that begins at 54 degrees 35.000 minutes North and 131 degrees 34.000 minutes West then to 54 degrees 28.000 minutes North and 131 degrees 30.000 minutes West then to 54 degrees 28.000 minutes North and 131 degrees 24.000 minutes West then to 54 degrees 32.000 minutes North and 131 degrees 22.000 minutes West then to 54 degrees 34.000 minutes North and 131 degrees 25.000 minutes West then to the beginning point. Subareas 101-4, 101-5, 101-8, 101-9 and that portion of Subarea 101-3 north of 54 degrees 24 minutes north latitude.

Jul. 10 ITQ Chinook opening with retention of Pinks. (FN0516 – released Jun. 22)

Management Strategy

i) Commercial Area F Troll fishery TAC = 93,900 Chinook
ii) ITQ share for each (241) Area F troll license = 390 Chinook
iii) WCVI Chinook managed to 3.2% harvest rate using effort / harvest rate management tool.
iv) Opening day restricted to July 10 to reduce impacts on Nass/Skeena Chinook.
v) Eastern boundary in Area 1 and 101 moved to 132 degrees 0.0 minutes for the July Chinook opening.
vi) AABM Chinook fishery closure in August to protect weak stocks of WCVI Chinook.
vii) Area F Troll Fishery to close on September 30th.
viii) Open Area
    - Subareas 1-1, 101-1, 101-2, 101-4, and 101-5.
    - Those portions of Subareas 1-2, 1-3 and 1-7 outside and seaward 1 nautical mile from the Graham Island and Langara Island shorelines (defined at the mean high water mark).
    - That portion of Subarea 1-5, except that portion east of 132 degrees 0.0 minutes west longitude or inside or shoreward of a line commencing at Wiah Point then following the Subarea boundary east for one nautical mile, then running parallele to the mean high water mark of Graham Islan at a distance of one nautical mile to a point true north of Skonun point, then running true south to Skonun Point..
    - Those portions of Subareas 101-3, 101-6 and 101-7 except thos portions inside or shoreward of a line commencing at 54 degrees 14.976 mintues north latitude and 133 04.386 minutes west longitude then true west for one nautical mile then north and east running parallel to the mean high water mark of the shorelines of Langara Island and Graham Island at a distance of one nautical mile or that portion of 107-7 east of 132 degrees and 0.0 minutes west longitude.

- That portion of Subarea 2-88 north of 53 degrees 37 minutes North latitude.
- Subareas 2-92, 2-97 and 2-98.
- That portion of Subarea 142-2 north of 53 degrees 37 minutes North latitude.
- The Frederick Island Rockfish Conservation Area remains closed to hook and line fisheries.
- Those portions of Subareas 1-1, 101-2 and 142-2 that lies outside of a line that begins at 53 degrees 56.246 minutes north and 133 degrees 17.500 minutes west then true East to 53 degrees 56.246 minutes north and 133 degrees 11.862 minutes west (Hope Point) then to 53 degrees 57.144 minutes north and 133 degrees 07.938 minutes west (Graham Island) then southerly following the shoreline of Graham Island to the intersection with 53 degrees 47.0 minutes north, then to 53 degrees 47.00 minutes north and 133 degrees 10.00 minutes west thence to the beginning point.
- The above boundaries retains the 1.0 nautical mile ribbon boundary in Areas 1 and 101 following the Graham Island and Langara Island shorelines initiating at Langara Island and terminating at Skonun Point. There will be no commercial trolling shoreward of the ribbon boundary.

Jul. 10 Directed Coho and Pink troll fishery opening. (FN0520 – released June 25)

Open Areas:

- Subareas Those portions of Subareas 1-2, 1-3, 1-7 and that portion of Subarea 1-5 west of a line drawn true north from Skonun Point, outside and seaward of a line drawn one nautical mile parallel to the shorelines of Graham Island and Langara Island (defined at the mean high water mark).
- That portion of Subarea 1-5 east of a line running true North from Skonun Point.
- Subareas 101-2, 101-4, 101-5, 101-8 to 101-10
- Those portions of Subareas 101-3, 101-6 and 101-7 outside and seaward of a line drawn one nautical mile parallel to the shorelines of Graham Island and Langara Island (defined at the mean high water mark).
- Those portions of Subareas 1-1, 101-1 and 142-2 that lie outside a line that begins at 53 degrees 56.737 minutes North and 133 degrees 08.036 minutes West [Morgan Point], then to 53 degrees 56.246 minutes North and 133 degrees 11.862 minutes West[Hope Point], then true West to 53 degrees 56.246 minutes North and 133 degrees 17.500 minutes West, then to 53 degrees 47.000 minutes North and 133 degrees 10.000 minutes West, then true East to the Graham Island

shore at 53 degrees 47.000 minutes North and 133 degrees 7.000 minutes West[Tian Head], and then northerly following the shoreline of Graham Island to the beginning point. Note: The Frederick Island Rockfish Conservation Area remains closed to hook and line fisheries

- That portion of Subarea 2-88 north of 53 degrees 37 minutes North latitude Subareas 2-92, 2-97 and 2-98.
- That portion of Subarea 142-2 north of 53 degrees 37 minutes North latitude
- Area 102
- Those portions of Subarea 3-1 and Areas 103 and 104 north of 54 degrees 12 minutes North latitude and west of 131 degrees 10 minutes West longitude
- Subarea 105-1
- That portion of subarea 105-2 that lies outside a line that begins at 53 degrees 27.900 minutes North and 130 degrees 39.800 minutes West then to 53 degrees 27.985 minutes North and 130 degrees 35.246 minutes West then to 53 degrees 23.700 minutes North and 130 degrees 22.700 minutes West then to 53 degrees 18.700 minutes North and 130 degrees 21.500 minutes West then to 53 degrees 24.300 minutes North and 130 degrees 38.000 minutes West and then to the beginning point.Note: The West Banks Island Rockfish Conservation Area remains closed to hook and line fisheries
- That portion of subarea 105-2 that lies outside a line that begins at 53 degrees 15.900 minutes West then to 53 degrees 16.100 minutes North and 130 degrees 16.700 minutes West then to 53 degrees 10.000 minutes North and 130 degrees 06.200 minutes West then to 53 degrees 10.000 minutes North and 130 degrees 21.300 minutes West and then to the beginning point. Note: The North Danger Rocks Rockfish Conservation Area remains closed to hook and line fisheries.
- That portion of Subarea 106-1 west of 130 degrees 30 minutes West longitude
- That portion of Subarea 106-1 west of 130 degrees 30 minutes west longitude.

Jul. 31 FN0673 – Central Coast Coho Limited Effort Opening August 1-15, 2018 Area 6 and 106

Jul. 31 FN0674 - Central Coast Coho Limited Effort Opening August 16-31- Areas 6 to 8 and 106 to 109.

Aug. 6 Chinook ITQ Fishery Closure (FN0656 – Posted July 27, 2018) (Note: Fishery closed during August to protect WCVI Chinook.)

Aug. 20 Chinook ITQ Fishery Re-Opening (FN0795 – released Aug.15)
Area F Area 1, 101, 2 and 142 – ITQ Fishery – Opening, August 20, 2018
Open Areas:

- Those portions of Subareas 1-2, 1-3, 1-7 and that portion of Subarea 1-5 west of a line drawn true north from Skonun Point, outside and seaward of a line drawn one nautical mile parallel to the shorelines of Graham Island and Langara Island (defined at the mean high water mark).
- That portion of Subarea 1-5 east of a line running true North from Skonun Point.
- Subareas 101-2, 101-4, 101-5, 101-8 to 101-10.
- Those portions of Subareas 101-3, 101-6 and 101-7 outside and seaward of a line drawn one nautical mile parallel to the shorelines of Graham Island and Langara Island (defined at the mean high water mark).
- Those portions of Subareas 1-1, 101-1 and 142-2 that lie outside a line that begins at 53 degrees 57.144 minutes North and 133 degrees 07.938 minutes West [Morgan Point], then to 53 degrees 56.246 minutes North and 133 degrees 11.862 minutes West [Hope Point], then true west to 53 degrees 56.246 minutes North and 133 degrees 17.500 minutes West, then to 53 degrees 47.000 minutes North and 133 degrees 10.000 minutes West, then true east to the Graham Island shore at 53 degrees 47.000 minutes North and 133 degrees 7.000 minutes West [Tian Head], and then northerly following the shoreline of Graham Island to the beginning point.
- That portion of Subarea 2-88 north of 53 degrees 37 minutes North latitude.
- Subareas 2-92, 2-97 and 2-98
- That portion of Subarea 142-2 north of 53 degrees 37 minutes North latitude.

Aug. 22 FN0837 Opening areas 1, 101, 2 and 142 for Chum retention – August 23, 2018.

Aug. 24 FN0847 – Coho and Pink Opening (Haida Demonstration Fishery) Areas 1 and 101 – August 24.

1. This demonstration fishery was proposed and reviewed as part of the work to implement updates to the Commercial Salmon Allocation Framework (CSAF)and was included in the draft 2018/2019 IFMP for public review and feedback prior to approval. This demonstration fishery is being conducted by the Haida Nation. This

fishery is limited to vessels, less than 25 feet in length, that are designated by the Haida Demonstration Fishery Manager on behalf of the Haida Nation. This fishery will be operating under a management plan agreed upon by the Department.

2. Effective 00:01 hours, August 24, 2018, the following Subareas of Area 1 and 101 will open to trolling by Haida Mosquito Fleet vessels for Coho
and Pink salmon until further notice: Subareas 1-2, 1-3, 1-5 and 1-7; Subarea 101-7.

Aug 31 FN0905 - Closure of Central Coast Limited Effort Demonstration Fishery

Sep. 5 FN0949 - Boundary Adjustment for Chinook, Coho, Pink Salmon Fishery – West side of Haida Gwaii and removal of ribbon boundary east of Shag Rock on the North Side of Haida Gwaii.

Sep. 11 FN0979 - Removal of ribbon boundary around Langara Island and the North Shore of Graham Island (Effective 00:01 September 13, 2018).

Sept. 10 - Area F Troll boundary adjustment

i) The 1 nautical mile ribbon boundary was removed between Skonun Point and Shag Rock.

ii) The southern boundary on the west side of Haida Gwaii was moved down to Cape St. James.

Sept. 13 - Area F Troll boundary adjustment
The 1 nautical mile ribbon boundary along the northern shore of Graham Island was removed.

Sept. 30 - Area F Troll closed for the balance of the season.

Area 1

Area 1 Map

Figure 2 Area 1 Map

First Nations Fishery Review

Haida FSC

Terminal Fisheries
Sockeye - Haida traditional fisheries focus on small terminal sockeye stocks such as the Yakoun, Awun and Naden Rivers. Sockeye fishery openings were managed under the direction of and Haida FSC Advisory Committee. The Haida Fisheries Program provided technical advice to the committee and Haida Fisheries Guardians monitored the fisheries and provided onsite management in Masset Inlet. Harvest information for Naden Harbour was obtained through interviews with harvesters post season. Terminal sockeye returns normally support only a small percentage of the community requirements. Terminal sockeye harvests were considered to be below average.

Interception Hook and Line Fisheries
Significant FSC effort targeting chinook and coho using hook and line gear occurs off of Masset on an annual basis. This fishery occurs during the summer months and targets mixed passing stocks. .

Interception Net Fisheries
The majority of FSC sockeye salmon have been traditionally been harvested within Dixon Entrance by seine and gillnet gear targeting sockeye in the Langara Island area. The Council of the Haida Nation sponsored a seine vessel to harvest FSC sockeye at the end of July in 2018.

ESSR Review

There were no ESSR licences issued in Area 1 during the 2018 season.

Table 4 Haida Gwaii FSC Catch Summary for Area 1

Unable to provide catch figures due to the limited fishers participating in the commercial fishery.

Recreational Review

Recreational (Tidal)

The recreational salmon fishery primarily occurs between Masset and Lanagara Island along the north shore of Graham Island. The majority of the fishery occurs between the middle of May to the middle of September with little to no effort in the winter months. In addition to a fleet made up of independent anglers and charter operators, mostly operating out of Masset, there were 7 fly in lodge operations (floating and land based) within Area 1; 4 present at Langara and 3 in Naden Harbour. Region wide management actions to reduce impacts on northern chinook included reduce recreational bag limits to 1 chinook per day from June 1st until July 9th. The total Area 1 recreational harvest was 19,250 chinook and 22,300 coho. Refer to Table 5 for detailed catch information.

Table 5 Haida Gwaii Recreational Catch

2018 Season		Catch By Species							
Month	Area	Coho	Chinook	Pink	Sockeye	Chum	Halibut	Lingcod	Rockfish
May	1	5	250	10	0	5	200	150	20
	2E	0	200	0	0	0	200	0	0
	2W	5	400	0	0	0	200	250	430
	May Total	10	850	10	0	5	600	400	450
June	1	1890	3600	80	10	40	3700	1700	600
	2E	0	100	0	0	0	100	50	100
	2W	200	3300	0	0	15	1500	1400	2200
	June Total	2090	7000	80	10	55	5300	3150	2900
July	1	11500	6600	1150	50	140	4050	1000	440
	2E	50	100	0	0	0	100	50	100
	2W	3600	5650	50	0	60	2100	2100	2200
	July Total	15150	12350	1200	50	200	6250	3150	2740
Aug.	1	9700	8300	500	80	420	4650	1000	300
	2E	100	50	0	0	0	100	50	100
	2W	3600	6150	150	10	140	1550	1450	1550
	Aug Total	13400	14500	650	90	560	6300	2500	1950
Sept.	1	1200	500	10	20	120	750	300	10
	2E	2000	0	0	0	0	50	50	50
	2W	350	1500	0	0	10	350	50	30
	Sept. Total	3550	2000	10	20	130	1150	400	90
May -	1	24295	19250	1750	160	725	13350	4150	1370
Sept.	2E	2150	450	0	0	0	550	200	350
	2W	7755	17000	200	10	225	5700	5250	6410
Season Total:		**34200**	**36700**	**1950**	**170**	**950**	**19600**	**9600**	**8130**
% of total catch by source	Log Book	83%	71%	50%	81%	84%	86%	88%	87%
	Creel	10%	27%	44%	1%	11%	10%	6%	7%
	Estimate	7%	2%	6%	19%	5%	5%	5%	6%

Commercial Net Fishery

Commercial Net

Pink salmon - Haida Gwaii stocks are primarily even year stocks with little to no returns in odd years. No commercial fishing opportunities were identified.

Chum salmon – returns have been consistently below management targets over the past decade. No commercial fishing opportunities were identified.

Area 1 Stream Escapements

Table 6 Area 1 Stream Escapements

AREA 1 (preliminary) STREAM ESCAPEMENTS 2018

	SOCKEYE		COHO		PINK		CHUM	
STREAM	Esc.	Target*	Esc.	Target*	Esc.	Target*	Esc.	Target*
MASSET SUBAREA								
Ain River	N/O	(15,000)		(20,000)			4,000	**(25,000)**
Awun River	2,300	**(20,000)**		(8,000)	N/O		1,000	**(15,000)**
Datlamen Creek				**(5,000)**	10,000	**(30,000)**		
Mamin River				(15,000)	43,000	**(50,000)**		
McClinton Creek				**(*)**	200			
Yakoun River[1]	1,500	**(45,000)**		(45,000)	500,000	**(650,000)**		
NADEN SUBAREA								
Davidson Creek					N/O	(100,000)		
Lignite Creek					A/P	(50,000)		
Naden River	3,000	**(20,000)**				**(100,000)**	N/O	**(20,000)**
Stanley Creek								**(2,000)**

[1] Yakoun River - was not inspected (N/I) for chinook escapement. Anecdotal information from the Marie Lake Hatchery Crew was that chinook escapement was below average.

* -**Targets** are not a biological escapement goals. They are used as a surrogate to assist management identify harvest opportunities.

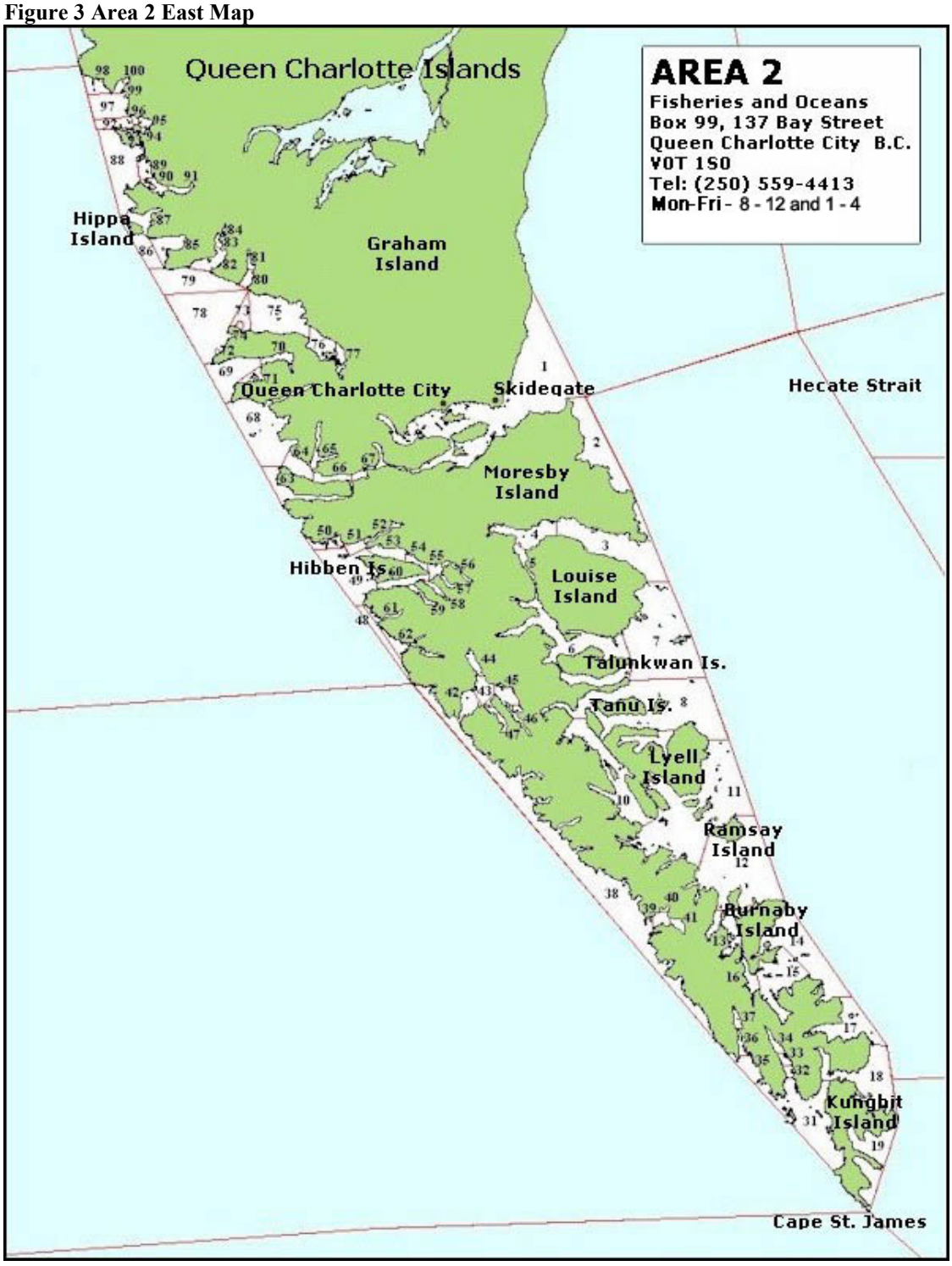
- Targets that are in bold and underlined are identified as indicators and priority for assessment.

N/O: None observed. A/P: Adults present.

Area 2 East

Area 2 East Map

Figure 3 Area 2 East Map



First Nations Fishery Review

Haida FSC

Area 2E
Terminal Fisheries
Sockeye - Haida traditional fisheries focus on primarily on sockeye returning to Copper Creek during the month of May. Sockeye fishery openings were managed under the direction of and Haida FSC Advisory Committee. The Haida Fisheries Program provided technical advice to the committee and Haida Fisheries Guardians monitored the fisheries and provided onsite management at Copper Bay. Terminal sockeye returns normally support only a small percentage of the community requirements.

Table 7 Area 2 East and West Haida FSC Catches
Unable to provide catch figures due to the limited fishers participating in the commercial fishery.

ESSR Review

There were no ESSR licences issued in Area 2 East during the 2018 season.

Recreational Review

The early chinook salmon fishery in East Skidegate during late winter and early spring was reported to be average. Total harvest of chinook in Area 2 East is unkown however it is assumed to be a small proportion compared to the number of recreationally intercepted salmon harvested in Area 1 and 2W of Haida Gwaii. Recreational effort (>99%) primarily occurs in Area 1 and 2W.

Area 2 East is most recognised for its fall coho fisheries which occur along the shores and in key producing streams of East Skidegate Inlet, Cumshewa Inlet, Copper Bay and Tlell. During the 2018 terminal season coho abundance was reported to be low to average by most recreational anglers.

Commercial Net Fishery

Pink salmon - Haida Gwaii stocks are primarily even year stocks with little to no returns in odd years. No commercial fishing opportunities were identified.

Chum salmon – returns have been consistently below management targets over the past decade. While chum returns have been marginally increasing over few past cycles, no commercial fishing opportunities were identified.

Area 2 East Stream Escapements

Table 8 Area 2 East Stream Escapements

AREA 2 EAST (preliminary) STREAM ESCAPEMENTS 2017

STREAM	SOCKEYE Esc.	SOCKEYE Target*	COHO Esc.	COHO Target*	PINK Esc.	PINK Target*	CHUM Esc.	CHUM Target*
TLELL SUBAREA								
Tlell River			6,630	**(25,000)**	8,000	**(25,000)**		
SKIDEGATE SUBAREA								
Cameron Creek								
Deena River				**(12,000)**		**(100,000)**	9,000	**(30,000)**
Haans Creek				(2,500)		**(5,000)**		(2,000)
Honna River				(2,000)		(25,000)	200	**(10,000)**
Indian Cabin Creek							400	**(8,000)**
Lagins Creek				(3,000)		(3,500)	15,000	**(25,000)**
Mud Bay Creek								(3,000)
Outlook Creek								(2,500)
Saltspring Creek				(250)				(2,500)
Slatechuck Creek				(2,000)			5,500	**(18,000)**
South Bay Dump Creek								
South Bay Culvert Creek								
Tarundl Creek				(1,500)		**(N/A)**	600	**(5,000)**
COPPER SUBAREA								
Copper River	12,000	**(10,000)**		(15,000)		**(75,000)**		
CUMSHEWA SUBAREA								
Carmichael Creek							30	**(N/A)**
Chadsey Creek			200				500	**(3,500)**
Mathers Creek						(75,000)		(20,000)
Pallant Creek			1,000		2,750	**(75,000)**	2,600	**(30,000)**
SELWYN SUBAREA								
Big Goose Creek			120	(200)	4	**(20,000)**	600	**(7,000)**
Clint Creek (Sewell L/H#3)							170	(500)
Dana #1 Creek			20				1,175	(2,500)
Dana #2 Creek							40	(500)
Dana #3 Creek							170	(1000)
Dass Creek							12	
Lagoon Creek			350	(1,500)			5,850	**(25,000)**
Little Goose Creek			60	(150)		(5,000)	450	(4,000)
Pacofi Creek			40				620	**(3,500)**
Sewell Inlet Head Creek			-	(1,500)			1,270	(6,500)
Sewell Point Creek							4	(500)
Thorsen Creek (Sewell L/H#1)			20	(200)			2,150	(2,000)
Thurston Creek							235	(2,000)
Waterfall Creek							405	(2,000)
ATLI SUBAREA								
Beljay Bay Creeks (2)			5				17	
Moore Creek							0	(3,000)
Powrivco Creek							70	**(5,000)**
Richardson Creek							30	
Sandy Creek			50				1,400	**(4,500)**
Takelley Creek							6	
DARWIN SUBAREA								
Anna Inlet Creek						(10,000)		**(1,500)**
Cresent Creek			400	(1,000)		**(30,000)**	450	**(6,500)**
Echo Harbour Creek						**(15,000)**		
Kostan Creek							300	(1,500)
Salmon River			100	(750)		**(100,000)**	900	(25,000)
JUAN PEREZ SUBAREA								
Arrow Creek				(250)				(2,000)
Gate Creek						**(20,000)**		
Hutton Head Creek						(15,000)	40	**(5,000)**
Hutton L/H Creek							20	**(3,000)**
Marshall Creeks (3)						(7,000)		**(3,000)**
Matheson L/H Creek			70			**(30,000)**	385	**(6,000)**
Matheson R/H Creek			50			**(5,000)**	70	**(3,000)**
Sedgwick Creek				(250)			775	**(7,000)**
Windy Bay Creek				(500)		**(70,000)**		
SKINCUTTLE SUBAREA								
Bag Harbour Creek			200	(1,000)		(1,500)	2,000	**(12,000)**
George Bay Creek			220	(500)		**(1,000)**	850	(12,000)
Harriet Harbour Creek							50	**(6,000)**
Slim Inlet Creek								**(1,500)**
Tangle Creek							150	**(4,000)**

* -Targets are not a biological escapement goals. They are used as a surrogate to assist management identify harvest opportunities.

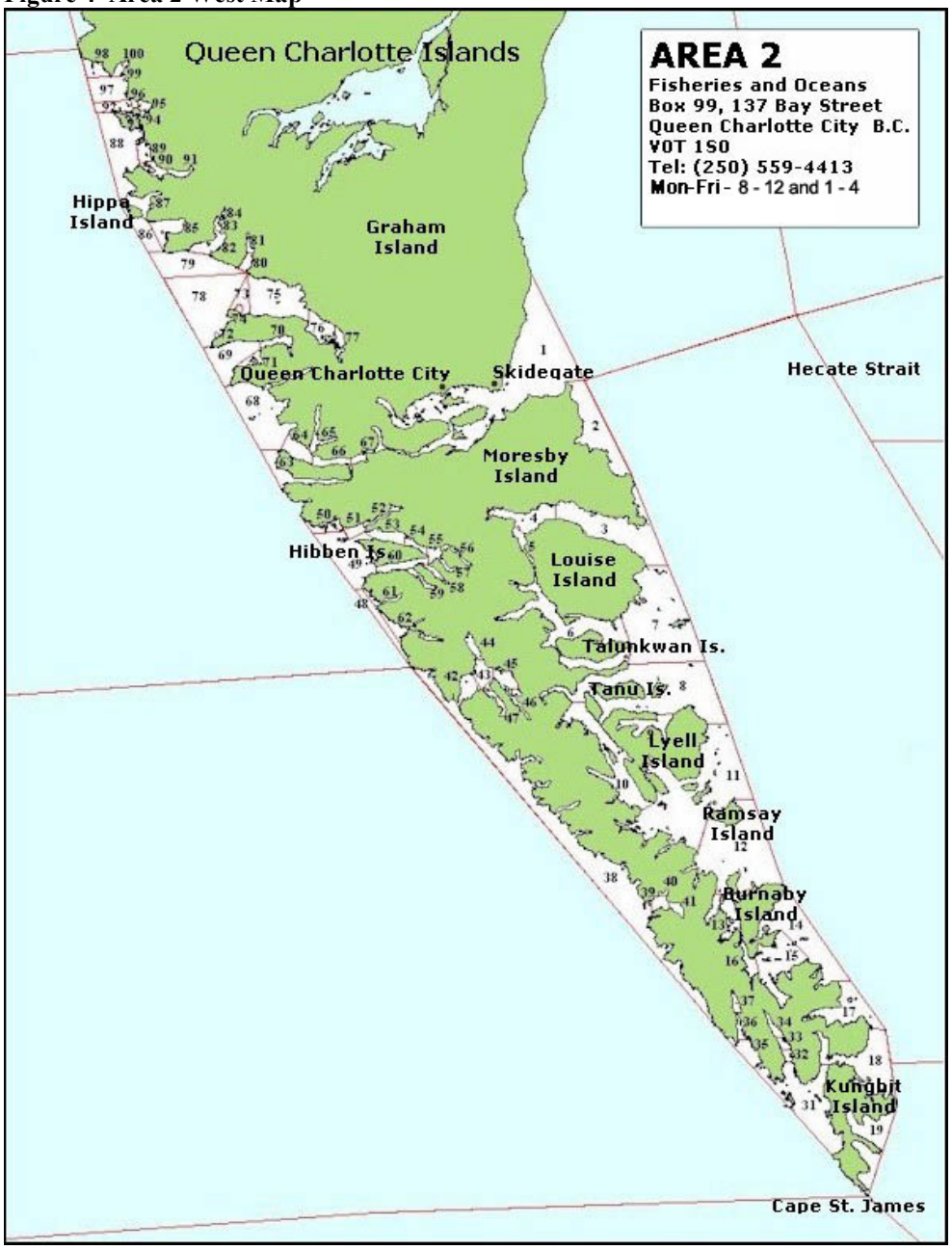
- **Targets** that are in bold and underlined are identified as indicators and priority for assessment.

N/O: None observed. A/P: Adults present.

Area 2 West

Area 2 West Map

Figure 4 Area 2 West Map



First Nations Fishery Review

Haida FSC Review

Area 2W
Terminal Fisheries
Sockeye - No known effort.
Coho – No known effort.
Chum – No known effort.
Pink – No known effort.

Interception Hook and Line Fisheries
Haida FSC in Area 2W primarily targets passing stocks of chinook and coho by hook and line from West Skidegate and Rennel Sound.

Interception Net Fisheries
FSC sockeye salmon have traditionally been harvested within Rennel Sound with seine gear targeting passing sockeye stocks. There was no effort in Area 2W to harvest FSC by commercial seine.

Table 9 Area 2 East and West Haida FSC Catches
Unable to provide catch figures due to the limited fishers participating in the commercial fishery.

ESSR Review

There were no ESSR licences issues for Area 2 West during 2018.

Recreational Review

The recreational salmon fishery primarily occurs between Englefield Sound and Port Louis. The majority of the fishery occurs between the middle of May to the middle of September with little to no effort in the winter months. In addition to a fleet made up of independent anglers and charter operators, mostly operating out of Queen Charlotte and Sandspit, there were 3 fly in lodge operations (floating and land based) within Area 2W; 1 at Englefield Sound, 1 at Hippa Island and 1 in Port Louis. Region wide management actions to reduce impacts on northern chinook included reduce recreational bag limits to 1 chinook per day from June 1st until July 9th. Approximately 17,000 chinook and 7,755 coho have been harvested in Area 2W during the season. Refer to Table 5 for detailed catch information.

Commercial Net Fishery

Pink salmon - Haida Gwaii stocks are primarily even year stocks with little to no returns in odd years. No commercial fishing opportunities were identified.

Chum salmon – returns have been consistently at management targets over the past few years. Most notable have been chum returning to Tasu Sound which showed strong returns (at target) however no commercial fishing opportunities were identified.

Area 2 West Stream Escapements

Table 10 Area 2 West Stream Escapements

AREA 2 WEST (preliminary) STREAM ESCAPEMENTS 2017

STREAM	SOCKEYE Esc.	SOCKEYE Target*	COHO Esc.	COHO Target*	PINK Esc.	PINK Target*	CHUM Esc.	CHUM Target*
ATHLOW/OTARD SUBAREA								
Mace Creek				(1,500)				**(5,000)**
Mercer Creek	2,500	(10,000)		**(2,000)**		(10,000)		(5,000)
RENNELL SUBAREA								
Bonanza Creek				(1,500)		**(25,000)**		(1,000)
Clapp Basin Creek							250	**(N/A)**
Gregory Creek				(500)		(25,000)		**(1,000)**
Kano Creek (head)						**(20,000)**		**(4,000)**
Mountain Creek							2,000	**(2,000)**
Rennell Creek							N/O	**(1,500)**
Riley Creek				**(2,000)**		**(20,000)**		(4,000)
W. SKIDEGATE SUBAREA								
Buck Channel Creek #8								
Buck Channel Creek #6-7							12	
Buck Channel Creek #2							45	(500)
Canoe Pass Creek			21				147	**(2,000)**
Dawson Harbour Creek			40	(300)			340	**(3,000)**
Dawson Inlet Creek			40	(200)			170	**(1,000)**
Government Creek			200	(2,000)		(60,000)	480	(7,500)
Trounce Creek (head)			105	(300)			235	**(4,000)**
Trounce R/H Creek							189	**(3,500)**
West Narrows Creek								(3000)
ENGLEFIELD SUBAREA								
Boomchain Bay Creek						**(N/A)**	48	
Inskip Creek						(10,000)	168	(1,500)
Kaisun Creek				(500)		(30,000)		(1,500)
Kootenay Inlet Creek (north)				(500)			N/O	(5,000)
Kootenay Inlet Creek (south)				(500)			82	(5,000)
MacKenzie Cove Creek				(500)		(20,000)	N/O	(2,000)
Mitchell Inlet spillway (Gold Hbr.)							3,920	**(4,000)**
Mudge Creeks (3)							1,525	(1,000)
Peel Inlet Creek (head)			117	(200)			4,550	(3,500)
Peel Inlet L/H #1 Creek	A/P						980	**(1,500)**
Peel Inlet L/H #2 Creek				(200)			5,100	**(3,500)**
Security Inlet L/H Creek			180	(2,000)		**(40,000)**	210	**(15,000)**
Security Inlet R/H Creek				(1,000)		(20,000)	350	(5,000)
TASU SUBAREA								
Botany Inlet Creek (head)	A/P		64	(300)			6,500	**(5,000)**
Botany Inlet Creek (outer)			110				4,800	**(4,000)**
Edwards Creek							85	
Fairfax Inlet Creek	-	(2000)		(1,000)			3,500	(3,000)
Fairfax Outer Creek				(1,000)			205	(3,000)
Flat Creek							1,560	(2,000)
Lomgon Creek							N/O	
Tasu Creek	A/P		440	**(1,000)**		(25,000)	5,600	**(7,000)**
Wilson Bay Creek							360	
SOUTH SUBAREA								
Goski Bay Creek							300	**(N/A)**
Louscoone Inlet Creek							800	**(N/A)**

* -Targets are not a biological escapement goals. They are used as a surrogate to assist management identify harvest opportunities.

- **Targets** that are in bold and underlined are identified as indicators and priority for assessment.

N/O: None observed. A/P: Adults present.

Area 3

Area 3 Map

Figure 5 Area 3 Map

First Nations Fishery Review

There are 6 First Nations groups that include Area 3 and Nass watershed Food, Social and Ceremonial salmon fisheries in their communal licence:

a) Nisga'a Lisims Government
b) Gitanyow First Nation
c) Lax Kw'alaams First Nation
d) Metlakatla First Nation
e) Kitselas First Nation
f) Kitsumkalum First Nation

FSC fisheries occur throughout Area 3 in both marine and freshwater locations using a variety of gear types. The Nisga'a salmon fishery is authorized by the Nisga'a Treaty and Harvest Agreement.

Nass River Salmon Stock Assessment Update

Nisga'a Lisims Government

NISGA'A FISHERIES & WILDLIFE
T 250 633 2617 / F 250 633 2971
TF 1 866 633 2145
PO Box 228 / 5101 Gitzyon St
New Aiyansh BC / Canada V0J 1A0
NISGAANATION.CA

2018 NASS RIVER SALMON STOCK ASSESSMENT – POST-SEASON SUMMARY

NASS FISHWHEEL OPERATIONAL SUMMARY 2018

The Nass River test fishery fishwheels operated from 1 June to 15 September for tagging and historical catch index assessments of salmon and summer-run steelhead. Fishwheels 1 and 2 operated at very low water levels during the season, averaging 1.2 m over season compared to 2.3 m historical average from 1994 to 2017 (Table 11). Record low water levels from 1–17 June (up to 2.4 m lower than historical averages) were observed in 2018. The range of water levels was <1 m (September) to 3.4 m (22 June). The Nass River mainstem water temperatures in 2018 were much warmer (1°C to 2°C above average) in June and July before cooling off in September. The water temperatures recorded at the Gitwinksihlkw fishwheels averaged 9.9°C from 1 June to 15 September (range: 7.2°C (1 June) to 12.1°C (28 July); Table 12).

Table 11 Mean water levels (m) on the Nass River at Gitwinksihlkw by period, 1994–2018.

Mean WL	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Mean	2018
June	3.37	3.51	3.97	2.98	3.18	2.93	3.61	4.76	2.81	4.05	2.56	3.50	3.79	3.10	2.62	2.63	2.63	2.86	3.29	1.80
July	3.23	3.03	2.62	2.45	2.30	2.17	2.58	4.00	2.64	2.81	1.80	2.08	3.54	1.69	2.03	1.71	1.71	1.74	2.51	1.37
Aug	2.40	1.94	2.02	1.23	1.68	1.66	1.37	1.84	2.30	1.56	1.35	1.79	1.75	1.24	1.12	1.45	1.45	1.59	1.77	1.00
Sep	2.28	1.12	1.73	1.29	0.89	1.32	1.32	1.32	1.03	1.16	0.89	3.95	0.94	0.74	0.68	0.84	0.84	1.15	1.33	0.26
Season	**2.83**	**2.47**	**2.73**	**2.15**	**2.23**	**2.07**	**2.33**	**3.13**	**2.49**	**2.61**	**1.70**	**2.69**	**2.74**	**1.86**	**1.77**	**1.82**	**1.82**	**1.98**	**2.33**	**1.23**

The Nass River water temperatures averaged 9.4°C during fishwheel operations in 2018, ranging between 6.2°C (5 June) and 12.3 °C (4 August). The mean water temperature in 2018 was 0.2°C higher than the historical mean water temperature (9.2°C) from 1994–2016 (Table 14).

Table 12 Mean water temperatures (°C) on the Nass River at Gitwinksihlkw by period, 1994–2018.

Mean Temp	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Mean	2018
June	9.4	3.9	6.4	8.6	11.3	9.1	8.8	8.1	7.0	7.4	8.4	7.5	6.7	8.4	8.1	8.9	8.9	8.6	8.3	9.6
July	10.5	5.8	9.1	10.2	12.1	9.5	10.1	8.6	8.0	9.0	10.2	8.7	8.1	10.1	9.6	10.5	10.5	10.3	9.5	11.0
Aug	10.9	7.6	9.5	10.8	10.5	10.0	10.1	9.6	9.3	10.2	9.7	9.0	8.9	10.1	10.2	9.9	9.9	10.1	9.8	9.7
Sep	9.4	5.6	8.7	8.8	8.9	8.8	9.0	8.9	8.2	9.5	8.0	8.1	8.3	10.1	8.6	8.3	8.3	9.6	8.7	8.2
Season	**10.3**	**5.8**	**8.9**	**10.0**	**11.0**	**9.4**	**9.8**	**8.9**	**8.2**	**8.9**	**9.2**	**8.4**	**8.0**	**9.6**	**9.3**	**9.7**	**9.7**	**9.7**	**9.2**	**9.9**

GITWINKSIHLKW (GW) FISHWHEELS (NASS TEST FISHERY –STARTED IN 1994 [25th year])

All fish caught in the GW fishwheels were released alive after tagging and/or counting. Of the 19,601 salmon (17,016 adults and 2,087 jacks) and steelhead (498) caught at the GW fishwheels in 2018, all were released with 8,655 tagged or fin marked.

GREASE HARBOUR (GH) FISHWHEELS

Four fishwheels were operated at Grease Harbour (upstream of Ts'im Anwiihlist) in 2018 for in-season mark-recapture tag recoveries, abundance estimates passing upstream, additional tagging (adult Chinook and Chum salmon, and Pacific Lamprey), and for selective harvesting when permitted by Nisga'a Lisims Government (which did not occur in 2018). Operational dates were from early June [FW 3 (Jun 7), FW4 (Jun 15), FW5 (Jun 5), and FW6 (Jun 6)] to mid-September [FW3 (Sep 5), FW4 (Sep 7), FW5 (Sep7), and FW6 (Sep 5)]. A total of 27,825 salmon (24,887 adults and 2,358 jacks) and steelhead (580) were caught and released from the GH fishwheels in 2018, including 969 that were tagged or fin marked.

NASS FISHWHEEL CATCH SUMMARY FOR 2018

A total of the 47,426 salmon (41,903 adults and 4,445 jacks) and steelhead (1,078) were caught by the Nisga'a Lisims Government's fishwheels operated in the Nass River in 2018. All were released with 9,624 tagged or fin marked. The Nass fishwheel catches were below average for Chinook, Sockeye, Coho, Pink,

Chum, Dolly Varden, Cutthroat, Pacific Lamprey, Pike Minnow, and suckers; about average for summer-run steelhead, Mountain Whitefish, and sculpins; and above average for Rainbow Trout, Peamouth Chub, and Redside Shiners based on catches since 2000 (Table 13 a and b). The fishwheel catches of small (jacks) salmon (<50 cm NFL for Chinook, <45 cm NFL for Sockeye, and <40 cm NFL for Coho) in 2018 were below average for Chinook (490 vs. 650) and Coho salmon (190 vs. 460), and above average for Sockeye (3,765 vs. 3,500) when compared to the mean catches from 1994–2018. Other adult species and juvenile salmon catches at the fishwheels in 2018 included: 127 Mountain Whitefish, 121 Rainbow Trout, 112 Dolly Varden, 70 Peamouth Chub, 48 Northern Pikeminnow, 37 Cutthroat Trout, 27 sculpins, 14 suckers, 6 River Lamprey, 63 salmon smolts (4 Coho, 14 Chinook, 45 Sockeye), 10 frogs, 4 seals, and 2 mice.

Table 13 Nass fishwheels catches of salmon and non-salmon species from 1994–2018.

a) Salmon and summer-run steelhead

Year	# of Fw	Start date	End date	Total Effort (days)	Total Effort (hrs)	Chinook Salmon (≥50 cm FL)	Sockeye Salmon (≥45 cm FL)	Coho Salmon (≥40 cm FL)	Pink Salmon	Chum Salmon	Summer-run steelhead (≥50 cm FL)
1992	2	5-Jun	29-Sep	116	3,452	444	9,046	559	5,699	42	40
1993	3	9-Jun	13-Sep	96	3,396	919	10,963	466	3,944	99	66
1994	4	7-Jun	7-Sep	92	5,859	2,667	24,746	6,990	12,436	250	211
1995	4	8-Jun	4-Sep	88	6,670	920	21,090	1,837	8,881	224	111
1996	4	29-May	22-Sep	116	7,705	2,191	23,063	4,029	23,601	371	485
1997	4	21-May	2-Sep	104	7,974	3,736	27,762	1,438	13,167	130	485
1998	4	12-Jun	20-Sep	100	9,875	3,071	17,185	3,760	10,624	272	701
1999	4	7-Jun	30-Sep	115	9,073	3,476	41,545	6,393	22,019	127	641
2000	6	11-Jun	18-Sep	99	11,196	5,003	33,879	8,529	10,206	241	1,404
2001	6	7-Jun	14-Sep	99	10,783	12,106	32,821	22,705	42,508	162	1,435
2002	6	20-Jun	9-Sep	81	9,691	6,785	58,728	14,556	15,893	54	1,100
2003	6	14-Jun	5-Sep	83	10,299	5,802	47,556	9,460	33,560	175	583
2004	6	11-Jun	10-Sep	91	11,250	3,314	43,782	11,788	35,605	242	655
2005	6	6-Jun	16-Sep	102	11,960	4,111	40,320	14,508	19,788	141	726
2006	6	8-Jun	3-Sep	87	10,477	9,089	50,769	9,671	2,817	158	466
2007	6	14-Jun	20-Sep	98	8,928	9,440	38,942	11,638	17,669	136	783
2008	5	5-Jun	6-Sep	93	9,898	4,331	34,702	14,640	1,932	52	851
2009	6	1-Jun	12-Sep	103	11,097	7,136	43,426	20,270	42,120	108	1,688
2010	6	1-Jun	22-Sep	113	13,520	1,140	25,703	12,938	4,614	78	1,191
2011	5	1-Jun	17-Sep	108	10,280	1,795	38,083	5,752	10,719	166	988
2012	5	1-Jun	15-Sep	106	9,497	4,059	62,385	15,608	7,694	106	1,525
2013	5	2-Jun	13-Sep	103	11,031	1,981	39,184	14,555	24,801	52	612
2014	6	1-Jun	13-Sep	104	12,298	1,693	38,345	17,137	24,038	83	1,472
2015	6	4-Jun	11-Sep	99	11,881	3,397	70,737	6,616	6,476	141	778
2016	6	31-May	9-Sep	101	12,916	1,389	38,677	15,690	13,197	228	1,070
2017	6	31-May	9-Sep	101	12,992	696	44,152	22,908	37,748	68	982
2018	**6**	**1-Jun**	**15-Sep**	**106**	**13,252**	**859**	**27,709**	**5,525**	**7,718**	**92**	**1,078**
2000 to 2017:											
Mean	**6**	**6-Jun**	**12-Sep**	**98**	**11,111**	**4,600**	**43,000**	**14,000**	**20,000**	**130**	**1,000**
Min	5	31-May	3-Sep	81	8,928	700	26,000	5,800	2,000	50	470
Max	6	20-Jun	22-Sep	113	13,520	12,100	71,000	23,000	43,000	240	1,700

b) Non-salmon species

Year	# of Fw	Start date	End date	Total Effort (days)	Dolly Varden (≥20 cm FL)	Cutthroat (≥20 cm FL)	Rainbow (≥20 cm FL)	White Fish	Pacific Lamprey	Pike Minnow	Pea-mouth Chub	Suckers	Sculpins	Red-side Shiner	Longfin Smelts
1992	2	5-Jun	29-Sep	116											
1993	3	9-Jun	13-Sep	96											
1994	4	7-Jun	7-Sep	92	42	5	2	11	47						
1995	4	8-Jun	4-Sep	88	101	8	6	42	81						
1996	4	29-May	22-Sep	116	177	29	21	108	384						
1997	4	21-May	2-Sep	104	294	27	23	145	388			7			
1998	4	12-Jun	20-Sep	100	388	61	9	140	194	84		38	69		
1999	4	7-Jun	30-Sep	115	1,189	97	17	155	185	65		24	24		3
2000	6	11-Jun	18-Sep	99	558	97	5	75	251	53		34	14		-
2001	6	7-Jun	14-Sep	99	347	69		67	238	75		42	13		-
2002	6	20-Jun	9-Sep	81	429	72	22	51	187	93		8	17		-
2003	6	14-Jun	5-Sep	83	524	94	26	99	936	105	9	29	25		-
2004	6	11-Jun	10-Sep	91	276	71	54	55	1,132	137	29	44	11		-
2005	6	6-Jun	16-Sep	102	150	26	48	55	615	100	73	33	16		-
2006	6	8-Jun	3-Sep	87	286	62	66	91	363	145	36	33	9		-
2007	6	14-Jun	20-Sep	98	254	47	69	70	315	140	22	20	31		-
2008	5	5-Jun	6-Sep	93	193	88	55	55	198	72	9	18	14	6	-
2009	6	1-Jun	12-Sep	103	328	93	117	119	483	93	46	27	56	-	-
2010	6	1-Jun	22-Sep	113	557	132	161	388	313	126	18	46	21	7	3
2011	5	1-Jun	17-Sep	108	481	156	86	353	632	181	35	45	17	10	-
2012	5	1-Jun	15-Sep	106	424	59	45	108	674	180	129	27	22	4	-
2013	5	2-Jun	13-Sep	103	169	67	46	79	567	137	111	21	12	9	-
2014	6	1-Jun	13-Sep	104	213	72	72	68	629	97	42	12	33	9	-
2015	6	4-Jun	11-Sep	99	256	68	111	108	746	136	73	14	21	17	-
2016	6	31-May	9-Sep	101	332	72	134	139	860	63	69	28	28	15	-
2017	6	31-May	9-Sep	101	147	40	154	183	1,188	95	65	23	48	8	-
2018	**6**	**1-Jun**	**15-Sep**	**106**	**112**	**37**	**121**	**127**	**1,255**	**48**	**70**	**14**	**27**	**31**	**-**
2000 to 2017:															
Mean	**6**	**6-Jun**	**12-Sep**	**98**	**330**	**80**	**70**	**120**	**570**	**110**	**50**	**30**	**20**	**10**	**-**
Min	5	31-May	3-Sep	81	150	30	10	50	190	50	10	10	10	-	-
Max	6	20-Jun	22-Sep	113	560	160	160	390	1,190	180	130	50	60	20	-

MEZIADIN FISHWAY OPERATION AND COUNT SUMMARY 2018

The Meziadin Fishway was operated from 1 July to 5 October 2018. The fishway water levels and temperatures averaged 1.10 m (ranged from 0.90 to 1.75 m) and 16.6°C (ranged from 9.4°C to 22.6°C), respectively. Water levels at the fishway were 0.16 m lower than average (1.26 m) when compared to historical levels from 1999 to 2017. Large fish (primarily Chinook Salmon) were observed jumping the falls in 2018 and twice as many Chinook Salmon were counted in spawning areas than during fishway counts. Water temperatures in 2018 were on average 2.6°C higher than average (16.6 vs. 14.0°C) with measurements recorded using a Hobo Temperature Logger. Water temperatures exceeded 21°C from 26 July to 4 August which greatly reduced counts of salmon through the fishway.

Counts at the Meziadin Fishway in 2018 were below average for large Chinook (36 vs. 400), Sockeye (97,000 vs. 158,000), Coho (2,145 vs. 4,700), and steelhead (9 vs. 40) when compared to mean counts from 2000 to 2017 (Table 14). Counts of small salmon (jacks) at the fishway were below average for Chinook (7 vs. 50) and Coho (55 vs. 70), and just above average for Sockeye

(6,497 vs. 6,000) when compared with mean counts from 1994 to 2017. A total of 11 adult Bull Trout (>20 cm NFL) were also counted at the fishway in 2018 with 6 being anchor tagged during operations. No Pink Salmon were counted at the fishway in 2018 during operations.

Escapement targets for adult large salmon at Meziadin Fishway are approximately: 160,000 Sockeye, 500 Chinook, and 3,500 Coho. The escapement targets for salmon at Meziadin Fishway were reached for Coho in 2018; but not for Sockeye and Chinook salmon. Chinook can jump the falls, but ground surveys found below target numbers on the spawning grounds: 90 Chinook (2.5 times greater than the fishway count) were counted during snorkel counts on 13 September in the spawning areas above the fishway by NFWD. Harvests in the Gitanyow fishery occurred below the Meziadin Fishway in 2018 that are monitored and reported separately by the Gitanyow Fisheries Authority (GFA).

Table 14 Counts of large salmon and steelhead at the Meziadin Fishway, 2000–2018.

Meziadin Fishway (~149 km from tagg		Adult large salmon and steelhead counte				Tags counted				Mark rates (%) observed			
Year	Period of Operation	Chinook	Sockeye	Coho	Steel	Chinook	Sockeye	Coho	Steel	Chinook	Sockeye	Coho	Steel
2000	29 June to 13 October	416	137,042	1,423	46	30	2,964	35	2	7.2%	2.2%	2.5%	4.3%
2001	4 July to 15 October	613	116,192	5,942	72	66	2,982	173	9	10.8%	2.6%	2.9%	12.5%
2002	1 July to 15 October	464	332,442	5,082	41	21	6,027	99	2	4.5%	1.8%	1.9%	4.9%
2003	2 July to 10 October	479	196,852	3,907	30	18	4,650	91	1	3.8%	2.4%	2.3%	3.3%
2004	3 July to 3 October	490	140,923	4,172	58	20	4,417	154	12	4.1%	3.1%	3.7%	20.7%
2005	1 July to 15 October	638	142,751	7,189	85	33	3,819	259	9	5.2%	2.7%	3.6%	10.6%
2006	1 July to 12 October	721	146,954	5,466	39	35	4,694	251	1	4.9%	3.2%	4.6%	2.6%
2007	1 July to 11 October	754	104,308	2,504	27	34	4,082	67	2	4.5%	3.9%	2.7%	7.4%
2008	1 July to 9 October	518	150,396	3,861	29	17	5,016	167	2	3.3%	3.3%	4.3%	6.9%
2009	1 July to 6 October	336	168,392	5,423	18	15	4,887	96	2	4.5%	2.9%	1.8%	11.1%
2010	1 July to 23 October	315	159,120	4,138	81	3	2,670	129	7	1.0%	1.7%	3.1%	8.6%
2011	1 July to 6 October	330	167,524	2,336	12	28	4,213	44	1	8.5%	2.5%	1.9%	8.3%
2012	1 July to 4 October	255	144,923	4,980	34	42	6,112	246	5	16.5%	4.2%	4.9%	14.7%
2013	1 July to 4 October	126	170,376	5,934	23	19	3,726	128	0	15.1%	2.2%	2.2%	NA
2014	1 July to 7 October	51	144,920	7,223	28	5	2,875	268	1	9.8%	2.0%	3.7%	3.6%
2015	1 July to 8 October	95	185,917	2,713	3	14	3,859	89	0	14.7%	2.1%	3.3%	NA
2016	1 July to 5 October	36	109,868	5,051	9	2	2,015	130	0	5.6%	1.8%	2.6%	NA
2017	1 July to 5 October	38	119,088	7,556	5	2	2,482	279	0	5.3%	2.1%	3.7%	NA
2018	**1 July to 5 October**	**36**	**96,827**	**2,145**	**9**	**1**	**1,676**	**39**	**0**	**2.8%**	**1.7%**	**1.8%**	**NA**
Average (2000-17)		**400**	**157,700**	**4,700**	**40**	**0**	**4,000**	**200**	**0**	**7.2%**	**2.6%**	**3.1%**	**8.5%**

KWINAGEESE WEIR NET UPSTREAM COUNTS AND OPERATION SUMMARY 2018

The Kwinageese video-counting weir operations were from 9 July to 9 October 2018. The water levels and temperatures at the weir averaged 0.16 m (ranged from 0.06 m to 0.31 m) and 14.5 °C (ranged from 4 °C to 23 °C), respectively. Water levels and temperatures in 2018 were 0.36 m lower and 1.3 °C higher, respectively, than mean levels (water level: 0.36 m [range: 0.18–0.68 m]; water temperature: 13.2 °C [range: 10.5–15.9 °C]) from 2009 to 2017. The weir was functional for the entire period of monitoring in 2018 and water levels never exceeded 0.90 m when the weir is topped.

Adult salmon net upstream counts of large fish were 456 Chinook, 290 Sockeye, and 247 Coho salmon through the Kwinageese River video weir from 9 July to 9 October 2018 (Table 15). Other net upstream counts included: 21 summer-run

steelhead, 101 adult Bull Trout (>20 cm NFL), 146 Rainbow Trout, eight whitefish, and one Chinook Salmon jack. It is uncertain how many more Coho Salmon or steelhead would subsequently pass the weir after operation, especially under the extreme low water levels experienced in 2018; therefore, these counts should be considered minimum escapement estimates to the Upper Kwinageese River for 2018. In addition, reported video counts are preliminary until final video reviews are completed. Net upstream counts through the Kwinageese weir were below average for all salmon and steelhead when compared to the average counts from monitored years up to 2018 (Table 15).

Table 15 Counts of medium/large salmon and steelhead at the Kwinageese Weir, 2002–2018.

Kwinageese Weir (~208 km from tagg		Adult large salmon and steelhead counted (net upstream)				Tags counted (net upstream)				Mark rates (%) observed			
Year	Period of Operation	Chinook	Sockeye	Coho	Steel	Chinook	Sockeye	Coho	Steel	Chinook	Sockeye	Coho	Steel
2002	17 July to 17 October	1,893	5,891	1,283	267	114	86	8	8	6.0%	1.5%	0.6%	3.0%
2005	12 August to 22 October	538	3,186	2,663	304	19	37	59	25	3.5%	1.2%	2.2%	8.2%
2006	25 August to 5 October	410	2,700	1,582	129	27	123	51	6	6.6%	4.6%	3.2%	4.7%
2009	12 July to 15 October	895	107	60	33	28	0	0	4	3.1%	0.0%	0.0%	12.1%
2010	9 July to 19 October	131	48	191	110	2	0	8	7	1.5%	0.0%	4.2%	6.4%
2011	10 July to 5 October	740	10,273	226	50	87	240	10	0	11.8%	2.3%	4.4%	0.0%
2012	19 July to 11 October	715	3,688	155	296	224	143	9	28	31.3%	3.9%	5.8%	9.5%
2013	13 July to 11 October	813	397	763	208	109	4	13	7	13.4%	1.0%	1.7%	3.4%
2014	10 July to 14 October	560	438	1,229	459	41	3	25	29	7.3%	0.7%	2.0%	6.3%
2015	3 July to 9 October	1,093	7,044	301	163	108	60	8	7	9.9%	0.9%	2.7%	4.3%
2016	11 July to 13 October	853	19,797	2,633	380	83	244	25	4	9.7%	1.2%	0.9%	1.1%
2017	9 July to 14 October	241	7,240	2,649	217	27	71	58	17	11.2%	1.0%	2.2%	7.8%
2018	**6 July to 15 October**	**456**	**290**	**247**	**21**	**18**	**2**	**6**	**0**	**3.9%**	**0.7%**	**2.4%**	**0.0%**
MEAN COUNT AT KWIN (2002-17)		**700**	**5,100**	**1,100**	**200**	**70**	**80**	**20**	**10**	**9.6%**	**1.5%**	**2.5%**	**5.6%**

GROUND SURVEY COUNTS CONDUCTED BY NFWD IN 2018

NFWD conducted salmon escapement surveys in the Nass watershed in 2018 on the following systems:

- Chinook – Cranberry, Kiteen (Cranberry), Meziadin, Oweegee (Bell-Irving), Kwinageese (beaver dam break), and Damdochax systems;
- Sockeye – Gingit, Gitzyon, Tseax, Wiminasik (Damdochax), and Zolzap;
- Chum – Coastal Nass: Crag, Dogfish Bay, Donahue, Illiance, Kitsault, Kshwan, Lizard, Stagoo, and Wilauks; Lower Nass: Ksemamaith, Tseax, and Zolzap;
- Pink – Coastal Nass: Crag, Dogfish Bay, Donahue, Illiance, Kitsault, Kshwan, Lizard, Stagoo, and Wilauks Lower Nass: Ksemamaith, Gitzyon, Tseax, and Zolzap;
- Coho – Coastal Nass: Dogfish Bay and Salmon Cove; Lower Nass: Ansedagan, Diskangeiq, and Zolzap; and Upper Nass: Meziadin and Kwinageese.

Typically, three to five surveys were conducted on each system to generate an AUC or peak count escapement estimate. Low counts were observed during many surveys in 2018 due to extreme low water levels. Results of surveys and dates are shown in Table 16 a and b.

Table 16 Ground survey a) dates and methods and b) counts in the Nass watershed (Area 3) by NFWD in 2018. (Streams are listed alphabetically)

a)

System	DATES
ANSEDAGAN	Sep 30, Oct 9, 24, 30, Nov 18
CRAG	Aug 23; Sep 3, 14
CRANBERRY (mainstem)	Aug 28; Sep 7
DAMDOCHAX	Aug 26; Sep 5, 10, 16
DISKANGEIQ	Oct 8, 23, Nov 5, 6, 14
DOGFISH BAY	Pinks: Aug 9, 22; Sep 1, 13; Coho: Oct 10, Nov 15 (too high)
DONAHUE	Sep 1, 13
GINGIT	Jul 15, 26; Aug 3, 14, 24; Sep 6, 13
GITZYON	Aug 4, 15, 25
ILLIANCE	Jul 30; Aug 6, 17; Sep 12
KITEEN	Sep 7 (count), Sep 10 (flight) - rain event, Sep 11 (flight) - washed out
KITSAULT	July 31, Aug 7, 16, 28, Sep 12
KSEMAMAITH	Aug 4, 15, 25; Sep 7
KSHWAN	Aug 18-19, 27-28; Sep 10-11
KWINAGEESE	Weir operational July 6 to Oct 9
KWIN-OBS	Sep 5, 10
LIZARD	Aug 23; Sep 3
MEZIADIN	Fishway operational: July 1 - Oct 5
Meziadin-obs	Spawner survey: Sep 13
OWEEGEE CREEK	Aug 26; Sep 14
SALMON COVE	Oct 11, 31, Nov 15 (too high)
STAGOO	July 15, 29; Aug 8, 20
TSEAX	Aug 24; Sep 7
WILAUKS	July 30; Aug 6, 17
WIMINASIK	Aug 26; Sep 5, 10, 16 (aerial counts)
ZOLZAP	Fence operation: Sep 25-Nov 16; Ground survey: Oct 25

b)

System	Sockeye	Chinook	Coho	Chum	Pinks	Steel	METHOD
ANSEDAGAN	DNS	DNS	0	DNS	DNS	DNS	No coho observed - low water
CRAG	N/O	N/O	N/I	AP	**236**	N/O	Pink = peak x 2
CRANBERRY (mainstem)	N/I	**1,048**	N/I	N/I	N/I	N/I	Aerial/ground count (peak x 2)
DAMDOCHAX	N/I	**338**	N/I	N/I	N/I	N/I	Chinook = AUC
DISKANGEIQ	DNS	DNS	**26**	DNS	DNS	DNS	Coho = peak x 2
DOGFISH BAY	DNS	DNS	0	DNS	**9,552**	DNS	Pink = peak x 2; no coho obs.
DONAHUE	N/I	N/I	N/I	**46**	**420**	N/I	Pink and Chum = peak x 2
GINGIT	**14,812**	N/O	N/I	N/O	N/O	N/O	Sockeye = AUC
GITZYON	**420**	N/O	N/I	N/O	N/O	N/O	Sockeye = AUC
ILLIANCE	N/O	N/O	N/O	**1,828**	**26,983**	N/O	Chum and Pink = AUC
KITEEN	N/I	**934**	N/I	N/I	N/I	N/I	Aerial count (peak x 2)
KITSAULT	N/O	N/O	N/I	**457**	**1,507**	N/I	Chum/Pink = AUC
KSEMAMAITH	N/O	N/O	N/I	N/O	**82**	N/O	Pink = peak x 2
KSHWAN	N/O	N/O	N/O	**18,686**	**3,424**	N/O	Chum and Pink = Peak x 2
KWINAGEESE	**290**	**457**	**247**	N/O	N/O	**21**	Video weir - adults only
KWIN-OBS	AP	AP	N/O	N/O	N/O	N/O	Removed Beaver Dam
LIZARD	N/O	N/O	N/I	A/P	A/P	N/I	Chum/Pink observed
MEZIADIN	**96,827**	**36**	**2,194**	NA	N/O	**9**	Weir counts - adults only; Coho count expanded
Meziadin-obs	N/I	**90**	N/I	N/I	N/I	N/I	Expanded live count
OWEEGEE CREEK	N/I	**AP**	N/I	N/I	N/I	N/I	Aerial (Aug 26); Ground (Sep 14)
SALMON COVE	DNS	DNS	**128**	DNS	DNS	DNS	Coho = Peak x 2
STAGOO	N/O	N/O	N/I	**9,164**	**6,763**	N/O	Chum/Pink = AUC
TSEAX	**996**	N/I	N/I	**138**	**3,776**	N/I	Chum/Pink = Peak x 2
WILAUKS	N/O	N/O	N/I	AP	AP	N/O	Chum/Pink observed
WIMINASIK	**4,675**	AP	N/I	N/I	N/I	N/I	Sockeye = AUC
ZOLZAP	**3**	**0**	**436**	**0**	**156**	0	Coho = mark recapture

PRELIMINARY NASS SALMON AND SUMMER-RUN STEELHEAD RUN SIZE ESTIMATES TO GITWINKSIHLKW AND NET ESCAPEMENT ESTIMATES FOR 2018

UPPER NASS SALMON AND SUMMER-RUN STEELHEAD ESTIMATES

Preliminary post-season aggregate estimates for Upper Nass salmon and summer-run steelhead returns in 2018 (Table 17) were calculated from current mark-recapture data (Table 18).

Table 17 Preliminary estimates of GW run size and net escapement for Nass salmon and summer-run steelhead, 2018.

Post-season estimate	Sockeye	Chinook	Coho	Steelhead
Run size estimate to Gitwinksilkw (GW) fishwheels	**254,600**	**15,081**	**58,979**	**25,238**
In-season estimate to GW fishwheels	*220,000*	*10,000*	*35,000*	*12,000*
% Difference of in-season to post-season	*-14%*	*-34%*	*-41%*	*-52%*
Net Escapement Estimate Above Gitwinksihlkw	**230,508**	**13,262**	**57,903**	**25,032**

The preliminary Upper Nass escapement estimates for salmon and summer-run steelhead to Gitwinksihlkw in 2018 were based on mark-recapture results presented in Table 18. Upper Nass net escapement goals were met for all species in 2018 except Chinook Salmon that had a poor return. The in-season population estimates underestimated the Upper Nass salmon and steelhead returns in 2018 with accuracy being affected by extreme low water levels (Table 17). The mean absolute percent accuracy performance of the in-season to actual run size estimates in 2018 performed poorer than average for Nass Sockeye (87% vs. 91%), Nass Chinook (53% vs. 82%), and Nass Coho (60% vs. 79%) based on returns from 1994 to 2018. The in-season tracking of these species tracked well enough to guide fisheries in 2018 to reach escapement goals.

Table 18 Mark-recapture estimates for Nass salmon (Chinook, Sockeye and Coho) and summer-run steelhead returns to Gitwinksihlkw and spawning grounds, 2018. Best estimates are bolded.

Species	Marked (M)	Censored	% marks removed	Net marks available (M*)	Examined (C)	Marks recovered (R)	Population Estimate to GH (N)	Catch between GH and GW	Population Estimate to GW (N)	SE	CV%	Catch above GH	Net escapement estimate
Chinook-stratified by size (Adj.)	**793**	**183**	**23%**	**610**	**562**	**22**	**13,302**	**1,779**	**15,081**	**2,605**	**20.9%**	**40**	**13,262**
Chinook-pooled	*793*	*183*	*23%*	*610*	*562*	*22*	*14,955*	*1,779*	*16,734*	*2,990*	*20.9%*	*40*	*14,915*
Chinook-stratified by site (GW)	*319*	*79*	*25%*	*240*	*562*	*8*	*15,075*	*1,779*	*16,854*	*4,729*	*33.4%*	*40*	*15,035*
Chinook-stratified by site (GH)	*474*	*103*	*22%*	*371*	*562*	*14*	*13,961*	*1,779*	*15,740*	*3,444*	*25.9%*	*40*	*13,921*
Sockeye-size stratified	**6,009**	**1,701**	**28%**	**4,308**	**96,827**	**1,676**	**239,253**	**15,347**	**254,600**	**5,812**	**2.4%**	**8,745**	**230,508**
Sockeye-pooled	*6,009*	*1,701*	*28%*	*4,308*	*96,827*	*1,676*	*248,796*	*15,347*	*264,143*	*6,021*	*2.4%*	*8,745*	*240,051*
Coho-pooled	**1,318**	**202**	**15%**	**1,116**	**2,392**	**45**	**58,107**	**716**	**58,823**	**8,394**	**14.8%**	**205**	**57,903**
Coho-stratified by size	*1,318*	*202*	*15%*	*1,116*	*2,145*	*38*	*64,731*	*716*	*65,447*	*11,179*	*16.4%*	*205*	*64,527*
Steelhead (Coho MR index)	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**25,032**	**206**	**25,238**	**3,859**	**33.3%**	**NA**	**25,032**
Steelhead (fin marks)	*943*	*74*	*8%*	*869*	*30*	*0*	*NA*	*206*	*NA*	*NA*	*NA*	*NA*	*NA*

% marks removed are associated with initial handling/capture induced mortality, primary tag loss if applicable, and selective removal in fisheries below Grease Harbour.

Post-season aggregate population estimates for Upper Nass Sockeye and Coho salmon returns in 2018 (Table 18) were precise (<15% CV) from mark-recapture surveys with high number of marks released from the fishwheels and recovered (or estimated) on the spawning grounds for Sockeye (R=1,676; CV=2.4%) and Coho (R=45; CV=14.8%). The Upper Nass Chinook salmon population estimate in 2018 was reliable but less precise (CV=20.9%) than other years due to low number of marks applied (M=793) and corresponding low recoveries (R=22) at Kwinageese weir, Meziadin fishway, and ground surveys at Damdochax and Cranberry systems. Genetic analyses of Upper Nass Chinook samples collected from the fishwheels will be conducted to determine overall stock contributions in 2018 for further evaluating run size estimates. The Upper Nass summer-run steelhead aggregate population estimate in 2018 was based on the Coho catch-index expansion method (CV=33%) as no steelhead fin-mark recoveries occurred at Meziadin fishway or Kwinageese weir from the 943 marked at the fishwheels. A mark-recapture estimate could not be calculated for 2018 summer-run steelhead.

NASS AREA SALMON AND SUMMER-RUN NET ESCAPEMENT ESTIMATES 2018:

The 2018 preliminary post-season estimates of net escapement for Nass salmon and summer-run steelhead were calculated according to methods developed by the Nisga'a-Canada-BC Joint technical committee (NCB-JTC) and preliminary results are shown in Table 19 for the Nass watershed including Coastal, Lower and Upper Nass areas. Nass Coho escapement estimates were calculated by prorating stream specific ground survey results (Table 16b) to habitat-capacity model (Bocking and Peacock 2004) aggregate area estimates. Nass Area salmon and steelhead run size returns and escapements in 2018 were below average for all salmon but above average for summer-run steelhead based on returns from 2000 to 2017 (Table 19). Based on these preliminary results, escapement goals were reached for all species in 2018 except Nass Area Pink salmon.

Table 19 Estimates of run size to GW fishwheels and net escapement for Nass salmon and summer-run steelhead, 2000–2018 (NCB-JTC 2018 [draft]).

	RUN SIZE TO GITWINKSIHLKW FISHWHEELS						NET ESCAPEMENT (COASTAL, LOWER, MIDDLE AND UPPER NASS)					
Year	Sockeye	Pink	Chinook	Coho	Chum	Steelhead	Sockeye	Pink	Chinook	Coho	Chum	Steelhead
2000	243,584	119,000	21,617	72,175	3,200	13,545	204,407	350,455	19,348	106,136	18,561	13,431
2001	206,033	314,000	34,703	89,536	1,600	11,524	168,753	839,628	32,340	194,761	30,383	11,325
2002	470,083	191,000	16,081	167,829	700	15,358	405,498	408,969	14,804	292,323	14,753	15,093
2003	328,916	525,000	29,462	77,574	1,800	14,774	263,688	854,007	28,274	140,901	64,545	14,530
2004	283,712	197,000	17,984	60,106	2,300	4,308	215,857	493,155	16,875	98,998	49,276	4,045
2005	285,916	136,000	16,764	99,906	1,300	7,090	224,559	1,063,691	15,571	159,861	30,041	7,008
2006	296,338	20,000	28,609	54,730	1,400	4,220	250,642	118,016	28,061	101,693	51,382	4,136
2007	195,238	147,000	27,165	55,944	800	5,864	164,747	647,378	24,964	141,930	11,005	5,823
2008	235,222	17,000	21,681	84,817	700	11,844	218,105	45,476	22,138	115,477	3,055	11,772
2009	281,235	564,000	30,253	201,683	1,400	23,177	244,900	722,772	29,576	311,688	20,195	23,040
2010	261,722	31,000	20,720	92,134	1,400	19,407	229,010	179,592	20,729	148,263	8,515	19,191
2011	308,636	143,000	11,573	74,108	2,700	19,398	276,700	115,830	10,826	98,006	6,338	19,312
2012	239,400	35,000	10,785	69,383	700	12,831	203,028	231,088	9,797	114,962	15,676	12,538
2013	248,650	322,000	10,240	129,882	700	6,855	210,126	848,048	9,034	354,229	14,426	6,630
2014	301,072	222,000	14,354	123,223	1,900	19,369	260,102	346,777	12,979	231,710	20,396	19,220
2015	469,466	66,000	22,262	44,262	2,400	13,731	389,503	353,574	20,595	55,954	42,649	13,565
2016	304,135	182,000	11,009	137,214	5,100	21,598	276,413	596,557	10,192	183,234	20,762	21,441
2017	260,585	341,000	5,677	116,419	1,100	8,962	226,758	840,119	4,984	190,135	22,902	8,894
2018	254,600	127,000	15,081	58,979	1,700	26,969	230,508	218,684	14,956	73,000	48,487	26,762
Mean 00-17	290,000	198,000	19,000	97,000	2,000	13,000	246,000	503,000	18,000	169,000	25,000	13,000
Goal-target	250,000		13,000	60,000		11,000	200,000	225,000	15,000	60,000	45,000	10,500
Goal-min							100,000	150,000	10,000	40,000	30,000	4,200

PRELIMINARY HARVEST ESTIMATES FOR ADULT NASS SALMON & STEELHEAD

ALASKAN FISHERIES IN SE ALASKA (information courtesy from ADFG's website):

Alaskan SE gillnet fisheries operational dates in 2018 were: District 101 (Tree Point) and District 106 (Sumner and Upper Clarence) were from 17 June to 25 September. Alaskan seine fisheries operational dates in 2018 were: District 101 (Lower Clarence/Revilla) - 1 July to 17 August; District 102 (Middle Clarence) – 17 June to 13 September; District 103 (Cordova) - 22 July to 24 August, and District 104 (Noyes/Dall) - 15 July to 24 August.

The preliminary estimates of salmon caught in Alaskan net fisheries in Districts 101-104 were 4,362,000 fish which was below average (23,000,000) based on salmon catches estimated from 2000 to 2017 (Table 20). The 2018 catch breakout by species was: 195,000 Sockeye, 4,000 Chinook, 3,008,000 Pink, 942,000 Chum and 213,000 Coho (Table 20).

Table 20 In-season commercial gillnet and seine catch estimates of salmon in Alaskan fisheries in Districts 101-104, 2018.

IN-SEASON SE ALASKAN CUM. SALMON CATCH ESTIMATES (ADFG WEBSITE) - 2018											WEEK END:	29-Sep-18
DISTRICTS	AREA	SOCK CATCH	AVG (00-17)	CHIN CATCH	AVG (00-17)	PINK CATCH	AVG EVE (00-16)	CHUM CATCH	AVG (00-17)	COHO CATCH	AVG (00-17)
DIST 101 GN	TREE PT	19,000	68,000	1,000	1,400	111,000	409,000	195,000	263,000	39,000	50,000
DIST 106 GN	UPP. CLAR	22,000	89,000	3,000	1,500	315,000	298,000	161,000	182,000	104,000	131,000
DIST 101 SN	LOW CLAR	13,000	58,600	0	800	452,000	4,923,000	87,000	273,000	6,000	37,000
DIST 102 SN	MID CLAR.	18,000	37,000	0	900	394,000	3,574,000	336,000	513,000	15,000	51,000
DIST 103 SN	CORDOVA	13,000	25,000	0	400	1,091,000	5,964,000	61,000	133,000	16,000	30,000
DIST 104 SN	NOYES/DALL	110,000	282,000	0	6,600	645,000	5,007,000	102,000	182,000	33,000	73,000
CUMULATIVE TOTAL		**195,000**	**560,000**	**4,000**	**12,000**	**3,008,000**	**20,180,000**	**942,000**	**1,546,000**	**213,000**	**372,000**

Of the total in-season Sockeye catch reported in Alaskan fisheries in 2018 (195,000), approximately 33,000 (17%) was estimated during the season as Nass-origin based on mean stock composition estimates from 1982 to 2017 and were below average (107,000). Preliminary post-season estimates of Alaska catch was 239,000 Sockeye and 20,000 Nass (8%; ADFG Nov 2018). The average total mean harvest of Nass Sockeye in Alaskan fisheries from 2000 to 2017 was 120,000 (range: 28,000–300,000).The preliminary exploitation rate of Nass Sockeye in Alaskan fisheries in 2018 is currently estimated at 6% and below the historical average (18%; range: 8%–42%) for the same period. Preliminary Alaskan estimated harvests of other Nass salmon species in 2018 were below average for Sockeye, Pink, Coho, and Chum, and near average for Chinook based on returns from 2000 to 2017 (Table 21).

Table 21 Preliminary estimates of Nass salmon harvests in Alaskan fisheries, Total Nass salmon returns, and US exploitation rates, 2000–2018 (NCB-JTC 2018 [draft]).

	ALASKAN HARVEST					TOTAL RUN					ALASKA EXPLOITATION RATE				
Year	Sock.	Pink	Chin.	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum
2000	86,000	32,000	1,700	92,000	4,000	625,000	594,000	34,700	209,000	40,000	14%	5%	5%	44%	10%
2001	202,000	192,000	2,500	176,000	18,000	582,000	2,093,000	52,500	389,000	90,000	35%	9%	5%	45%	20%
2002	125,000	41,000	1,500	63,000	2,000	1,404,000	691,000	31,500	387,000	32,000	9%	6%	5%	16%	6%
2003	153,000	136,000	2,300	89,000	11,000	1,177,000	1,155,000	46,300	261,000	87,000	13%	12%	5%	34%	13%
2004	304,000	86,000	600	91,000	24,000	985,000	782,000	33,600	222,000	81,000	31%	11%	2%	41%	30%
2005	145,000	175,000	300	163,000	9,000	667,000	1,522,000	28,300	374,000	42,000	22%	11%	1%	44%	21%
2006	138,000	5,000	1,800	69,000	13,000	775,000	140,000	44,800	194,000	73,000	18%	4%	4%	36%	18%
2007	251,000	119,000	1,300	107,000	9,000	602,000	1,014,000	40,300	282,000	22,000	42%	12%	3%	38%	41%
2008	47,000	4,000	400	61,000	500	380,000	55,000	30,400	193,000	4,500	12%	7%	1%	32%	11%
2009	150,000	102,000	1,200	125,000	8,000	575,000	904,000	40,200	479,000	29,000	26%	11%	3%	26%	28%
2010	47,000	18,000	800	97,000	1,000	439,000	202,000	27,800	277,000	10,000	11%	9%	3%	35%	10%
2011	99,000	6,000	1,500	86,000	1,000	557,000	178,000	19,500	201,000	8,000	18%	3%	8%	43%	13%
2012	58,000	32,000	1,200	100,000	2,000	477,000	301,000	16,200	258,000	18,000	12%	11%	7%	39%	11%
2013	67,000	140,000	200	530,000	2,000	501,000	1,113,000	16,200	1,034,000	17,000	13%	13%	1%	51%	12%
2014	66,000	62,000	1,600	138,000	3,000	551,000	460,000	23,600	402,000	24,000	12%	13%	7%	34%	13%
2015	117,000	35,000	2,200	281,000	7,000	869,000	449,000	34,200	457,000	54,000	13%	8%	6%	61%	13%
2016	80,000	77,000	1,700	341,000	5,000	442,000	757,000	19,700	613,000	28,000	18%	10%	9%	56%	18%
2017	28,000	38,000	700	166,000	2,000	369,000	951,000	11,700	450,000	25,000	8%	4%	6%	37%	8%
2018	20,000	9,000	1,300	59,000	4,000	318,000	246,000	21,300	160,000	53,000	6%	4%	6%	37%	8%
Mean 00-17	120,000	72,000	1,000	154,000	7,000	665,000	742,000	31,000	371,000	38,000	18%	9%	4%	40%	16%

CANADIAN COMMERCIAL HARVEST DATA 2018

IN-SEASON AREA 3 GILLNET AND SEINE CATCH DATA (information courtesy from DFO Prince Rupert)

Total commercial net fisheries conducted in Area 3 in 2018 (Table 22 and Table 23):

- 4 gillnet fisheries were conducted from June 25 to July 3, and
- 5 seine fisheries were conducted from July 5 to July 20.

Of the total commercial catch of Sockeye (40,000; Table 23) in Area 3 (12,000; Table 22) and outside Area 4 (28,000) in 2018, 10,800 are estimated as Nass origin (27%) based on stock composition modeling. The average total mean harvest of Nass Sockeye in Canadian commercial net fisheries in Areas 3–5 from

2000 to 2017 was 84,000 (range: 11,000–280,000). DFO implemented management actions in Area 3 to reduce harvest impacts on the Kwinageese Sockeye stock during their migration through Area 3 in mid-July. The Nass Sockeye stock requires rebuilding from a past spawning barrier detected in 2011 that resulted in extreme poor returns in 2013 (only 397 spawners) and 2014 (only 498 spawners). Sockeye retention was not be permitted in commercial fisheries in Area 3 from 9 July to 22 July, the anticipated peak of the Kwinageese Sockeye migration, as documented in DFO's 2018 Integrated Fisheries Management Plan (IFMP).

Table 22 In-season salmon and steelhead gillnet and seine catch estimates by day in DFO commercial net fisheries in Area 3, 2018.

GEAR	DATE	Vessel days	SO-harv	SO-Rel	CO-HARV	CO-Rel	PK-HARV	PK-Rel	Chum-harv	Chum-Rel	CH-harv	CH-Rel	STEEL-Rel
⊟GN	6/25/2018	120	3,521	0	8	1	0	0	1,254	36	0	169	4
	6/26/2018	57	1,285	0	0	0	9	0	364	8	0	38	4
	7/2/2018	103	3,770	0	36	2	306	1	5,119	455	0	84	8
	7/3/2018	99	3,051	0	49	2	503	6	1,769	25	0	50	11
GN Total		**379**	**11,627**	**0**	**93**	**5**	**818**	**7**	**8,506**	**524**	**0**	**341**	**27**
⊟SN	7/5/2018	21	159	0	13	1	234	0	1,654	0	0	95	50
	7/11/2018	27	0	921	81	16	6,669	0	7,814	0	0	240	155
	7/16/2018	21	0	805	132	0	20,994	0	10,229	0	0	123	131
	7/19/2018	21	0	1,143	309	0	34,579	0	10,046	0	0	181	45
	7/20/2018	21	0	1,072	375	0	25,765	0	7,721	0	0	131	35
SN Total		**111**	**159**	**3,941**	**910**	**17**	**88,241**	**0**	**37,464**	**0**	**0**	**770**	**416**
Grand Total		**490**	**11,786**	**3,941**	**1,003**	**22**	**89,059**	**7**	**45,970**	**524**	**0**	**1,111**	**443**

LABELS: SO=SOCKEYE, PK=PINK, CO=COHO, CH=CHINOOK; STEEL=STEELHEAD, HARV=HARVESTED, AND REL=RELEASED; VESSEL DAYS=BOAT DAYS.

Table 23 In-season salmon and steelhead gillnet and seine catch estimates by area in DFO commercial net fisheries in Area 3, 2018.

GEAR	AREA 3, 4 (out)	Vessel days	SO-harv	SO-Rel	CO-HARV	CO-Rel	PK-HARV	PK-Rel	Chum-harv	Chum-Rel	CH-harv	CH-Rel	STEEL-Rel
⊟GN	3-12	190	5,840	0	43	3	308	4	0	444	0	171	14
	3-7B	140	4,258	0	36	2	409	3	7,562	0	0	121	9
	3-7A	34	1,116	0	7	0	74	0	0	80	0	29	4
	BOSTON ROCKS	15	413	0	7	0	27	0	944	0	0	20	0
	TRACEY BAY	0	0	0	0	0	0	0	0	0	0	0	0
	4-9	37	3,392	0	0	128	377	22	0	57	0	1	60
	4-5	170	24,558	0	0	447	9,312	64	0	885	0	50	207
GN Total		**586**	**39,577**	**0**	**93**	**580**	**10,507**	**93**	**8,506**	**1,466**	**0**	**392**	**294**
⊟SN	3-12	0	0	0	0	0	0	0	0	0	0	0	0
	3-7B	28	115	1,235	296	4	27,752	0	8,261	0	0	198	101
	3-7A	0	0	0	0	0	0	0	0	0	0	0	0
	BOSTON ROCKS	60	19	1,645	369	13	36,112	0	20,542	0	0	358	241
	TRACEY BAY	23	25	1,061	245	0	24,377	0	8,661	0	0	214	74
SN Total		**111**	**159**	**3,941**	**910**	**17**	**88,241**	**0**	**37,464**	**0**	**0**	**770**	**416**
Grand Total		**697**	**39,736**	**3,941**	**1,003**	**597**	**98,748**	**93**	**45,970**	**1,466**	**0**	**1,162**	**710**

**Sub-area catches reporting fewer than three boats are not shown by sub area but included in totals by gear type.*

PRELIMINARY POST-SEASON NET, TROLL, AND RECREATIONAL CATCH ESTIMATES FOR NASS SALMON STOCKS 2018

COMMERCIAL CATCH ESTIMATES OF NASS SALMON 2018

Preliminary total harvest estimates of Nass salmon in commercial net and troll fisheries for 2018 are approximately: 12,000 Sockeye, 17,000 Pink, 200 Chinook, 22,000 Coho, and <500 Chum based on preliminary data from DFO Prince Rupert and methods developed by the NCB-JTC (Table 24). The Area 3 troll fishery did not open in 2018 due to low Nass Area Coho returns. Preliminary post-season commercial catch estimates in 2018 are below average for all Nass salmon species when compared to the mean catches from 2000–2017.

Table 24 Preliminary post-season commercial net and troll catch estimates of Nass salmon in DFO commercial fisheries in Areas 1-5, 2000–2018 (NCB-JTC 2018 [draft]).

	COMMERCIAL (GILLNET & SEINE)					COMMERCIAL (TROLL)					TOTAL COMMERCIAL CATCH ESTIMATES				
Year	Sockeye	Pink	Chinook	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum
2000	239,000	205,000	1,800	24,000	11,500	UNK	UNK	NA	NA	UNK	239,000	205,000	1,800	24,000	11,500
2001	132,000	982,000	900	11,000	31,200	UNK	UNK	NA	18,000	UNK	132,000	982,000	900	29,000	31,200
2002	725,000	239,000	3,800	2,000	9,800	UNK	UNK	2,100	6,000	UNK	725,000	239,000	5,900	8,000	9,800
2003	616,000	146,000	3,600	2,000	11,100	UNK	UNK	2,500	9,000	UNK	616,000	146,000	6,100	11,000	11,100
2004	318,000	192,000	6,300	3,000	6,700	UNK	UNK	400	4,000	UNK	318,000	192,000	6,700	7,000	6,700
2005	174,000	279,000	2,700	11,000	2,200	UNK	UNK	400	19,000	UNK	174,000	279,000	3,100	30,000	2,200
2006	292,000	13,000	3,200	2,000	7,500	UNK	UNK	1,300	8,000	UNK	292,000	13,000	4,500	10,000	7,500
2007	131,000	241,000	3,400	10,000	900	UNK	UNK	600	9,000	UNK	131,000	241,000	4,000	19,000	900
2008	60,000	1,000	300	2,000	200	UNK	UNK	50	4,000	UNK	60,000	1,000	350	6,000	200
2009	103,000	55,000	800	3,000	1,000	UNK	UNK	300	16,000	UNK	103,000	55,000	1,100	19,000	1,000
2010	86,000	2,000	600	2,000	200	UNK	UNK	300	13,000	UNK	86,000	2,000	900	15,000	200
2011	108,000	11,000	800	1,000	400	UNK	UNK	400	7,000	UNK	108,000	11,000	1,200	8,000	400
2012	133,000	18,000	400	3,000	400	UNK	UNK	400	25,000	UNK	133,000	18,000	800	28,000	400
2013	140,000	89,000	900	23,000	600	UNK	UNK	200	101,000	UNK	140,000	89,000	1,100	124,000	600
2014	127,000	43,000	1,600	3,000	400	UNK	UNK	100	18,000	UNK	127,000	43,000	1,700	21,000	400
2015	187,000	38,000	1,400	45,000	3,800	UNK	UNK	400	61,000	UNK	187,000	38,000	1,800	106,000	3,800
2016	24,000	71,000	700	31,000	200	UNK	UNK	100	44,000	UNK	24,000	71,000	800	75,000	200
2017	44,000	65,000	1,000	18,000	100	UNK	UNK	50	60,000	UNK	44,000	65,000	1,050	78,000	100
2018	12,000	17,000	0	4,000	100	UNK	UNK	200	18,000	UNK	12,000	17,000	200	22,000	100
Mean 00-17	202,000	149,000	2,000	11,000	5,000	UNK	UNK	1,000	25,000	UNK	202,000	149,000	2,000	34,000	5,000

RECREATIONAL CATCH ESTIMATES OF NASS SALMON 2018

Preliminary minimum harvest estimates of Nass salmon in recreational fisheries for 2018 are approximately: <100 Sockeye, 100 Chinook, 2,500 Coho, and <100 Pink based on preliminary data from NFWD, DFO Prince Rupert, and methods developed by the NCB-JTC (Table 25). The recreational catch estimates of Nass salmon that are shown in Table 25 are considered minimum and based on many assumptions (e.g., relative stock composition of Nass salmon in total recreational catches in Area 3 and Area 4 (tidal only). The recreational harvest estimates for Nass salmon in 2018 indicated below average catches of Nass Chinook and Coho salmon when compared to mean estimates from 2000 to 2017 (Table 25).
The Nass River watershed was closed to recreational fishing for Chinook Salmon in 2018 to rebuild stocks that have returned below the escapement goal (15,000) six times out of the past ten years, including the 2017 return of only 5,000 spawners. Due to the recreational closure, in-river recreational catches were not monitored by NFWD. In-river recreational catch estimates for Coho salmon were based on methods developed by NCB-JTC and using tag recovery returns in 2018.

Table 25 Preliminary post-season Nass salmon harvest estimates in recreational fisheries, 2000–2018 (NCB-JTC 2018 [draft]).

	IN-RIVER RECREATIONAL CATCH					MARINE (TIDAL) RECREATIONAL CATCH					TOTAL RECREATIONAL CATCH				
Year	Sock.	Pink	Chin.	Coho	Chum	Sock.	Pink	Chin.	Coho	Chum	Sock.	Pink	Chin.	Coho	Chum
2000	20	UNK	1,200	300	UNK	UNK	UNK	1,000	600	UNK	20	UNK	2,200	900	UNK
2001	310	UNK	1,100	500	UNK	UNK	UNK	1,700	3,600	UNK	310	UNK	2,800	4,100	UNK
2002	30	UNK	900	400	UNK	UNK	UNK	1,100	4,800	UNK	30	UNK	2,000	5,200	UNK
2003	UNK	UNK	1,200	200	UNK	UNK	UNK	1,200	4,500	UNK	UNK	UNK	2,400	4,700	UNK
2004	UNK	UNK	900	200	UNK	UNK	UNK	1,900	4,400	UNK	UNK	UNK	2,800	4,600	UNK
2005	UNK	UNK	800	500	UNK	UNK	UNK	1,500	4,800	UNK	UNK	UNK	2,300	5,300	UNK
2006	UNK	UNK	1,300	100	UNK	UNK	UNK	1,000	4,700	UNK	UNK	UNK	2,300	4,800	UNK
2007	UNK	UNK	1,500	600	UNK	UNK	UNK	1,800	3,900	UNK	UNK	UNK	3,300	4,500	UNK
2008	UNK	UNK	1,300	100	UNK	UNK	UNK	1,600	6,200	UNK	UNK	UNK	2,900	6,300	UNK
2009	UNK	UNK	1,300	1,700	UNK	UNK	UNK	1,300	7,300	UNK	UNK	UNK	2,600	9,000	UNK
2010	120	UNK	500	300	UNK	UNK	UNK	400	4,700	UNK	120	UNK	900	5,000	UNK
2011	10	0	600	300	UNK	UNK	UNK	900	5,800	UNK	10	UNK	1,500	6,100	UNK
2012	UNK	10	600	200	UNK	UNK	UNK	500	2,600	UNK	UNK	10	1,100	2,800	UNK
2013	30	20	500	300	UNK	UNK	UNK	500	6,400	UNK	30	20	1,000	6,700	UNK
2014	120	UNK	900	300	UNK	UNK	UNK	700	2,700	UNK	120	UNK	1,600	3,000	UNK
2015	20	50	600	400	UNK	UNK	UNK	700	5,200	UNK	20	50	1,300	5,600	UNK
2016	UNK	UNK	300	100	UNK	UNK	UNK	800	4,600	UNK	UNK	UNK	1,100	4,700	UNK
2017	UNK	10	200	1,500	UNK	UNK	UNK	800	3,700	UNK	UNK	10	1,000	5,200	UNK
2018	**UNK**	**UNK**	**0**	**400**	**UNK**	**UNK**	**UNK**	**100**	**2,100**	**UNK**	**UNK**	**UNK**	**100**	**2,500**	**UNK**
Mean 00-17	**80**	**20**	**1,000**	**400**	**UNK**	**UNK**	**UNK**	**1,000**	**4,000**	**UNK**	**80**	**20**	**2,000**	**5,000**	**UNK**

NISGA'A NATION CATCH ESTIMATES OF NASS SALMON AND STEELHEAD 2018

The 2018 Nisga'a salmon and steelhead fisheries were monitored from 6 May to 1 September as part of the NFWD's annual salmon catch monitoring program. Incidental salmon and steelhead catches before 6 May and after 1 September were also accounted for in NFWD's annual non-salmon catch monitoring program. During the salmon catch monitoring period, estimates were expanded each week for non-reporting based on catch and fishing effort analyses. Of the total Nisga'a harvests of Nass salmon in 2018, 4 marine and 2 in-river individual-sale gillnet fisheries (Table 26) were conducted with 10,335 Sockeye, 0 Chinook, 0 Coho, 284 Pink, and 0 Chum salmon harvested within the sale fisheries (Table 27). Total Individual-sale (IS) fisher permits issued in 2018 were 123 (including 47 elder permits). Of the permits issued, 53 participated in the IS fisheries in June and July. Permits issued by community were: 42 Gitlaxt'aamiks, 21 Gingolx, 16 Laxgalts'ap, 15 Gitwinksihlkw, 13 Prince Rupert, 9 Terrace, and 5 other areas.

Table 26 Nisga'a individual-sale (IS) fisheries conducted in 2018.

NISGA'A MARINE SALE FISHERY:		
NUMBER OF NISGA'A MARINE FISHERIES (16 HR OPENINGS):	4	JUNE 28, JUNE 29, JULY 5, JULY 6
DATA FROM JUNE 28 FISHERY (21 BOATS; 12 FISHERS SOLD) - FINAL		809 SOCKEYE
DATA FROM JUNE 29 FISHERY (17 BOATS; 21 FISHERS SOLD) - FINAL		2,147 SOCKEYE
DATA FROM JULY 5 FISHERY (18 BOATS; 8 FISHERS SOLD) - FINAL		617 SOCKEYE AND 24 PINK
DATA FROM JULY 6 FISHERY (17 BOATS; 19 FISHERS SOLD) - FINAL		1,811 SOCKEYE AND 245 PINK
NISGA'A IN-RIVER SALE FISHERY:		
NUMBER OF NISGA'A IN-RIVER FISHERIES (10 HR OPENINGS):	2	JULY 9, JULY 10
DATA FROM JULY 9 FISHERY (30 FISHERS SOLD) - FINAL		2,778 SOCKEYE
DATA FROM JULY 10 FISHERY (27 FISHERS SOLD) - FINAL		2,173 SOCKEYE

Table 27 show preliminary post-season harvest estimates of Nass salmon and steelhead in Nisga'a fisheries in 2018. Total salmon harvests in the Nisga'a

fisheries were: 46,615 Sockeye (all Treaty), 4,735 Chinook, 2,691 Coho, 1,002 Pink, and 89 Chum. Harvest of steelhead in 2018 was 398 (including 12 winter-run in spring fisheries and 386 summer-run from June to 1 September). No other Nisga'a harvest fisheries were permitted by NLG in 2018 due to low returns for Nass salmon. Preliminary post-season Nisga'a harvest estimates for Nass salmon in 2018 were below average for all Nass salmon based on mean harvests from 2000 to 2017 (Table 28). Nisga'a harvest estimates for summer-run steelhead was average when compared to mean harvests from 2000 to 2017. There is currently no defined Nisga'a entitlement for steelhead (winter or summer-run), other than a maximum allocation for summer-run steelhead (1,000) defined in the Nisga'a Treaty; but domestic harvests are permitted each year. The Nisga'a entitlement estimates shown in Table 28 for 2018 are based on preliminary data to date and include catch potential adjustments from cumulative overages or underages from 2000 to 2017 and any over harvests permitted in accordance to the provisions documented in the Nisga'a Treaty.

Table 27 Preliminary Nass salmon and steelhead harvests in Nisga'a fisheries, 2018.

NISGA'A TOTAL HARVEST SUMMARY	SOCK	CHIN	COHO	PINK-EVE	CHUM	STEEL
MARINE SALE FISHERY TOTAL	5,384	CLOSED	0	284	CLOSED	CLOSED
IN-RIVER SALE FISHERY TOTAL	4,951	CLOSED	0	CLOSED	CLOSED	CLOSED
INDIVIDUAL SALE (IS) FISHERY TOTAL	**10,335**	**CLOSED**	**0**	**284**	**CLOSED**	**CLOSED**
NLG COMMUNAL SELECTIVE TREATY FISHERY - GH FISHWHEELS	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
NLG COMMUNAL SELECTIVE TREATY FISHERY - SEINE	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
DOMESTIC (FSC) GILLNET FISHERY - WK END: SEP 1	**36,280**	**4,735**	**2,691**	**718**	**89**	**398**
SUB TOTAL (NLG TREATY FISHERIES)	**46,615**	**4,735**	**2,691**	**1,002**	**89**	**398**
NLG SOCK DEMONSTRATION FISHERY HARVEST - DFO INVENTORY	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
GRAND TOTAL	**46,615**	**4,735**	**2,691**	**1,002**	**89**	**398**

Table 28 Nisga'a Treaty entitlement and harvest estimates for Nass salmon and steelhead, 2000–2018 (NCB-JTC 2018 [draft]).

	NISGA'A CATCH POTENTIAL TARGETS (TREATY, DEMO, UNDERAGES, SE)					NISGA'A TOTAL CATCHES (TREATY, DEMO, UNDERAGES, SE)					
Year	Sockeye	Pink	Chinook	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum	Steel
2000	93,855	42,118	6,935	9,397	2,905	93,179	6,086	9,326	1,950	1,067	495
2001	63,199	257,071	8,056	24,502	17,259	77,183	79,378	11,764	14,706	1,617	403
2002	185,562	67,129	2,607	28,996	16,988	140,666	2,043	5,431	9,016	132	557
2003	171,681	124,282	6,332	27,389	32,832	140,861	18,949	6,709	14,882	318	445
2004	143,378	74,125	6,453	22,982	32,533	145,241	10,528	5,876	20,336	1,030	512
2005	87,591	173,973	6,399	19,507	30,604	113,345	4,519	6,545	14,969	698	244
2006	85,837	101	8,891	14,553	34,955	88,021	3,753	7,706	8,425	1,110	251
2007	48,226	105,018	8,963	20,120	30,160	53,863	6,159	6,724	9,515	932	116
2008	46,685	33	7,896	19,497	29,761	45,648	4,372	4,450	3,450	506	179
2009	69,131	90,714	10,378	28,126	29,454	69,446	24,572	5,435	13,794	139	266
2010	60,418	2,170	8,732	23,288	29,664	67,691	2,493	4,581	10,292	102	709
2011	68,107	338	7,416	18,133	29,651	60,441	45,719	4,584	2,635	210	193
2012	74,425	7,769	8,817	21,562	29,617	68,759	20,224	3,547	12,082	316	542
2013	80,812	117,173	10,470	28,680	29,509	73,432	36,081	4,352	19,370	111	433
2014	93,278	27,974	12,908	28,510	29,597	79,750	8,264	5,914	8,452	553	468
2015	162,391	30,435	15,058	23,364	33,053	154,140	22,331	8,251	7,905	255	424
2016	62,392	71,731	10,491	35,151	3,759	46,858	12,157	5,396	8,234	2,486	542
2017	64,920	107,906	7,053	35,151	2,065	58,179	7,861	3,643	10,300	346	233
2018	46,598	3,399	9,987	24,004	5,735	46,615	1,002	4,735	2,691	89	398
Mean 00-17	92,000	72,000	9,000	24,000	25,000	88,000	18,000	6,000	11,000	1,000	400

PRELIMINARY NASS SALMON TOTAL RETURN TO CANADA (TRTC) ESTIMATES FOR 2018

The preliminary post-season TRTC estimates for determining the Nisga'a Treaty entitlements for Nass salmon in 2018 are approximately: 298,000 Sockeye, 237,000 Pink, 20,000 Chinook, 101,000 Coho, and 49,000 Chum (Table 29). The preliminary post-season TRTC salmon estimates for 2018 were lower than the pre-season estimates for Sockeye (298,000 vs. 377,000), Pink (237,000 vs. 635,000), and Coho (101,000 vs. 223,000), and higher for Chinook (20,000 vs. 19,000) and Chum (49,000 vs. 33,000). Preliminary total run exploitation rate estimates for Nass salmon in all fisheries in 2018 were 27% Sockeye, 11% Pink, 30% Chinook, 54% Coho, and 8% Chum when combining harvests from Alaskan (Table 21) and Canadian (Table 29) fisheries. Ranking the TRTC returns (Table 30) for Nass salmon in 2018 over a 34 year return period (1985–2018) resulted in some of the poorest returns on record for Nass Sockeye (3rd worst/32nd best), Pink (7th worst/28th best), Chinook (7th worst/28th best), and Coho (7th worst/28th best), and a fair return for Nass Chum (19th worst/16th best).

Table 29 Preliminary estimates of Total Return to Canada, total harvests in Canadian fisheries, and overall exploitation rates for Nass salmon, 2000–2018 (NCB-JTC 2018 [draft]).

	TOTAL RETURN TO CANADA (TRTC)					HARVEST TOTALS (ALL CAN FISHERIES)					EXPLOITATION RATE (ALL CAN FISHERIES)				
Year	Sockeye	Pink	Chinook	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum	Sockeye	Pink	Chinook	Coho	Chum
2000	539,000	562,000	33,000	117,000	36,000	335,000	211,000	13,000	27,000	8,000	54%	36%	37%	13%	20%
2001	380,000	1,901,000	50,000	213,000	72,000	212,000	1,062,000	16,000	48,000	6,000	36%	51%	30%	12%	7%
2002	1,279,000	650,000	30,000	324,000	30,000	873,000	241,000	14,000	22,000	3,000	62%	35%	44%	6%	9%
2003	1,024,000	1,019,000	44,000	172,000	76,000	760,000	165,000	15,000	31,000	11,000	65%	14%	32%	12%	13%
2004	681,000	696,000	33,000	131,000	57,000	466,000	202,000	16,000	32,000	8,000	47%	26%	48%	14%	10%
2005	522,000	1,347,000	28,000	211,000	33,000	297,000	284,000	12,000	51,000	3,000	45%	19%	42%	14%	7%
2006	637,000	135,000	43,000	125,000	60,000	386,000	17,000	15,000	23,000	9,000	50%	12%	33%	12%	12%
2007	351,000	895,000	39,000	175,000	13,000	186,000	247,000	14,000	33,000	2,000	31%	24%	35%	12%	9%
2008	333,000	51,000	30,000	132,000	4,000	115,000	6,000	8,000	17,000	1,000	30%	11%	26%	9%	25%
2009	425,000	802,000	39,000	354,000	21,000	180,000	80,000	9,000	42,000	1,000	31%	9%	22%	9%	3%
2010	392,000	184,000	27,000	180,000	9,000	163,000	4,000	6,000	31,000	300	37%	2%	22%	11%	3%
2011	458,000	172,000	18,000	115,000	7,000	181,000	57,000	7,000	17,000	1,000	32%	32%	36%	8%	13%
2012	419,000	269,000	15,000	158,000	16,000	216,000	38,000	5,000	43,000	1,000	45%	13%	31%	17%	6%
2013	434,000	973,000	16,000	504,000	15,000	224,000	125,000	6,000	150,000	1,000	45%	11%	37%	15%	6%
2014	485,000	398,000	22,000	264,000	21,000	224,000	51,000	9,000	32,000	1,000	41%	11%	38%	8%	4%
2015	752,000	414,000	32,000	176,000	47,000	362,000	60,000	12,000	120,000	4,000	42%	13%	35%	26%	7%
2016	362,000	680,000	18,000	272,000	23,000	86,000	84,000	7,000	89,000	3,000	19%	11%	36%	15%	11%
2017	341,000	913,000	11,000	284,000	23,000	114,000	73,000	6,000	94,000	400	31%	8%	51%	21%	2%
2018	298,000	237,000	20,000	101,000	49,000	67,000	18,000	5,000	28,000	200	20%	7%	23%	18%	0.4%
Mean 00-17	545,000	670,000	29,000	217,000	31,000	299,000	167,000	11,000	50,000	4,000	41%	19%	35%	13%	9%

Table 30 Preliminary Total Return to Canada and rankings by year for Nass salmon from 1985–2018.

NASS SALMON TOTAL RETURN TO CANADA ESTIMATES, 1985-2018

YEAR	SOCKEYE	PINK	CHINOOK	COHO	CHUM
1985	660,000	1,230,000	32,500	190,000	73,000
1986	378,000	580,000	64,400	205,000	84,000
1987	413,000	911,000	35,800	128,000	75,000
1988	259,000	335,000	28,100	43,000	47,000
1989	363,000	1,501,000	48,700	130,000	79,000
1990	286,000	304,000	44,200	242,000	76,000
1991	727,000	1,680,000	16,300	46,000	58,000
1992	1,572,000	328,000	35,400	160,000	54,000
1993	1,586,000	874,000	45,400	62,000	239,000
1994	590,000	184,000	42,800	351,000	105,000
1995	855,000	829,000	21,700	68,000	83,000
1996	694,000	465,000	41,600	126,000	40,000
1997	574,000	416,000	36,300	33,000	31,000
1998	446,000	143,000	45,700	72,000	182,000
1999	645,000	1,259,000	29,000	107,000	68,000
2000	539,000	292,000	32,800	134,000	26,000
2001	380,000	995,000	48,000	243,000	36,000
2002	1,279,000	365,000	28,400	314,000	18,000
2003	1,024,000	1,019,000	43,600	172,000	76,000
2004	681,000	696,000	32,500	131,000	57,000
2005	522,000	1,347,000	27,700	211,000	33,000
2006	637,000	135,000	43,000	125,000	60,000
2007	351,000	895,000	39,100	175,000	13,000
2008	333,000	51,000	30,100	132,000	4,000
2009	425,000	802,000	38,900	354,000	21,000
2010	392,000	184,000	27,200	180,000	9,000
2011	458,000	172,000	18,200	115,000	7,000
2012	419,000	269,000	15,300	158,000	16,000
2013	434,000	973,000	15,500	504,000	15,000
2014	485,000	398,000	22,200	264,000	21,000
2015	752,000	414,000	32,200	176,000	47,000
2016	362,000	680,000	17,500	272,000	23,000
2017	341,000	913,000	10,700	284,000	23,000
2018	298,000	237,000	20,000	101,000	49,000
AVERAGES:					
00+	521,000	554,000	28,000	207,000	30,000
85+	585,000	632,000	32,000	175,000	54,000

NASS TRTC RANKINGS BY YEAR FOR SALMON, 1985-2018

TRTC	SOCKEYE	PINK	CHINOOK	COHO	CHUM
1985	10	5	17	12	10
1986	26	17	1	11	4
1987	23	10	14	23	9
1988	34	23	23	33	17
1989	27	2	2	22	6
1990	33	25	6	9	7
1991	7	1	31	32	13
1992	2	24	15	17	15
1993	1	12	5	31	1
1994	13	29	9	3	3
1995	5	13	27	30	5
1996	8	18	10	24	19
1997	14	19	13	34	22
1998	19	32	4	29	2
1999	11	4	21	27	11
2000	15	26	16	19	23
2001	25	7	3	8	20
2002	3	22	22	4	28
2003	4	6	7	16	7
2004	9	15	17	21	14
2005	16	3	24	10	21
2006	12	33	8	25	12
2007	29	11	11	15	31
2008	31	34	20	20	34
2009	21	14	12	2	26
2010	24	29	25	13	32
2011	18	31	29	26	33
2012	22	27	33	18	29
2013	20	8	32	1	30
2014	17	21	26	7	26
2015	6	20	19	14	17
2016	28	16	30	6	24
2017	30	9	34	5	24
2018	32	28	28	28	16

Year colors:	
Best:	1-11
Average:	12-23
Poor:	24-34

Respectfully provided by:

Richard Alexander, R.P.Bio
Nass River Senior Stock Assessment Biologist
LGL Limited – Senior Technical Advisor to Nisga'a Lisims Government
Nisga'a Fisheries (website: http://www.nisgaalisims.ca/?q=fisheries-and-wildlife)
LGL Limited (website: http://www.lgl.com)

Nass River Demonstration Fishery

Due to the low returns in the Nass, the Nass River demonstration fishery did not take place in 2018.

Recreational Fishery Review

The tidal waters salmon sport fishery in Area 3 begins with low effort in late April, with initial participation by local area residents launching from Prince Rupert or Port Edward. Independent and guided day charter effort increases significantly in late May, remaining high throughout the peak season in June, July and August, and with primarily local participants again by the end of September. There were three recreational fishing lodges operating in Area 3 in 2018, and the catch and effort numbers are included in the Area 3 & 4 Creel Program summary.

Due to predicted low returns of Northern Chinook salmon, the Department implemented Northern Chinook salmon conservation measures which reduced the daily Chinook limits in Area 3 as follows:
June 1, 2018 to June 15, 2018 – Daily limit of one (1) Chinook per day.
June 16, 2018 to July 9, 2018 – Zero (0) retention of Chinook.
July 10, 2018 to July 31, 2018 – Daily limit of one (1) Chinook per day.

Other salmon species daily limits were 4 pink, 4 coho and 4 chum, with a combined daily limit of 4 salmon. There was non-retention of sockeye for the 2018 season in the tidal waters of Area 3. Due to predicted low returns of Northern Chinook, the Nass River was closed to recreational fishing for Chinook as of May 9, 2018.

Area 3 & 4 Creel Program collects catch information from the recreational fishery surrounding Prince Rupert and Port Edward on the North Coast of B.C. It is focused in Areas 3 and 4, comprising the waters of Chatham Sound between the mouths of the Nass and Skeena Rivers. Chatham Sound is bordered by the Alaska/BC border to the north, Dundas and Stephens Island groups to the west and Porcher Island to the south, covering an area of approximately 4,200 km2. The North Coast Skeena First Nations Stewardship Society (NCSFNSS), an aggregate of six North Coast B.C. First Nations, was granted resources from the Pacific Salmon Commission to operate the Area 3 & 4 Creel Program and has done so using the same study design as was used by DFO during 2008-2014.

The Area 3 & 4 Creel Program operated from June 1st to August 31st, 2018, with 10,734 vessel trips made by recreational vessels and a retained catch of 5,822 chinook, 10,438 coho, 1,391 pink, 176 chum, and 32 sockeye.

There was an observed decrease in vessel trips compared to 2017 where there were 13,598 boat trips and a retained catch of 10,108 chinook, 38,713 coho, 2,869 pink, 127 chum and 109 sockeye.

Commercial Net Fishery Review

The Area 3 commercial net fishery was planned in anticipation of harvesting a surplus of approximately 110,000 Nass sockeye with a below even year average pink return while meeting a number of pre-season commitments. These commitments included managing in accordance to the Nisga'a Treaty, the Pacific Salmon Treaty, allocation policy, chum and Chinook rebuilding, and limiting impacts on steelhead. Some of the restrictions put into place to deal with these commitments were, closed areas, daylight only fisheries, non-retention steelhead for both gear types, mandatory brailing for seines, non-retention Chinook for seines and gill nets.
The Kwinageese sockeye return for 2018 was anticipated to be poor coming off of two poor brood years. A closure was in effect from July 9 to July 22 (peak migration timing of Kwinageese sockeye through the commercial fishery based on DNA analysis) to minimize impacts on Kwinageese sockeye.

Gill Net

The first gill net opening occurred June 25 to minimize impacts on chinook returning to area 3. Non retention chinook and the Bay Pt / low Pt boundary was also in effect throughout the season.

Sockeye gill net catches were poor over the course of the four openings prior to the Kwinageese closure. A modest commercial fleet started off the season comprised mostly of local northern fishermen due to the poor area 4 Skeena sockeye forecast. Gill nets began the season with coho retention.

Gill nets were allowed to retain chum from the start of the season until the Kwinageese closure. Chum numbers showed improvement during the first week of July. Chum boundaries separating chum retention on the outside and chum non retention on the inside of area 3 were in effect from the start of the season.

Area 3 was limited to four targeted sockeye gill net openings (June 25, 26, July 2 & 3)) with chum retention resulting in a total catch of 8,506 chums compared to the last ten average of 17,314.

Coho retention was allowed from the start of the season and showed slight improvement early July prior to the Kwinageese closure.

A total of 4 gill net openings (June 25 & 26,July 2& 3) with 379 vessel operating days compared to ten year average of 12.5 openings and 1612.8 vessel operating days.

The gill nets finished the season with a final catch of 11,627 sockeye compared to the last ten year average of 87644.5.

Seine

The first seine opening occurred July 5 with 21 seines participating, fishing was restricted to the outside of area 3 southwest of Wales Island and south of Sommerville Island.

The seines were allowed to retain incidental sockeye for one pink directed opening prior to the Kwinageese closure for a total catch of 159.

Seine pink fishing started out slow showing improvement as the season progressed however continued to track below historic catches for the season. The early start to the season was taken into consideration however it was quickly evident that catches were not increasing to harvestable levels. Seine opportunities ceased on July 20 until escapement into the main pink rivers showed improvement. Unfortunately pink escapements did not improve and no further opportunities were granted.

The season ended with a total of 5 seine pink openings with chum retention in the outer portion of area 3 with a final chum catch of 38,836 vs. the ten even year average of 31,983. Chum catches looked started to increase mid-July.

The majority of the pink and chum catches were taken along the south western shore of Wales Island, Boston Rocks,Tracey Bay and throughout Emma Pass.

Final catch of 101,267 pinks compared to the last even year average 426,422 pinks.

For the season a total of 5 seine openings with 111 vessel operating days compared to the last five even year average of 8 openings and 152 vessel operating days.

Nisga’a Fisheries continue to do an excellent job managing the Nass River fishwheel program which is critical for the management of the Area 3 net fishery.

Table 31 Area 3 Gillnet Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON GILL NET In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 3

Report Details by Subarea or Portion

				Sockeye Salmon		Coho Salmon		Pink Salmon		Chum Salmon		Chinook Salmon			
Stat Week	Week of Year	Date	Effort	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Status	Last Updated
		25-Jun	120	3521	0	8	1	0	0	1254	36	0	169	Final	13-Sep-2018
		26-Jun	57	1285	0	0	0	9	0	364	8	0	38	Final	13-Sep-2018
Total for Week			177	4806	0	8	1	9	0	1618	44	0	207		
		02-Jul	103	3770	0	36	2	306	1	5119	455	0	84	Final	13-Sep-2018
		03-Jul	99	3051	0	49	2	503	6	1769	25	0	50	Final	13-Sep-2018
Total for Week			202	6821	0	85	4	809	7	6888	480	0	134		
Total for Management Area 3 in Period			379	11627	0	93	5	818	7	8506	524	0	341		

Table 32 Area 3 Seine Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON SEINE In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 3

Report Details by Subarea or Portion

				Sockeye Salmon		Coho Salmon		Pink Salmon		Chum Salmon		Chinook Salmon			
Stat Week	Week of Year	Date	Effort	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Status	Last Updated
		05-Jul	21	159	0	13	1	234	0	1654	0	0	95	Final	13-Sep-2018
Total for Week			21	159	0	13	1	234	0	1654	0	0	95		
		11-Jul	27	0	921	81	16	6669	0	7814	0	0	240	Final	13-Sep-2018
Total for Week			27	0	921	81	16	6669	0	7814	0	0	240		
		16-Jul	21	0	805	132	0	20994	0	10229	0	0	123	Final	13-Sep-2018
		19-Jul	21	0	1201	185	0	42043	0	10558	0	0	126	Final	13-Sep-2018
		20-Jul	21	0	1198	224	0	31327	0	8113	0	0	110	Final	13-Sep-2018
Total for Week			63	0	3204	541	0	94364	0	28900	0	0	359		
Total for Management Area 3 in Period			111	159	4125	635	17	101267	0	38368	0	0	694		

2018 Stream Escapements

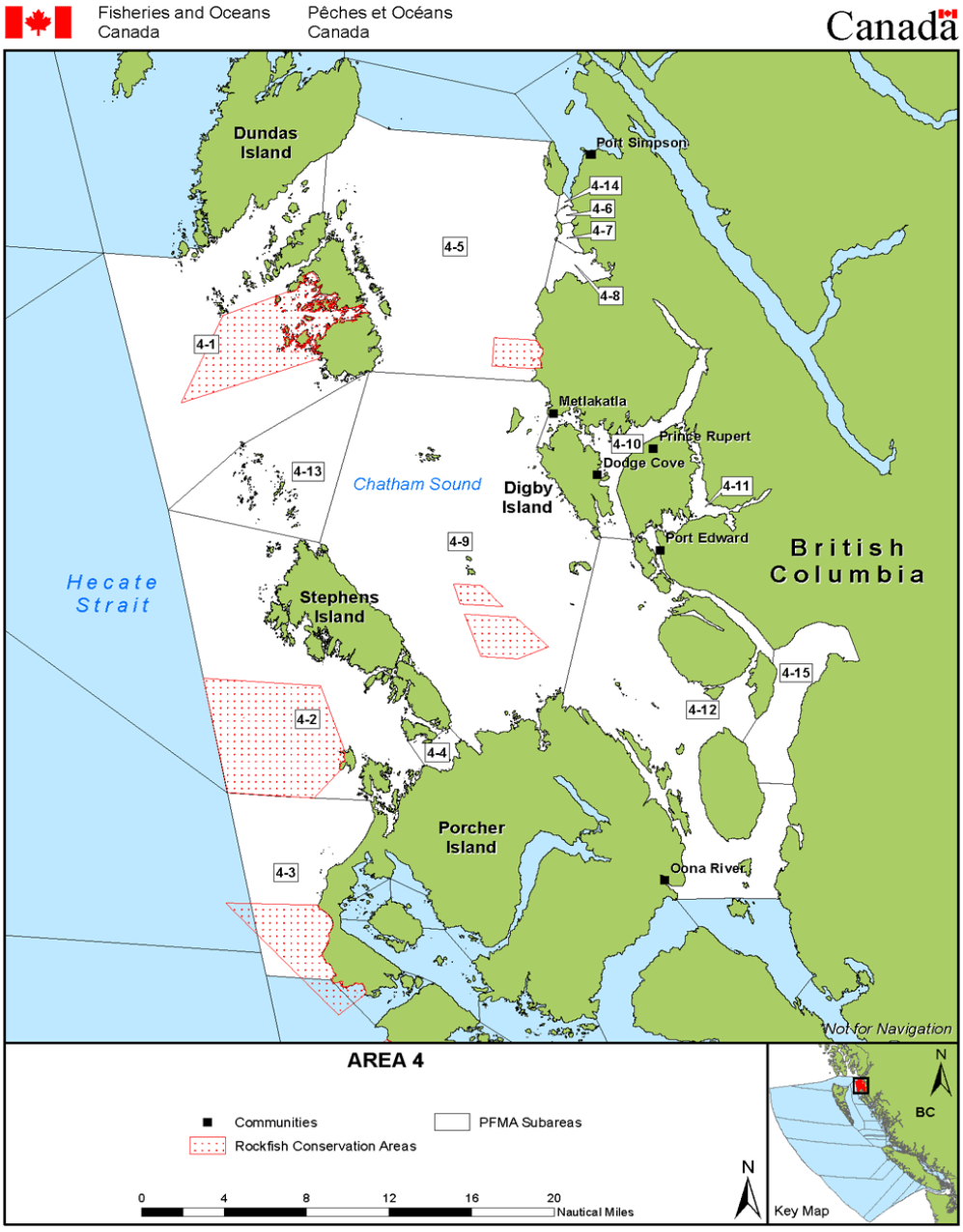
Table 33 Area 3 Stream Escapements

AREA 3 2018 PRELIMINARY ESCAPEMENT ESTIMATES							
N/O - NONE OBSERVED, N/I - NOT INSPECTED, DNS - DOES NOT SPAWN IN THIS CREEK, A/P - ADULTS PRESENT, INADEQUATE INFORMATION TO MAKE ESTIMATE							
Location	**Stream Name**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Chinook**	**Comments**
COASTAL							
	BOAT HARBOUR CREEK	N/I	N/I	N/I	N/I	N/I	
	BRUNDIGE CREEK WEST	N/I	N/I	N/I	N/I	N/I	
	BRUNDIGE CREEK	DNS	N/O	N/O	N/O	DNS	
	SANDY BAY CREEK	DNS	N/I	A/P	N/I	DNS	
	STUMAUN CREEK	DNS	F/P	1110	N/O	DNS	
	TRACY BAY #2 CREEK	DNS	F/P	A/P	DNS	DNS	
	TRACY CREEK	DNS	F/P	61	N/O	DNS	
	WHITLY POINT CREEK	N/I	N/I	N/I	N/I	N/I	
NASS RIVER							
	ANSEDAGAN CREEK	N/I	N/I	N/I	N/I	N/I	
	BROWN BEAR CREEK	N/I	N/I	N/I	N/I	N/I	
	CHAMBERS CREEK	DNS	N/I	A/P	N/I	N/I	
	DAMDOCHAX RIVER AND LAKE	N/I	N/I	N/I	N/I	N/I	
	DISKANGIEG CREEK	N/I	N/I	N/I	N/I	N/I	
	GINGIT CREEK	N/I	N/I	N/I	N/I	N/I	
	GITZYON CREEK	N/I	N/I	N/I	N/I	N/I	
	IKNOUK RIVER	N/I	N/I	N/I	N/I	N/I	
	KINCOLITH RIVER	N/I	N/I	N/I	N/I	N/I	
	KSEMAMAITH CREEK (Kseaden Creek)	N/I	N/I	N/I	N/I	N/I	
	KWINAGEESE RIVER (w eir count)	279	28	N/I	N/I	444	Nisga'a Fisheries
	MEZIADIN RIVER AND LAKE	96666	1791	0	0	41	Nisga'a Fisheries
	NASS MAIN	N/I	N/I	N/I	N/I	N/I	
	SEASKINNISH CREEK	N/I	N/I	N/I	N/I	N/I	
	TEIGEN CREEK	N/I	N/I	N/I	N/I	N/I	
	TSEAX RIVER	N/I	N/I	N/I	N/I	N/I	
	ZOLZAP CREEK	N/I	N/I	N/I	N/I	N/I	
OBSERVATORY INLET							
	ILLIANCE RIVER	N/I	N/I	N/I	N/I	N/I	
	KITSAULT RIVER	N/I	N/I	N/I	N/I	N/I	
	KSHWAN RIVER	N/I	N/I	N/I	N/I	N/I	
	SALMON COVE CREEK	N/I	N/I	N/I	N/I	N/I	
	STAGOO CREEK	N/I	N/I	N/I	N/I	N/I	
	WILAUKS CREEK	N/I	N/I	N/I	N/I	N/I	
PORTLAND CANAL							
	DOGFISH BAY CREEK	N/I	N/I	N/I	N/I	N/I	
PORTLAND INLET	CEDAR CREEK	DNS	F/P	320	N/O	DNS	
	CRAG CREEK	N/I	N/I	N/I	N/I	N/I	
	CROW LAGOON CREEK	DNS	A/P	N/O	N/O	DNS	
	KHUTZEYMATEEN RIVER	20	A/P	24000	6600	A/P	
	KWINAMASS RIVER	N/I	A/P	11400	A/P	222	
	LARCH CREEK	DNS	F/P	A/P	N/O	DNS	
	LIZARD CREEK	N/I	N/I	N/I	N/I	N/I	
	MANZANITA COVE CREEK	DNS	N/O	N/O	DNS	DNS	
	MOUSE CREEK	DNS	F/P	42	4	DNS	
	PIRATE COVE CREEK	DNS	DNS	A/P	DNS	N/I	
	TSAMSPANAKNOK BAY CREEK	DNS	F/P	A/P	DNS	DNS	
WORK CHANNEL	ENSHESHESE RIVER	N/I	A/P	12400	3600	N/I	C. Martens, DFO Staff
	LACHMACH RIVER	N/I	1392	1701	A/P	N/I	Lax kw'alaams Fisheries/DFO
	TOON RIVER	A/P	20	75145	1394	N/I	Lax kw'alaams Fisheries/DFO
	TOTALS	**96965**	**3231**	**126179**	**11598**	**707**	

Area 4

Area 4 Map

Figure 6 Area 4 Map



First Nations Fishery Review

There are 11 First Nations groups that include Area 4 and Skeena watershed Food, Social and Ceremonial salmon fisheries in their communal licence:

a) Lax Kw'alaams First Nation
b) Metlakatla First Nation
c) Gitxaala First Nation
d) Kitsumkalum First Nation
e) Kitselas First Nation
f) Gitksan First Nation
g) Gitanyow First Nation
h) Wet'suwet'en First Nation
i) Babine Lake First Nation
j) Takla Lake First Nation
k) Yekooche First Nation

FSC fisheries occur throughout Area 4 in both marine and freshwater locations using a variety of gear types.

Skeena CSAF Demonstration Fisheries

The North Coast Skeena First Nation Stewardship Society (NCSFNSS), the Gitksan Watershed Authorities (GWA) and Lake Babine Nation (LBN) all participated in the Skeena River Inland Demonstration Fishery for 2018. The NCSFNSS selectively harvest sockeye salmon in Areas 4-12 and 4-15 by using gill nets, the GWA selectively harvested sockeye salmon by beach seine in the Kitwanga area, and LBN selectively harvested sockeye using dip nets at the Babine Fence. The NCSFNSS obtained 29.3 Area C licences and 6.3 Area A licences. The Gitksan Watershed Authority obtained 29.3 Area C licences and 6.3 Area A licences. Lake Babine Nation obtained 49.3 Area C licences and 6.3 Area A licences. Uncaught allocations we transferred to upriver fisheries, after accounting for stock composition adjustments, on a weekly basis.

Table 34 Area 3 Stream Escapements

		NCSFNSS	**Gitksan Watershed Authority**	**Lake Babine Nation**
Area C Licences		29.3	29.3	49.3
Area A Licences		6.3	6.3	6.3
Sockeye	Allocation	6,353	8,684	10,539
	Catch	1,297	8,991	10,539
Skeena Sockeye Catch Total			**20,827**	

ESSR Review

ESSR opportunities for Sockeye in the Skeena River occurred in 2018 with a directed harvest in Babine Lake at the mouth of Fulton River. The ESSR allocations were determined by the escapements past the Tyee Test Fishery and Babine Fence as well as by consultation with the Facility Manager of Fulton River Spawning Channel, Stock Assessment, and Resource Management.

ESSR opportunities also occurred for Pink salmon. The Wet'suwet'en First Nation selectively harvested pink salmon under an ESSR licence at Moricetown Canyon on the Bulkley River using dip nets. A total of 110 pink salmon were harvested in the 2018 ESSR fishery.

Table 35 Area 4 ESSR Review

Area	Harvester	Allocation	Catch
Moricetown Canyon (Bulkley River)	Wet'suwet'en First Nation	3,000 pink	110 pink
Babine Lake (Fulton River)	Lake Babine First Nation	264,500 sockeye	192,712 sockeye

Recreational Fishery Review

The tidal waters salmon sport fishery in Area 4 begins with low effort in April, with initial participation by local area residents launching from Prince Rupert or Port Edward. Independent and guided day charter effort increases significantly in May, remaining high throughout the peak season in June, July and August, and with primarily local participants again by the end of September.

Due to predicted low returns of Northern Chinook salmon, the Department implemented Northern Chinook salmon conservation measures which reduced the Chinook daily limits in Area 4 as follows:
June 1, 2018 to June 15, 2018 – Daily limit of one (1) Chinook per day.
June 16, 2018 to July 9, 2018 – Zero (0) retention of Chinook.
July 10, 2018 to July 31, 2018 – Daily limit of one (1) Chinook per day.

Other salmon species daily limits were 4 pink, 4 coho and 4 chum, with a combined daily limit of 4 salmon. Due to predicted low returns of Skeena Sockeye, non-retention of Sockeye for the tidal waters of Area 4 was in place for the start of the season. A larger than expected return of Skeena Sockeye resulted in the tidal waters of Area 4 opening to four (4) Sockeye per day on Aug 10, 2018.

Area 3 and 4 Creel Program collects catch information from the recreational fishery surrounding Prince Rupert and Port Edward on the North Coast of B.C. It is focused in Areas 3 and 4, comprising the waters of Chatham Sound between the mouths of the Nass and Skeena Rivers. Chatham Sound is bordered by the

Alaska/BC border to the north, Dundas and Stephens Island groups to the west and Porcher Island to the south, covering an area of approximately 4,200 km2. The North Coast Skeena First Nations Stewardship Society (NCSFNSS), an aggregate of six North Coast B.C. First Nations, was granted resources from the Pacific Salmon Commission to operate the Area 3 and 4 Creel Program and has done so using the same study design as was used by DFO during 2008-2014.

The Area 3 & 4 Creel Program operated from June 1st to August 31st, 2018, with 10,734 vessel trips made by recreational vessels and a retained catch of 5,822 chinook, 10,438 coho, 1,391 pink, 176 chum, and 32 sockeye.

There was an observed decrease in vessel trips compared to 2017 where there were 13,598 boat trips and a retained catch of 10,108 chinook, 38,713 coho, 2,869 pink, 127 chum and 109 sockeye.

Skeena River

A full recreational closure of all salmon species in the Skeena River was implemented from May 9, 2018 to Aug 6, 2018 due to predicted low returns of Skeena River Chinook salmon in 2018.

Recreational fishing for Skeena River Coho and Pink reopened on Aug 7, 2018 while recreational fishing for Chinook and Chum remained closed in the entire Skeena River watershed, including tributaries and lakes. Additional management measures were implemented for North Coast Chinook which included:

The Skeena River mainstem upstream of the Sustut River and at the Kitsumkalum, Kitwanga and Kispiox River mouths was closed to fishing for salmon.

Kispiox River and Babine River remained no fishing for salmon during the 2018 season.

Gitnadoix River upstream of confluence with Magar Creek remained no fishing for salmon during the 2018 season.

Morice River upstream of confluence with Lamprey Creek remained no fishing for salmon during the 2018 season.

There was non-retention of Chinook salmon in all rivers draining into PFMAs 1 to 6, excluding the Kitimat River which opened to Chinook retention (1 per day under 80cm) on July 1, 2018.

On July 5, 2018 Chinook salmon fishing was closed in the waters of the Kitlope Lake, and tributaries, including the waters flowing from Kitlope Lake to the confluence with the Kitlope River.

The Sockeye estimate past the Tyee Test fishery reached 800,000 and 1.05 million Sockeye around July 28 and Aug 1, 2018, respectively. However, to protect Skeena River Chinook, recreational fishing for Sockeye opened to two (2) Sockeye per day as follows:

August 3, 2018 to September 15, 2018

Babine Lake, not including tributaries and excluding those waters within a 400m radius of the following tributary streams: Morrison Creek, Six Mile Creek, Pierre Creek, Pendleton Creek, Hazelwood Creek, Twain Creek, Tachek Creek, Five Mile Creek, Four Mile Creek, Sockeye Creek, Big Loon Creek, Tsezakwa Creek, Pinkut Creek. Also closed east of a line from Gullwing Creek to the south shore of Babine Lake.

August 3, 2018 to August 14, 2018
Fulton River
Pinkut Creek, downstream of fishing boundary signs located approx. 25m downstream of fish counting fence.
Aug 7, 2018 to September 15, 2018
Skeena River mainstem waters only, upstream of CNR bridge at Terrace, B.C. to the confluence with the Babine River (Excluding Skeena River mainstem waters only, near the Kitwanga River mouth, from Mill Creek upstream to the Highway 37 bridge. Also excluding Skeena River mainstem waters within three white triangular fishing boundary signs located at the confluence with the Kispiox River).
Skeena River mainstem waters only, downstream of CNR Railway bridge at Terrace, B.C. (Excluding the Skeena River mainstem waters only, near Kitsumkalum River mouth, from Zymachord River mouth upstream to the power line crossing below Ferry Island).
As a result of an ESSR Sockeye fishery being provided on Babine Lake, the recreational Sockeye daily limit was increased to four (4) Sockeye per day in Babine Lake on Aug 17, 2018 to Sept 15, 2018. This was consistent with the 2018 – 2019 Integrated Fisheries Management Plan.

Lower Skeena River Angling Creel Survey 2018
The Lower Skeena River Angling Creel Survey did not take place in 2018.

Babine Lake Recreational Creel Survey
The Recreational Creel survey for Babine Lake did not take place in 2018.

Commercial Net Fishery Summary

The total Skeena Sockeye return was expected to be poor with a pre-season return forecast from 0.28 million (90% probability) to 1.47 million (10% probability) and a point estimate of 0.645 million (50% probability) based on the sibling model, which in turn did not support a commercial fishery for 2018.

Gill net

With the concerns surrounding chinook returning to area 4 no targeted chinook gill net openings were planned for 2018. Early in the season sockeye escapement was trending at low levels which was consistent with the 2018 preseason forecast for the Skeena River. However sockeye escapement past the

Skeena River Tyee Test fishery started to show improvement during the first week of July and continued to build throughout the following week. It was decided by the third week of July that sockeye escapement figures past the Skeena Tyee Test fishery were strong enough to open to gillnets (July 24). The area 4 gill net fleet was relatively small and remained so throughout the season due to the decent chum fishing in the central coast. Fishing continued into the first week of August with the selective gill net restrictions (half nets/20 min soak times/restricted fishing area) in place to address steelhead concerns.
Gillnets finished the season with a total of 10 sockeye openings with 625 vessel operating days compared to ten year average of 7.1 openings and 1,719 vessel operating days. The six gill net openings that occurred in August (2, 3, 6, 7, 9 & 10)) operated under the rules outlined in the Selective Gill net program.

Coho retention was not allowed by gillnets in area 4 throughout the season for 2018.

Area 4 final gill net catch of 79,225 sockeye compared to the last ten year average 187,840.

Seine

Seine ITQ fishery in area 4 took place over three time periods:

Seine ITQ fishery August 1 to August 5: aggregate seine
quota for this week is 29,669 sockeye salmon. The individual transferable quota share of sockeye is 0.92593% (e.g. 1/108 Licences). This equates to 275 sockeye per licence.

Seine ITQ fishery August 8 to August 12: aggregate seine
quota for this week is 19,254 Sockeye salmon. The individual transferable quota share of sockeye is 0.93458% (e.g. 1/107 licenses). This equates to 181 Sockeye per licence.

Seine ITQ fishery August 15 to August 19: aggregate seine
quota for this week is 8,152 sockeye salmon. The individual transferable quota share of sockeye is 0.93458% (e.g. 1/107 licenses). This equates to 76 sockeye per licence.

Coho retention was not allowed by seines in area 4 throughout the season for 2018. Final verified sockeye catch of 24,370 compared to the last ten year average of 58,252. Area 4 seine pink catch 5,940 compared to the last ten year average of 114,584.

Table 36 Area 4 Gill Net Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON GILL NET In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 4

Report Details by Subarea or Portion

				Sockeye Salmon		Coho Salmon		Pink Salmon		Chum Salmon		Chinook Salmon			
Stat Week	Week of Year	Date	Effort	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Kept	Rel	Status	Last Updated
		24-Jul	69	11170	0	0	88	2901	27	0	245	0	52	Final	13-Sep-2018
		25-Jul	79	7116	0	0	104	1668	32	0	143	0	49	Final	13-Sep-2018
Total for Week			148	18286	0	0	192	4569	59	0	388	0	101		
		29-Jul	93	22728	0	0	202	1611	38	0	294	0	46	Final	13-Sep-2018
		30-Jul	104	16899	0	0	86	1047	21	0	77	0	26	Final	13-Sep-2018
		02-Aug	86	6738	0	0	87	1539	27	0	93	0	11	Final	13-Sep-2018
		03-Aug	29	1742	0	0	23	252	3	0	34	0	7	Final	13-Sep-2018
Total for Week			312	48107	0	0	398	4449	89	0	498	0	90		
		06-Aug	56	4973	0	0	139	760	40	0	163	0	10	Final	13-Sep-2018
		07-Aug	48	4213	0	0	115	487	63	0	95	0	4	Final	13-Sep-2018
		09-Aug	32	1598	0	0	99	179	4	0	57	0	11	Final	13-Sep-2018
		10-Aug	29	2048	0	0	73	473	2	0	38	0	4	Final	13-Sep-2018
Total for Week			165	12832	0	0	426	1899	109	0	353	0	29		
Total for Management Area 4 in Period			625	79225	0	0	1016	10917	257	0	1239	0	220		

Table 37 Area 4 Seine Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON SEINE In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 4

Report Details by Subarea or Portion

Stat Week	Week of Year	Date	Effort	Sockeye Salmon Kept	Sockeye Salmon Rel	Coho Salmon Kept	Coho Salmon Rel	Pink Salmon Kept	Pink Salmon Rel	Chum Salmon Kept	Chum Salmon Rel	Chinook Salmon Kept	Chinook Salmon Rel	Status	Last Updated
		01-Aug	14	8973	0	0	132	2004	0	0	103	0	40	Final	13-Sep-2018
		02-Aug	13	4031	0	0	76	1263	0	0	83	0	32	Final	13-Sep-2018
		03-Aug	4	1050	0	0	15	121	0	0	44	0	4	Final	13-Sep-2018
		04-Aug	3	5200	0	0	90	676	0	0	88	0	25	Final	13-Sep-2018
Total for Week			34	19254	0	0	313	4064	0	0	318	0	101		
		05-Aug	1	0	0	0	3	200	0	0	2	0	1	Final	13-Sep-2018
		08-Aug	3	1079	0	0	30	346	0	0	6	0	3	Final	13-Sep-2018
		09-Aug	2	152	0	0	19	183	0	0	3	0	4	Final	13-Sep-2018
		10-Aug	2	1324	0	0	18	647	0	0	10	0	7	Final	13-Sep-2018
		11-Aug	3	469	0	0	15	121	0	0	0	0	0	Final	13-Sep-2018
Total for Week			11	3024	0	0	85	1497	0	0	21	0	15		
		12-Aug	2	454	0	0	16	89	0	0	2	0	3	Final	13-Sep-2018
		15-Aug	1	613	0	0	20	101	0	0	12	0	0	Final	13-Sep-2018
		16-Aug	1	136	0	0	16	43	0	0	3	0	0	Final	13-Sep-2018
		17-Aug	1	147	0	0	6	24	0	0	3	0	0	Final	13-Sep-2018
		18-Aug	1	439	0	0	15	51	0	0	6	0	3	Final	13-Sep-2018
Total for Week			6	1789	0	0	73	308	0	0	26	0	6		
		19-Aug	1	303	0	0	16	71	0	0	1	0	1	Final	13-Sep-2018
Total for Week			1	303	0	0	16	71	0	0	1	0	1		
Total for Management Area 4 in Period			52	24370	0	0	487	5940	0	0	366	0	123		

2018 Stream Escapements

Table 38 Area 4 Stream Escapements

AREA 4 2018 PRELIMINARY ESCAPEMENT ESTIMATES							
N/O - NONE OBSERVED, N/I - NOT INSPECTED, DNS - DOES NOT SPAWN IN THIS CREEK, A/P - ADULTS PRESENT, INADEQUATE INFORMATION TO MAKE ESTIMATE, ? = INFORMATION EXPECTED							
Location	**Stream Name**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Chinook**	**Comments**
BABINE							
	BABINE FENCE COUNT	1,284,960	3,558	5,446		1,805	LBN
	BABINE RIVER - SECTIONS 1, 2 AND 3	141363	8538	N/I	N/I	N/I	B. Finnegan, DFO Staff
	BABINE RIVER - SECTION 4	12875	A/P	A/P	N/I	3572	B. Finnegan, DFO Staff
	BABINE RIVER - SECTION 5	A/P	N/I	N/I	N/I	1036	B. Finnegan, DFO Staff
	BABINE UNACCOUNTED *						
	BERNANN CREEK (DEEP CR.)	N/O	N/I	N/I	N/I	N/I	Lake Babine Nation
	BOUCHER CREEK	N/O	A/P	N/I	N/I	N/I	Lake Babine Nation
	FIVE MILE CREEK	N/O	N/I	N/I	N/I	N/I	Lake Babine Nation
	FOUR MILE CREEK	768	N/I	N/I	N/I	N/I	Lake Babine Nation
	FULTON RIVER						
	MORRISON CREEK	1555	A/P	N/I	N/I	N/I	Lake Babine Nation
	NICHYESKWA RIVER	N/I	N/O	N/I	N/I	N/I	B. Finnegan, DFO Staff
	NILKITKWA RIVER	A/P	A/P	N/I	N/I	N/I	B. Finnegan, DFO Staff
	NINE MILE CREEK	8	N/I	N/I	N/I	N/I	Lake Babine Nation
	PENDELTON CREEK (CROSS CREEK)	100	N/I	N/I	N/I	N/I	Lake Babine Nation
	PIERRE CREEK	7591	N/I	N/I	N/I	N/I	Lake Babine Nation
	PINKUT CREEK						
	SHASS CREEK	70	N/I	N/I	N/I	N/I	B. Finnegan, DFO Staff
	SIX MILE CREEK (GULLWING CR.)	N/O	N/I	N/I	N/I	N/I	Lake Babine Nation
	SOCKEYE CREEK	132	N/I	N/I	N/I	N/I	Lake Babine Nation
	SUTHERLAND RIVER	325	N/I	N/I	N/I	N/I	B. Finnegan, DFO Staff
	TACHEK CREEK	128	N/I	N/I	N/I	N/I	Lake Babine Nation
	TAHLO CREEK - (LOWER)	626	N/I	N/I	N/I	N/I	Lake Babine Nation
	TAHLO CREEK - UPPER (SALMON CR.)	N/O	N/I	N/I	N/I	N/I	B. Finnegan, DFO Staff
	TSEZAKWA CREEK	364	A/P	N/I	N/I	N/I	Lake Babine Nation
	TWAIN CREEK	20	N/I	N/I	N/I	N/I	Lake Babine Nation
	WRIGHT CREEK (BIG LOON CR.)	N/O	N/I	N/I	N/I	N/I	Lake Babine Nation
	*Sockeye estimate is fence count minus estimates for specific systems above fence						
BEAR							
	ASITKA LAKE	408	393	N/I	N/I	N/I	B. Finnegan, DFO Staff
	AZUKLOTZ CREEK	3558	A/P	N/I	N/I	N/I	B. Finnegan, DFO Staff
	BEAR LAKE	850	N/I	N/I	N/I	N/I	B. Finnegan, DFO Staff
	BEAR RIVER	N/I	1285	40	N/I	2681	B. Fineegan, DFO Staff
	DAMSHILGWIT CREEK	333	554	DNS	DNS	N/I	Gitksan Watershed Authorities
	MOTASE LAKE	A/P	A/P	N/I	N/I	N/I	B. Finnegan, DFO Staff
	SHILAHOU CREEK	N/I	N/I	N/I	N/I	N/I	
	SUSTUT RIVER AND LAKE*	N/I	N/I	N/I	N/I	N/I	
BULKLEY / MORICE							
	ATNA RIVER AND LAKE	A/P	A/P	N/I	N/I	N/I	B. Finnegan, DFO Staff
	BULKLEY RIVER - LOWER	N/I	N/I	N/I	N/I	N/I	
	BULKLEY RIVER - UPPER	N/I	N/I	N/I	N/I	N/I	
	GOSNELL CREEK	N/I	726	N/I	N/I	N/I	B. Finnegan, DFO Staff
	MORICE LAKE	A/P	N/I	N/I	N/I	N/I	B. Finnegan, DFO Staff
	MORICE RIVER	N/O	A/P	A/P	N/I	14700	B. Finnegan, DFO Staff
	NANIKA RIVER	15301	N/I	N/I	N/I	440	B. Finnegan, DFO Staff
	OWEN CREEK	N/I	N/I	N/I	N/I	N/I	
	STATION CREEK	N/I	N/I	N/I	N/I	N/I	
	TELKWA RIVER	N/I	988	N/I	N/I	N/I	B. Finnegan, DFO Staff
	TOBOGGAN CREEK	N/I	649	N/I	N/I	N/I	B. Finnegan, DFO Staff
	TOUHY CREEK	N/I	A/P	N/I	N/I	N/I	B. Finnegan, DFO Staff
COASTAL							
	DENISE CREEK						
	DIANA CREEK	24	N/I	N/I	N/I	N/I	Lax Kw'alaams Fisheries/DFO Staff
	ECSTALL RIVER	8	AP	AP	130	580	
	HAYS CREEK	N/I	N/I	N/I	N/I	N/I	
	KHYEX RIVER	N/I	N/I	N/I	N/I	N/I	
	KLOIYA RIVER	N/I	N/I	A/P	N/I	12	Lax Kw'alaams Fisheries/DFO Staff
	LA HOU CREEK	DNS	F/P	1000	N/O	DNS	
	MCNICHOL CREEK	DNS	F/P	130	N/O	DNS	
	OLDFIELD CREEK	N/I	N/I	N/I	N/I	N/I	
	OONA RIVER	N/I	N/I	N/I	N/I	N/I	
	PRUDHOMME CREEK	60	N/I	N/I	N/I	N/I	Lax Kw'alaams Fisheries/DFO Staff
	SHAWATLAN RIVER	A/P	N/I	N/I	N/I	N/I	Lax Kw'alaams Fisheries/DFO Staff
	SILVER CREEK	DNS	A/P	1500	N/O	N/I	
	SPILLER RIVER	N/I	N/I	N/I	N/I	N/I	

AREA 4 2018 PRELIMINARY ESCAPEMENT ESTIMATES

N/O - NONE OBSERVED, N/I - NOT INSPECTED, DNS - DOES NOT SPAWN IN THIS CREEK, A/P - ADULTS PRESENT, INADEQUATE INFORMATION TO MAKE ESTIMATE, ? = INFORMATION EXPECTED

Location	Stream Name	Sockeye	Coho	Pink	Chum	Chinook	Comments
KISPIOX							
	BARNES CREEK	N/O	N/I	DNS	DNS	DNS	Gitksan Watershed Authorities
	BEAVERLODGE CREEK	DNS	N/O	DNS	DNS	DNS	Gitksan Watershed Authorities
	CLIFFORD CREEK	N/I	A/P	N/I	DNS	DNS	Gitksan Watershed Authorities
	CLUB CREEK (LOWER)	1969	N/I	DNS	DNS	N/I	Gitksan Watershed Authorities
	CLUB CREEK (UPPER)	N/I	N/I	N/I	N/I	N/I	
	CULLON CREEK	N/I	A/P	N/I	N/I	N/I	Gitksan Watershed Authorities
	DATE CREEK	N/I	N/I	N/I	N/I	N/I	
	FALLS CREEK	N/O	N/I	DNS	DNS	DNS	Gitksan Watershed Authorities
	FOOTSORE CREEK	N/I	N/O	N/I	N/I	N/I	Gitksan Watershed Authorities
	FOOTSORE CREEK UPPER	N/I	N/O	N/I	N/I	N/I	Gitksan Watershed Authorities
	HODDER CREEK	N/I	N/O	N/I	N/I	N/I	Gitksan Watershed Authorities
	IRONSIDE CREEK	N/I	22	N/I	DNS	DNS	Gitksan Watershed Authorities
	JACKSON CREEK	A/P	N/I	N/I	N/I	N/I	Gitksan Watershed Authorities
	KISPIOX RIVER	N/I	N/I	N/I	N/I	3888	Gitksan Watershed Authorities
	MCCULLY CREEK	DNS	N/O	N/I	N/I	N/I	Gitksan Watershed Authorities
	MURDER CREEK	N/I	A/P	N/I	N/I	N/I	Gitksan Watershed Authorities
	NANGEESE RIVER	N/O	404	N/I	N/I	N/I	Gitksan Watershed Authorities
	SKUNSNAT CREEK	N/I	N/O	N/I	N/I	N/I	Gitksan Watershed Authorities
	STEEP CANYON CREEK	N/I	N/I	N/I	N/I	N/I	
	UNNAMED SWAN LAKE CREEK	N/I	N/I	N/I	N/I	N/I	
KITSUMKALUM							
	CEDAR RIVER	N/I	N/I	N/I	N/I	N/I	
	CLEAR CREEK	N/I	N/I	N/I	N/I	N/I	
	DRY CREEK	N/I	N/I	N/I	N/I	N/I	
	KITSUMKALUM LAKE	N/I	N/I	N/I	N/I	N/I	
	KITSUMKALUM RIVER - LOWER	N/I	N/I	N/I	N/I	N/I	
	KITSUMKALUM RIVER - UPPER	N/I	N/I	N/I	N/I	N/I	
LAKELSE							
	DASQUE CREEK	N/I	506	457	425	N/I	Kitselas Land & Resource Dept.
	GAINEY CREEK	N/I	N/I	N/I	N/I	N/I	
	HATCHERY CREEK (GRANITE CREEK)	N/I	N/I	N/I	N/I	N/I	
	LAKELSE RIVER	NO	AP	6340	28	51	
	SALMON CREEK (N. GRANITE CREEK)	N/I	N/I	N/I	N/I	N/I	
	SCHULBUCKHAND CREEK	1017	N/I	N/I	N/I	N/I	Kitselas Land & Resource Dept.
	SOCKEYE CREEK	N/I	N/I	N/I	N/I	N/I	
	WILLIAMS CREEK	11170	N/I	N/I	N/I	N/I	Kitselas Land & Resource Dept.
OTHER LOWER SKEENA							
	ALASTAIR LAKE	1,300	NI	AP	AP	NO	Stan Hutchings/STAD
	ANDESITE CREEK	N/I	N/I	N/I	N/I	N/I	
	DOG TAG CREEK	N/I	N/I	N/I	N/I	N/I	
	ERLANDSEN CREEK	DNS	15	NO	NO	NO	Stan Hutchings/STAD
	EXCHAMSIKS RIVER	DNS	920	NO	NO	AP	Stan Hutchings/STAD
	EXSTEW RIVER AND SLOUGH	DNS	AP	NO	NO	NO	Stan Hutchings/STAD
	GITNADOIX RIVER	DNS	AP	AP	AP	AP	Stan Hutchings/STAD
	KADEEN CREEK	N/I	N/I	N/I	N/I	N/I	
	KASIKS RIVER	DNS	300	AP	AP	25	Stan Hutchings/STAD
	MAGAR CREEK	N/I	N/I	N/I	N/I	N/I	
	MIDDLE CREEK	N/O	N/O	N/O	N/O	N/O	Kitselas Land & Resource Dept.
	MOLYBDENUM CREEK	N/I	N/I	N/I	N/I	N/I	
	SHAMES RIVER	N/I	N/I	N/I	N/I	N/I	
	SOUTHEND CREEK	100	NO	DNS	DNS	DNS	Stan Hutchings/STAD
	ZYMAGOTITZ RIVER	N/I	N/I	N/I	N/I	N/I	
OTHER MIDDLE SKEENA							
	KITSEGUECLA RIVER	N/I	N/I	N/I	N/I	N/I	
	KITWANGA RIVER (fence count)	1434	551	2736	273	618	Gitanyow Fisheries Authority
	KLEANZA CREEK	N/O	N/I	3	N/I	N/I	Kitselas Land & Resource Dept.
	SALMON RUN CREEK	N/I	N/I	N/I	N/I	N/I	
	SINGLEHURST CREEK	N/I	26	N/I	N/I	N/I	Mitch Drewes,
	THOMAS CREEK	N/I	N/I	N/I	N/I	N/I	
	ZYMOETZ RIVER - LOWER	N/I	N/I	N/I	N/I	N/I	
	ZYMOETZ RIVER - UPPER	1742	3937	N/I	N/I	N/I	B. Finnegan, DFO Staff
	TOTAL ALL AREAS	**1,490,159**	**23,372**	**17,652**	**856**	**29,408**	

Area 5

Area 5 Map

Figure 7 Area 5 Map

First Nations Fisheries Review

There are 5 First Nations groups that include Area 5 Food, Social and Ceremonial salmon fisheries in their communal licence:

a) Lax Kw'alaams First Nation
b) Metlakatla First Nation
c) Gitxaala First Nation
d) Kitsumkalum First Nation
e) Kitselas First Nation

FSC fisheries occur throughout Area 5 in both marine and freshwater locations using a variety of gear types.

Recreational Fishery Review

The tidal water interception salmon sport fishery begins in late April, with effort increasing significantly in late May and continuing to mid-September. Initial effort is mostly by local anglers out of Prince Rupert and Port Edward, and then with a significant fleet made up of independent anglers and charter operators. There was one recreational fishing lodge operating in Area 5 in 2018.
Due to predicted low returns of Northern Chinook salmon, the Department implemented Northern Chinook Salmon Conservation Measures which reduced the daily Chinook limits in Area 5 as follows:
June 1, 2018 to June 15, 2018 – Daily limit of one (1) Chinook per day.
June 16, 2018 to July 9, 2018 – Zero (0) retention of Chinook.
July 10, 2018 to July 31, 2018 – Daily limit of one (1) Chinook per day.

Other species daily limits were 4 pink, 4 coho and 4 chum, with a combined daily limit of 4 salmon. Due to low pre-season expectations for Skeena sockeye, non-retention of Sockeye for the tidal waters of Area 5 was in place for the start of the season. A larger than expected return of Skeena Sockeye resulted in the tidal waters of Area 5 opening to four (4) Sockeye per day on Aug 10, 2018.

Recreational catch data is not provided for Area 5 at this time, but the internet recreational fishing effort and catch survey (iREC) could provide catch estimates in future years.

Commercial Net Fishery Summary

Area 5 was opened to gill nets July 24 & 25 in conjunction with the area 4 gill net opening. Very little effort was observed throughout area 5 for the 2018 season. Area 5 did not reopen leading into August in conjunction with the area 4 gill net selective gill net fishery.

Charter patrol observations throughout the season suggested low returns of pinks to area 5 indicator systems, therefore no seine fisheries were opened in area 5 for 2018.

Unable to provide catch figures due to the limited fishers participating in the commercial fishery.

Table 39 Area 5 Gill Net Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON GILL NET In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 5

Unable to provide catch figures due to the limited fishers participating in the commercial fishery.

Table 40 Area 5 Seine Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON SEINE In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 5

There are no Catch Estimate records for Management Area 5 for the specified date range.

2018 Stream Escapements

Table 41 Area 5 Stream Escapements

AREA 5 2018 PRELIMINARY ESCAPEMENT ESTIMATES								
N/O - NONE OBSERVED, N/I - NOT INSPECTED, DNS - DOES NOT SPAWN IN THIS CREEK, A/P - ADULTS PRESENT, INADEQUATE INFORMATION TO MAKE ESTIMATE								
Location	**Stream Name**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Chinook**	**Comments**	
LOWER GRENVILLE								
	BELOWE CREEK	NO	86	250	175	DNS	Stan Hutchings/Gitga'at	
	DEER CREEK	NI	NI	NI	NI	NI		
	LOWE INLET SYSTEM	650	NI	DNS	DNS	DNS	Stan Hutchings/Gitga'at	
	RED BLUFF CREEK	DNS	NO	NO	NO	DNS	Stan Hutchings/Gitga'at	
	STEWART CREEK	NI	NI	NI	NI	NI	Stan Hutchings/Gitga'at	
	SYLVIA CREEK	14	DNS	DNS	DNS	DNS	Stan Hutchings/Gitga'at	
	TSIM CREEK	8	100	NO	NO	NO	Stan Hutchings/Gitga'at	
	TSIMTACK LAKE SYSTEM	AP	AP	NO	NO	DNS	Stan Hutchings/Gitga'at	
LOWER PRINCIPE								
	BOLTON CREEK	N/I	N/I	N/I	N/I	N/I		
	CURTIS CREEK	N/I	N/I	N/I	N/I	N/I		
	DEVON LAKE SYSTEM	N/I	N/I	N/I	N/I	N/I		
	KOORYET CREEK	370	N/I	10	N/I	N/I	Joe Trainor, Charter Patrol	
	MIKADO LAKE SYSTEM	N/I	N/I	N/I	N/I	N/I		
	SHENEEZA CREEK	N/I	N/I	N/I	N/I	N/I		
	KEECHA CREEK	N/I	N/I	N/I	N/I	N/I		
UPPER PRINCIPE								
	HANKIN CREEK	N/I	N/I	N/I	N/I	N/I		
OGDEN / KITKATLA								
	ALPHA CREEK	N/I	N/I	N/O	N/I	N/I	Joe Trainor, Charter Patrol	
	CAPTAIN COVE CREEK	3	2	10	30	N/I	Joe Trainor, Charter Patrol	
PETREL CHANNEL / ALA PASS								
	HEVENOR INLET CREEKS	N/I	N/I	N/O	15	N/I	Joe Trainor, Charter Patrol	
	MARKLE INLET CREEK	N/I	N/O	N/O	800	N/I	Joe Trainor, Charter Patrol	
	NEWCOMBE HARBOUR CREEKS (3)	N/I	N/I	N/I	N/I	N/I		
	RYAN CREEK	N/O	N/I	N/O	N/I	N/I	Joe Trainor, Charter Patrol	
	SHAW CREEK	N/I	50	N/O	N/I	N/I	Joe Trainor, Charter Patrol	
	WILSON INLET CREEK	N/I	N/O	N/O	N/I	N/I	Joe Trainor, Charter Patrol	
PORCHER INLET								
	HEAD CREEK	N/I	N/I	N/O	N/I	N/I	Joe Trainor, Charter Patrol	
	SALT LAGOON CREEK	N/I	N/I	N/I	N/I	N/I		
	WOLF CREEK	N/I	N/I	N/I	N/I	N/I		
	KITKATLA CREEK	N/I	N/I	N/I	N/I	N/I		
	PORCHER CREEK	N/I	N/I	N/I	N/I	N/I		
UPPER GRENVILLE								
	FALSE STEWART CREEK	N/I	N/I	N/O	N/I	N/I	Joe Trainor, Charter Patrol	
	KLEWNUGGIT INLET CREEKS	N/I	N/I	N/I	N/I	N/I		
	KUBAS CREEK	N/I	N/I	N/I	N/I	N/I		
	KUMEALON CREEK	6	160	840	112	25	Joe Trainor, Charter Patrol	
	KXNGEAL CREEK	N/I	N/I	N/I	N/I	N/I		
	PA-AAT RIVER	N/I	N/O	300	4	N/I	Joe Trainor, Charter Patrol	
	AREA 5 TOTAL	**1,051**	**398**	**1,410**	**1,136**	**25**		

Area 6

Area 6 Map

Figure 8 Area 6 Map

First Nations Fishery Review

There are 4 First Nations groups that include Area 6 Food, Social and Ceremonial salmon fisheries in their communal licence:

a) Gitxaala First Nation
b) Gitga'at First Nation
c) Haisla First Nation
d) Kitasoo First Nation

FSC fisheries occur throughout Area 6 in both marine and freshwater locations using a variety of gear types.

Recreational Fishery Review

The tidal water interception salmon sport fishery begins in late April, with effort increasing significantly in late May and continuing to mid-September. Initial effort is mostly by local anglers out of Kitimat, and then with a significant fleet made up of independent anglers and charter operators.
Due to predicted low returns of Northern Chinook salmon, the Department implemented Northern Chinook salmon conservation measures which reduced the daily Chinook limits in Area 6 as follows:
June 1, 2018 to July 31, 2018 – Daily limit of one (1) Chinook per day.

Other salmon species daily limits in Area 6 were 4 pink, 4 coho, 4 chum and 4 sockeye, with a combined daily limit of 4 salmon.
Recreational catch data is not provided for Area 6 at this time, but the internet recreational fishing effort and catch survey (iREC) and lodge data could provide catch estimates in future years.

Commercial Net Fishery Review

Hatchery updates and charter patrol inspections throughout the season suggested low pink and chum returns to local systems in area 6. Therefore no commercial gill net fisheries targeting Kitimat hatchery chum or seine fisheries targeting pink around Gil Island for 2018.

Table 42 Area 6 Gill Net Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON GILL NET In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 6

There are no Catch Estimate records for Management Area 6 for the specified date range.

Table 43 Area 6 Seine Catches

Fisheries and Oceans Canada | Pêches et Océans Canada

Canada

Fishery Operations System

Commercial SALMON SEINE In-Season Estimated Catch-by-Area (Pieces) for Period 01-Apr-2018 to 27-Nov-2018

Management Area 6

There are no Catch Estimate records for Management Area 6 for the specified date range.

2018 Stream Escapements

Table 44 Area 6 Stream Escapements

AREA 6 2018 PRELIMINARY ESCAPEMENT ESTIMATES

N/O - NONE OBSERVED, N/I - NOT INSPECTED, DNS - DOES NOT SPAWN IN THIS CREEK, A/P - ADULTS PRESENT, INADEQUATE INFORMATION TO MAKE ESTIMATE

Location	Stream Name	Sockeye	Coho	Pink	Chum	Chinook	Comments
ARISTAZABAL ISLAND WEST							
	BORROWMAN CREEK	N/I	N/I	N/I	N/I	N/I	
	CLIFFORD CREEK	N/I	N/I	N/I	N/I	N/I	
	DEVIL CREEK	N/I	N/I	N/I	N/I	N/I	
	DON CREEK	N/I	N/I	N/I	N/I	N/I	
	DUFFEY CREEK	N/I	N/I	N/I	N/I	N/I	
	EAGLE CREEK	N/I	N/I	N/I	N/I	N/I	
	FLUX CREEK	N/I	N/I	N/I	N/I	N/I	
	KDELMASHAN CREEK	N/I	N/I	N/I	N/I	N/I	
	LINNEA CREEK	N/I	N/I	N/I	N/I	N/I	
	LITTLE KETTLE CREEK	N/I	N/I	N/I	N/I	N/I	
	MCDONALD CREEK	N/I	N/I	N/I	N/I	N/I	
	NOBLE CREEK	N/I	N/I	N/I	N/I	N/I	
	SALMON CREEK	N/I	N/I	N/I	N/I	N/I	
	SENTINEL CREEK	N/I	N/I	N/I	N/I	N/I	
	STANNARD CREEK	N/I	N/I	N/I	N/I	N/I	
	TRENAMAN CREEK	N/I	N/I	N/I	N/I	N/I	
	WEST CREEK	N/I	N/I	N/I	N/I	N/I	
	WEST CREEK AND LAKE	N/I	N/I	N/I	N/I	N/I	
DOUGLAS-URSULA-DEVASTATION CHANNELS							
	ANGLER COVE CREEK	DNS	NO	NO	DNS	NI	Stan Hutchings, Charter Patrol
	BIG TILLHORNE RIVER	DNS	NO	250	6	NI	Stan Hutchings, Charter Patrol
	EVELYN CREEK	370	130	620	180	NI	Stan Hutchings/Haisla Fisheries Commission
	FISHTRAP BAY CREEK	NI	NI	NI	NI	NI	
	FOCH RIVER	10	390	2,460	10,250	NI	Stan Hutchings/Haisla Fisheries Commission
	GILTTOYEES CREEK	DNS	AP	AP	AP	AP	Stan Hutchings, Charter Patrol
	GOAT RIVER	DNS	NO	NO	AP	NI	Stan Hutchings, Charter Patrol
	GRIBBLE ISLAND CREEK	DNS	NO	AP	AP	DNS	Gitga'at Oceans & Land Dept.
	HARTLEY BAY CREEK	850	AP	290	2	DNS	Stan Hutchings, Charter Patrol
	HAWKSBURY ISLAND CREEK	24	NO	155	30	DNS	Stan Hutchings, Charter Patrol
	HUGH CREEK	8	200	710	35	DNS	Stan Hutchings/Haisla Fisheries Commission
	KEESIL CREEK	NI	NI	NI	NI	DNS	
	KIHESS CREEK	DNS	NI	NO	NO	DNS	Stan Hutchings, Charter Patrol
	KISKOSH CREEK	2	60	1,120	50	DNS	Stan Hutchings/Gitga'at Oceans & Land Dept.
	KITKIATA CREEK	AP	AP	940	16	DNS	Stan Hutchings, Charter Patrol
	LITTLE TILLHORNE RIVER	DNS	NI	25	1	DNS	Stan Hutchings, Charter Patrol
	MISSED CREEK	NI	AP	NO	NO	DNS	Stan Hutchings, Charter Patrol
	PIKE CREEK	N/I	NI	NI	NI	NI	
	QUAAL RIVER	50	2,960	3,135	1,700	1	Stan Hutchings, Charter Patrol
	RIORDAN RIVER	DNS	25	100	30	DNS	Stan Hutchings, Charter Patrol
	VERNEY PASSAGE CREEK	450	AP	215	90	DNS	Stan Hutchings/Haisla Fisheries Commission
	WEEWANIE CREEK	DNS	AP	130	125	DNS	Stan Hutchings, Charter Patrol
FRASER - GRAHAM REACH							
	AALTANHASH RIVER						KXIRA
	CANOONA RIVER	550	AP	110	NO	DNS	Stan Hutchings, Charter Patrol
	DOME CREEK (HEAD CR.)	DNS	NI	NO	NO		Stan Hutchings, Charter Patrol
	GREEN RIVER	20	550	275	3,150	DNS	Stan Hutchings, Charter Patrol
	KHUTZE RIVER	DNS	NI	5,310	1,120	10	Stan Hutchings, Charter Patrol
	KLEKANE RIVER	N/I	N/I	N/I	N/I	N/I	
	MARMOT COVE CREEK	N/I	N/I	N/I	N/I	N/I	
	MARSHALL CREEK	N/I	N/I	N/I	N/I	N/I	
	MCKAY CREEK	N/I	N/I	N/I	N/I	N/I	
	MEYERS PASS CREEK	N/I	N/I	N/I	N/I	N/I	
	SCOW BAY CREEK	N/I	N/I	N/I	N/I	N/I	
	SODA CREEK	N/I	N/I	N/I	N/I	N/I	
	TAYLOR CREEK	N/I	N/I	N/I	N/I	N/I	
GARDNER CHANNEL							
	BRIM RIVER	DNS	650	5,780	205	9	Stan Hutchings/Haisla Fisheries Commission
	CRAB RIVER	DNS	NO	260	230	DNS	Stan Hutchings, Charter Patrol
	HOTSPRING CREEK	DNS	NO	100	215	DNS	Stan Hutchings/Haisla Fisheries Commission
	KEMANO RIVER	200	2,100	33,400	2,060	AP	Stan Hutchings/Haisla Fisheries Commission
	KILTUISH RIVER	25	315	475	1,410	AP	Stan Hutchings, Charter Patrol
	KITLOPE RIVER	12,350	AP	AP	AP	AP	Stan Hutchings/Haisla Fisheries Commission
	KOWESAS RIVER	DNS	AP	AP	NO	75	Stan Hutchings/Haisla Fisheries Commission
	PARIL RIVER	DNS	130	15	2	DNS	Stan Hutchings/Haisla Fisheries Commission
	TSAYTIS RIVER	NI	NI	NI	NI	NI	
	WAHOO CREEK	DNS	650	270	45	430	Stan Hutchings/Haisla Fisheries Commission

Location	Stream Name	Sockeye	Coho	Pink	Chum	Chinook	Comments
KITIMAT ARM							
	BEAVER CREEK	NI	NI	NI	NI	NI	
	BISH CREEK	DNS	AP	3,055	160	DNS	Stan Hutchings/Haisla Fisheries Commission
	BOLTON CREEK	NI	NI	NI	NI	NI	
	BOWBEYES CREEK	NI	NI	NI	NI	NI	
	CORDELLA CREEK	NI	NI	NI	NI	NI	
	DALA RIVER	36	1,950	6,090	3,790	3	Stan Hutchings/Haisla Fisheries Commission
	EAGLE BAY RIVER	DNS	NO	50	NO	DNS	Stan Hutchings, Charter Patrol
	EMSLEY CREEK	DNS	NO	NO	NO	DNS	Haisla Fisheries Commission
	FALLS RIVER	DNS	NI	NI	NI	DNS	
	GOBEIL BAY CREEK	DNS	NI	NI	NI	NI	
	KILDALA RIVER	DNS	1,500	6,300	960	100	Stan Hutchings/Haisla Fisheries Commission
	KITIMAT RIVER (Estimates include the tributary	400	7,000	15,000	8,000	1,500	Stan Hutchings/Haisla Fisheries Commission
	ANDERSON CREEK	DNS	51	NO	NO	DNS	Stan Hutchings/Haisla Fisheries Commission
	CECIL CREEK	NI	NI	NI	NI	NI	
	CHIST CREEK	NO	AP	537	49	21	Stan Hutchings/Haisla Fisheries Commission
	HUMPHRYS CREEK	DNS	25	3	2	NO	Stan Hutchings, Charter Patrol
	HIRSCH CREEK	DNS	AP	535	565	50	Stan Hutchings, Charter Patrol
	LITTLE WEDEENE RIVER	DNS	AP	1,720	250	6	Stan Hutchings, Charter Patrol
	HUNTER CREEK	1,415	NO	750	160	AP	Haisla Fisheries Commission
	TETLOCK CREEK	NI	NI	NI	NI	NI	
	M.E.S.S. CREEK	NI	NI	NI	NI	NI	
	MOORE CREEK	NI	NI	NI	NI	NI	
	PINE CREEK	NI	NI	NI	NI	NI	
	WATHL CREEK	1	70	11	9	DNS	Haisla Fisheries Commission
	WATHLSTO CREEK	NO	NO	NO	NO	NO	Haisla Fisheries Commission
LAREDO CHANNEL - CAMPANIA SOUND							
	ARGYH CREEK	NI	NI	NI	NI	NI	
	BARNARD CREEK	DNS	AP	425	120	DNS	Stan Hutchings/Gitga'at Oceans & Land Dept.
	BLACKROCK CREEK	NI	NI	NI	NI	NI	
	CAMPANIA ISLAND CREEK	NI	NI	NI	NI	NI	
	CARTWRIGHT CREEK	NI	NI	NI	NI	NI	
	CHAPPLE CREEK	NI	NI	NI	NI	NI	
	CHERRY CREEK	NI	NI	NI	NI	NI	
	CRANE BAY CREEK	DNS	NO	NO	NO	DNS	Stan Hutchings/Gitga'at Oceans & Land Dept.
	CRIDGE INLET CREEK	NI	NI	NI	NI	NI	
	DOUGLAS CREEK	NI	NI	NI	NI	NI	
	EAST ARM CREEK	10	95	90	96	DNS	Stan Hutchings, Charter Patrol
	EVINRUDE CREEK	NI	NI	NI	NI	NI	
	FURY CREEK	NI	NI	NI	NI	NI	
	GIL CREEK	DNS	25	952	33	DNS	Stan Hutchings/Gitga'at Oceans & Land Dept.
	HOME BAY CREEKS	NI	NI	NI	NI	NI	
	KENT INLET LAGOON CREEK	NI	NI	NI	NI	NI	
	LAEDKIN CREEK/RIVERS BIGHT	DNS	NO	21	12	DNS	Stan Hutchings, Charter Patrol
	LIMESTONE CREEK	NI	NI	NI	NI	NI	
	MCMICKLING CREEK	NI	NI	NI	NI	NI	
	PENN CREEK	NI	NI	NI	NI	NI	
	RIVERS BIGHT CREEK	NI	NI	NI	NI	NI	
	ROLAND CREEK	NI	NI	NI	NI	NI	
	TALAMOOSA CREEK	NI	NI	NI	NI	NI	Stan Hutchings/Gitga'at Oceans & Land Dept.
	TURN CREEK	DNS	NO	50	1	DNS	Stan Hutchings/Gitga'at Oceans & Land Dept.
	TURTLE CREEK	DNS	NO	548	20	DNS	
	TUWARTZ CREEK	NI	NI	NI	NI	NI	
	WALE CREEK	NI	NI	NI	NI	NI	Stan Hutchings, Charter Patrol
	WEST ARM CREEK	30	60	65	410	DNS	Stan Hutchings, Charter Patrol
	WHALEN LAKE CREEK	DNS	NO	1	4	DNS	
	WINDY ISLAND CREEK	NI	NI	NI	NI	NI	
LAREDO SOUND							
	ARNOUP CREEK	N/I	N/I	N/I	N/I	N/I	
	BLEE CREEK	N/I	N/I	N/I	N/I	N/I	
	BLOOMFIELD CREEK	N/I	N/I	N/I	N/I	N/I	
	BUSEY CREEK	N/I	N/I	N/I	N/I	N/I	
	DALLAIN CREEK	N/I	N/I	N/I	N/I	N/I	
	DALLY CREEK	N/I	N/I	N/I	N/I	N/I	
	FIFER CREEK	N/I	N/I	N/I	N/I	N/I	
	GOIN CREEK	N/I	N/I	N/I	N/I	N/I	
	KAMIN CREEK	N/I	N/I	N/I	N/I	N/I	
	KWAKWA CREEK	N/I	N/I	N/I	N/I	N/I	
	NIAS CREEK	N/I	N/I	N/I	N/I	N/I	
	OSMENT CREEK	N/I	N/I	N/I	N/I	N/I	
	PACKE CREEK	N/I	N/I	N/I	N/I	N/I	
	POWLES CREEK	N/I	N/I	N/I	N/I	N/I	
	PRICE CREEK	N/I	N/I	N/I	N/I	N/I	
	PYNE CREEK	N/I	N/I	N/I	N/I	N/I	
	QUIGLEY CREEK	N/I	N/I	N/I	N/I	N/I	
	RONALD CREEK	N/I	N/I	N/I	N/I	N/I	
	STEEP CREEK	N/I	N/I	N/I	N/I	N/I	
	TRAHEY CREEK	N/I	N/I	N/I	N/I	N/I	
	TYLER CREEK	N/I	N/I	N/I	N/I	N/I	
	AREA 6 TOTAL	**16,801**	**18,936**	**92,348**	**35,593**	**2,205**	