



South Coast Salmon Strait of Georgia Stock Assessment

15 November 2024, Escapement Bulletin #9 – all salmon species

SUMMARY: This bulletin details the in-season escapement information for migrating salmon species for assessed river systems in the Strait of Georgia (SG) management area through the 2024 salmon escapement season. The SG area extends down the East Coast of Vancouver Island and Mainland Inlets (DFO Statistical Areas 14 to 20, roughly Comox to Sooke and the Sunshine Coast).

Environmental Conditions: Water levels in the SG river systems were average to below average for returning fish during the summer and into the early fall, with periods of moderate rainfall in the South Coast since the late summer. Multiple events of heavy rainfall has occurred over the past month, causing frequent flooding in many rivers and there is lots of additional rainfall in the forecast.

Operations: Major hatcheries, First Nations and Stock Assessment staff in the SG area began enumeration activities early in the year (Nanaimo early/summer chinook) and continued through the summer for other chinook (Puntledge, Chemainus) and sockeye (Sakinaw) populations. Fall counts of all salmon species are coming to a close in many systems. Coho enumeration will continue into the New Year for later spawners. Many hatcheries, first nations, contractors, community groups and volunteers have been operating fences, video cameras, sonars, and traps and conducting walks and swims for escapement enumeration, assisting in loading spawning channels, and conducting brood stock collections and egg takes.

2024 PRE-SEASON EXPECTATIONS:

Chinook: There are no formal forecasts for Chinook returns to the Strait of Georgia for 2024. In 2023 most final escapement estimates were average to above average for major fall chinook hatchery systems such as Big Qualicum, Little Qualicum, Nanaimo and Cowichan. Cowichan escapement exceeded the 4 and 12-year averages and the target while wild production continues to drive the adult escapement with the proportion of hatchery fish in the population estimated at 3% in 2023. A similar upward trend was observed in the Nanaimo River in 2023 and 2024 escapement is expected to remain near average. Summer chinook in Nanaimo and Puntledge remain as stocks of concern with low escapements.

Coho: 2024 returns are expected to be average for hatchery stocks, with forecasted marine survival remaining low. Expectations for wild stocks are similar with continued low marine survival/productivity relative to historic values and variable returns around the coast. In-season recreational fishery catch estimates for the Strait of Georgia have been well above recent averages which may be a cause for cautious optimism for improved escapements this fall.

Pink: No formal forecast of pink populations in the Strait of Georgia. Expectations for 2024 are for average even-year returns and odd years are more dominant than even years in most of the SG area.

Chum: Forecast methods consistent with previous years indicate chum returns in 2024 will be driven by below average parental brood abundances in 2019 to 2021 (terminal return forecast, see table below) but the 7 year decline in Chum productivity will likely mean below average returns of fall Chum in 2024 (adjusted 'like last year' forecast, see table below). These expectations for chum are highly uncertain, and with limited fishery openings expected due to conservation measures, they are conservative estimates.

2024 Chum Expectations:

Forecast 2024	Forecast		Escapement Target	2023 Escapement	Adjusted "Like Last Year"
	Low	High			
Mid-Vancouver Island	50,600	75,800	230,000	23,755	39,900
- Puntledge	21,800	32,600	60,000	11,989	18,500
- Big Qualium	10,200	15,400	85,000	6,336	14,500
- Little Qualicum	19,200	28,800	85,000	5,430	8,600
Jervis/Narrows Inlets	19,800	29,800	85,000	9,869	20,400
Nanaimo River	38,400	57,600	40,000	22,219	23,800
Cowichan River	106,900	160,300	160,000	31,095	32,900
Goldstream River	14,700	22,100	15,000	4,238	2,600
Sliammon Creek	5,800	8,600	11,000*	5,483	8,200
Theodosia River	14,100	21,100	21,000	6,198	15,200
Okeover Creek	1,800	2,800	6,000	1,444	5,100
Lang Creek	1,300	1,900	2,500	2,088	1,400

* Sliammon target is the median limit reference point

Sockeye: Sockeye returns to Sakinaw were forecast at 49 (37 clipped and 12 not-clipped) adults, with a very high uncertainty due to low marine survival observed in recent years. There are no other sockeye forecasts in the Strait of Georgia area.

2024 OBSERVATION SPECIES SUMMARY

Chinook: Fall chinook are past the peak of migration and most are finished spawning with very few live fish left in recent reports (Table 1). Cowichan run timing is later than most systems, and are now at peak spawn; the fence was installed on 4 September and was removed 18 October, and deadpitch crews are out sampling the natural spawners on the spawning grounds. Most hatcheries have finished conducting egg takes, except Cowichan hatchery which began egg takes last Tuesday and the final egg take will be next Tuesday. Summer chinook have also finished spawning.

Coho: Coho migration is at or past the peak in most rivers in the Strait of Georgia streams, and there has been good returns in many systems (Table 2). Observations have also increased in smaller creeks over the past month after the rainfall events, with many fish migrating further upstream and into tributaries and channels. There has been some reports of the highest coho returns in some systems compared to recent years.

Chum: It is now past the peak run timing for the chum season, and counts in the major South Vancouver Island systems (Area 17 to 19) as well as Northern Sunshine Coast (Area 15) have exceeded target escapements and forecasts, with the largest chum returns observed since 2016 (Table 3). Most other systems have above the recent 4-year average returns. Sonar counts are underway on Nanaimo, Cowichan and Little Qualicum Rivers, and the 4th and final helicopter count in Jervis and Narrows Inlets is scheduled for next Monday.

Pink: Pink enumerations have come to an end and fish have completed spawning (Table 4). Pink returns were higher than the observed even-year 3 generation averages, except in Nanaimo River.

Sockeye: Sakinaw sockeye enumeration is at completion and the final escapement count is 183 adults, which is well above the forecast with a higher than average marine survival than expected (Table 5). Sakinaw sockeye are nearing their spawning time on the beaches around Sakinaw Lake. Few sockeye have been observed in other rivers.

ESCAPEMENT MONITORING METHODS:

There are records of spawning salmon populations in over 165 streams or rivers across the East Coast of Vancouver Island and Mainland Inlets (DFO Statistical Areas 14 to 20, roughly Sooke to Comox and the Sunshine Coast). Only a subset of these streams are surveyed annually. These indicator stocks are used to monitor the status of populations across the area. Many groups participate in the annual Strait of Georgia escapement survey, including First Nations, DFO-contracted survey crews, Charter Patrols, Conservation and Protection Officers, Hatchery Staff (SEP) and local stewardship and volunteer groups.

Where escapement counts or surveys are conducted, the estimates are classed to one of three categories:

1. True Abundance

Full quantitative escapement assessments of indicator streams or other complete escapement counts are classified as True Abundance meaning fish are counted as they move upstream past a fixed location. The type of count for these systems is cumulative, meaning the number reported in the tables below is the total number of fish that have migrated past the fixed point enumeration site as of the count date. These are generally assessed through counting operations at fishways or fences, using video recordings or sonar counting systems (e.g. DIDSON/ARIS), although mark-recapture is an alternative method as well as trap and truck (e.g. Shawnigan coho). Some indicator stocks are marked (e.g. using coded-wire tags, thermally-marked otoliths or PIT tags) and recovery of marks in fisheries and escapement allows survival, distribution, and exploitation rate parameters to be estimated, and expansions to final estimates.

True abundance estimates for Cowichan Chinook, Cowichan Chum, Shawnigan Coho, and Goldstream Chinook are reported, as cumulative escapement to date, in these bulletins.

2. Relative Abundance

Most systems that are monitored for escapement are classified as relative abundance estimates, where there is a partial quantitative escapement assessment conducted. The type of these survey assessments are periodic and include swim surveys, helicopter counts, bank or stream walks, tagging and index surveys. These are categorized by Area Under the Curve (AUC) estimates or peak live plus dead (PL+D) estimates in most cases, and sometimes mark-recapture estimates. AUC estimates are calculated when the system was surveyed with good coverage of the population on a regular basis (3 or more surveys over the spawning season, covering the start, peak and end of the run) and PL+D estimates are used when the surveys are too far apart (longer than the expected survey life of the species for that system), or there are too few surveys to calculate an AUC.

All relative abundance systems are recorded here as the PL+D estimate up to and including the most recent survey (e.g. in-season data). The PL+D counts are only a minimum index of abundance as the final escapement estimates may be corrected for observer efficiency and estimated "survey life" of spawners (via AUC analyses).

Relative abundance estimates in hatchery systems are often monitored more closely than other systems, and may include a mixed survey type (e.g. True Abundance fence counts mixed with estimates for below fence via swim surveys). Salmon returns to Puntledge, Qualicum, Little Qualicum, Nanaimo and Goldstream are in this category.

3. Presence/Absence

This category defines the estimate when only a partial count was available, and/or the count was not representative of the entire population or habitat. These are labelled as adults present, when 1 or more adults were observed, or none observed, when no fish were observed during a survey. These systems are not detailed in this bulletin.

RESULTS:

In-season assessment results for hatchery and non-hatchery systems are reported in Tables 1 to 5, for Chinook, Coho, Chum, Pink and Sockeye, respectively. These tables include the type of survey, the group doing the surveys, total or peak count to date (including natural spawners, broodstock and other removals), date of last survey, and average escapement information. Four and 12 year average historic escapements, corresponding to roughly one and three generations for chinook, coho, chum and sockeye, and the even-year 3 generation average for pinks, are also included in these tables where they are available.

For cumulative enumeration method estimates (e.g. fences), averages (in black) are total return to river, which includes natural spawners, broodstock, and other river removals (e.g. ESSR, in-river fisheries) and all adults and jacks are included. New since 2021, averages in grey italics are the expanded peak live plus dead in-season counts, including adults and jacks, where periodic counts are conducted throughout the run (e.g swims, stream walks). Four year averages include surveys conducted from 2020-2023. Twelve year averages include surveys conducted from 2012-2023. Table 6 includes a list of the full names of enumeration participant groups.

Comparisons between current totals and average historical estimates should be interpreted with caution, especially before the runs are complete (for cumulative counts) or before the peak of the run has passed (for periodic counts). Also, some counts are minimum estimates due to weather and limited surveys during the peak of the run. Chinook escapement is normally completed by November with the peak in early to mid-October, Coho escapement will be complete in the New Year with the peak in late October to early November, Chum escapement is normally completed by late November with the peak of the run in late October to early November. Final escapement totals will be calculated in the New Year, and sent out in a final escapement bulletin when complete.

The data presented here are preliminary in-season estimates and will be reviewed and finalized following the escapement season. Populations with PL+D (Peak Live plus Dead) count types in Tables 1 to 5 with 3 or more surveys will be expanded to AUC (Area-Under-the-Curve) estimates following data analysis, which generally increases the final number to 1.5-2.5 times the PL+D count.

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Note: If you have collected any salmon escapement data in the Strait of Georgia area, or are interested in doing stream surveys in your local creeks, please contact.

Table 1: **Chinook** escapement counts to date for 2024 Strait of Georgia salmon surveys. Counts include adults and jacks combined as well as brood removals when available. Included jack totals are provided below the table when known. Averages are total return to river for cumulative counts (black) and average in-season expanded peak live plus dead for periodic counts (*grey italics*).

Area	System	Survey Type/Count Type	Enumeration conducted by	Date of last count	Number of surveys	Peak Estimate	4 yr Average	12 yr Average
14	Oyster River	Periodic/PL+D	A-T	18-Oct	3	25	<i>260</i>	<i>N/A</i>
14	Puntledge River - summer run	Mixed/Cumulative	SEP	13-Nov	-	89*	390	640
14	Puntledge River - fall run	Mixed/Cumulative	SEP	13-Nov	-	6662*	8,590	8,600
14	Big Qualicum River	Mixed/Cumulative	SEP	13-Nov	-	13158*	12,860	8,710
14	Little Qualicum River	Mixed/PL+D	SEP/StAD	6-Nov	8	5467*	<i>4,400</i>	<i>3,280</i>
14	Englishman River	Periodic/PL+D	BCCF/StAD	1-Nov	7	101*	<i>360</i>	<i>590</i>
15	Lang Creek	Fence/Cumulative	PRSS	12-Nov	-	594*	900	970
15	Sliammon Creek	Fence/Cumulative	TFN	11-Nov	-	13*	50	130
15	Theodosia River	Periodic/PL+D	TFN/CEL	7-Nov	8	5*	<i>10</i>	<i>40</i>
29	Chapman Creek	Mixed/PL+D	SN/SEP/SCSES	18-Oct	-	6	<i>10</i>	<i>10</i>
17	Nanaimo River - summer run	Mixed/Cumulative	SFN/NRSS/BCCF	31-Jul	-	834	<i>310</i>	<i>590</i>
17	Nanaimo River - fall run	Periodic/PL+D	NRSS	16-Oct	6	3430*	<i>5,250</i>	<i>2,860</i>
17	Chemainus River - summer run	Periodic/PL+D	QARS/StAD	30-Jul	2	10	<i>20</i>	<i>20</i>
18	Cowichan River - fall run	Fence/Cumulative	CT/StAD	18-Oct	-	15002*	28,130	18,260
19	Goldstream River	Mixed/PL+D	GVSEA	9-Nov	-	16*	10	20
20	Sooke River	Periodic/PL+D	BCCF	7-Nov	5	263*	<i>410</i>	<i>470</i>

*Jacks included: Puntledge summer 7, Puntledge fall 1868, Big Qualicum 1451, Little Qualicum 101, Englishman 16, Lang 196, Sliammon 2, Theodosia 0, Nanaimo 1124, Cowichan 6143, Goldstream 5, Sooke 40

Table 2: **Coho** escapement counts to date for 2024 Strait of Georgia salmon surveys. Counts include adults and jacks combined as well as brood removals when available. Included jack totals are provided below the table when known. Averages are total return to river for cumulative counts (black) and average in-season expanded peak live plus dead for periodic counts (*grey italics*).

Area	System	Survey Type/Count Type	Enumeration conducted by	Date of last count	Number of surveys	Peak Estimate	4 yr Average	12 yr Average
14	Oyster River	Periodic/PL+D	A-T	18-Oct	3	4500	<i>7,055</i>	<i>N/A</i>
14	Black Creek	Fence/Cumulative	A-T	15-Nov	-	13479*	5,160	5,780
14	Little River	Fence/Cumulative	LRES	13-Nov	-	4380	980	620
14	Puntledge River	Mixed/Cumulative	SEP	13-Nov	-	8542*	10,550	6,850
14	Rosewall Creek	Periodic/PL+D	FBSES	23-Oct	1	985*	<i>1,030</i>	<i>870</i>
14	Roy Creek	Fence/Cumulative	RCSSES	3-Nov	-	1,319	<i>N/A</i>	106
14	Nile Creek	Periodic/PL+D	NCES	24-Oct	3	296*	<i>N/A</i>	<i>N/A</i>
14	Tsable River	Periodic/PL+D	FBSES	19-Aug	1	0	<i>N/A</i>	<i>N/A</i>
14	Cook Creek	Periodic/PL+D	FBSES	6-Nov	1	184*	<i>120</i>	<i>90</i>
14	Wilfred Creek	Periodic/PL+D	FBSES	6-Oct	3	371	<i>330</i>	<i>330</i>
14	Big Qualicum River	Mixed/Cumulative	SEP	13-Nov	-	17430*	15,240	11,760
14	Little Qualicum River	Mixed/PL+D	StAD/SEP	6-Nov	8	3784*	<i>2,310</i>	<i>2,150</i>
14	Englishman River	Periodic/PL+D	StAD/BCCF	1-Nov	7	1674*	<i>2,120</i>	<i>2,890</i>
14	Clay Young Channel	Periodic/PL+D	VIU	7-Nov	3	220	<i>420</i>	<i>320</i>
15	Lang Creek	Fence/Cumulative	PRSS	12-Nov	-	2082*	1,720	1,630
15	Theodosia River	Periodic/PL+D	TFN/CEL	7-Nov	8	411*	<i>740</i>	<i>1,120</i>
15	Sliammon Creek	Fence/Cumulative	TFN	11-Nov	-	386*	150	140
16	Anderson Creek	Periodic/PL+D	LF	5-Nov	11	25*	<i>50</i>	<i>40</i>
16	Brittain River	Periodic/PL+D	SN/StAD	6-Nov	2	55	<i>240</i>	<i>140</i>
16	Deserted River	Periodic/PL+D	SN/StAD	6-Nov	2	0	<i>330</i>	<i>620</i>
16	Myers Creek	Periodic/PL+D	LF	6-Nov	10	48*	<i>50</i>	<i>40</i>
16	Sakinaw Lake	Fence/Cumulative	CAS/SN/StAD/SEP	6-Nov	-	884*	<i>N/A</i>	<i>N/A</i>
16	Skwakwa River	Mixed/PL+D	SN/StAD	6-Nov	3	6,588	3,240	1,780
16	Vancouver River	Periodic/PL+D	SN/StAD	6-Nov	2	56	<i>170</i>	<i>290</i>
16	Colvin Creek	Periodic/PL+D	SBS	14-Nov	1	12	<i>NA</i>	<i>NA</i>
29	Chapman Creek	Mixed/PL+D	SN/SEP/SCSES	18-Oct	-	1,100	<i>510</i>	<i>440</i>
29	Chaster Creek	Periodic/PL+D	SCSS	18-Oct	1	8	<i>0</i>	<i>0</i>
29	Gibson Creek	Periodic/PL+D	SCSS		0	0	<i>N/A</i>	<i>N/A</i>
29	Roberts Creek	Periodic/PL+D	SCSS	10-Nov	2	38	<i>0</i>	<i>10</i>
29	Wilson Creek	Periodic/PL+D	SN	29-Oct	1	2	<i>0</i>	<i>10</i>
17	Departure Creek	Periodic/PL+D	DBNA	14-Nov	4	13	<i>N/A</i>	<i>N/A</i>
17	Millstone River	Fishway/Cumulative	VIU	15-Nov	-	31	<i>120</i>	<i>130</i>
17	Chase River	Periodic/PL+D	VIU	6-Nov	3	34*	<i>160</i>	<i>200</i>
17	Nanaimo River	Periodic/PL+D	NRSS	16-Oct	6	1421*	<i>2,260</i>	<i>3,080</i>
18	Averill Creek	Periodic/PL+D	SMWS		0	0	<i>N/A</i>	<i>N/A</i>
18	Bings Creek	Periodic/PL+D	SMWS		0	0	<i>N/A</i>	<i>N/A</i>
18	Richards Creek	Periodic/PL+D	SMWS		0	0	<i>N/A</i>	<i>N/A</i>
18	Cowichan River	Fishway/Cumulative	CT/StAD	18-Oct	-	1870*	21,720	<i>N/A</i>
19	Shawnigan Creek	Trap/Cumulative	MB&DCS	13-Nov	5	8485*	3,340	2,610
19	Goldstream River	Mixed/PL+D	GVSEA	9-Nov	-	623*	820	860
19	Craigflower Creek	Fence/Cumulative	EAA	6-Nov	-	678	310	700
19	Millstream River	Fence/Cumulative	GVSEA	10-Nov	-	399	140	140
20	Sooke River	Periodic/PL+D	BCCF	7-Nov	5	440*	<i>460</i>	<i>580</i>

*Jacks included: Black 3979, Puntledge 542, Rosewall 23, Nile 4, Cook 9, Big Qualicum 3040, Little Qualicum 22, Englishman 40, Lang 345, Theodosia 88, Sliammon 53, Myers Anderson 2, Sakinaw 21, Nanaimo 85, Chase 1, Cowichan 351, Shawnigan 733, Goldstream 23, Craigflower 44, Sooke 31

Table 3: **Chum** escapement counts to date for 2024 Strait of Georgia salmon surveys. Counts include brood removals when available. Averages are total return to river for cumulative counts (black) and average in-season expanded peak live plus dead for periodic counts (*grey italics*).

Area	System	Survey	Enumeration	Date of	Number	Peak	4 yr	12 yr
		Type/Count	Type conducted by	last count	of surveys	Estimate	Average	Average
14	Oyster River	Periodic/PL+D	A-T	18-Oct	3	1,500	<i>770</i>	<i>N/A</i>
14	Little River	Fence/Cumulative	LRES	13-Nov	-	289	40	50
14	Puntledge River	Mixed/Cumulative	SEP	13-Nov	-	35,567	17,630	37,330
14	Rosewall Creek	Periodic/PL+D	FBSES	23-Oct	1	3,997	<i>1,020</i>	<i>1,250</i>
14	Wilfred Creek	Periodic/PL+D	FBSES	6-Oct	3	8,647	<i>2,090</i>	<i>1,730</i>
14	Nile Creek	Periodic/PL+D	NCES	24-Oct	3	239	<i>N/A</i>	<i>N/A</i>
14	Big Qualicum River	Mixed/Cumulative	SEP	13-Nov	-	44,049	8,920	50,760
14	Little Qualicum River	Periodic/PL+D	StAD/SEP	6-Nov	8	11,165	<i>6,560</i>	<i>9,970</i>
14	Englishman River	Periodic/PL+D	StAD/BCCF	1-Nov	7	1,474	<i>790</i>	<i>3,100</i>
14	Clay Young Channel	Periodic/PL+D	VIU	7-Nov	3	111	<i>130</i>	<i>710</i>
15	Lang Creek	Fence/Cumulative	PRSS	12-Nov	-	8,560	2,290	4,910
15	Theodosia River	Periodic/PL+D	TFN/CEL	7-Nov	8	52,012	<i>4,450</i>	<i>6,590</i>
15	Okeover River	Periodic/PL+D	TFN	6-Nov	4	3,841	<i>700</i>	<i>1,760</i>
15	Sliammon Creek	Fence/Cumulative	TFN	11-Nov	-	29,831	6,920	11,620
16	Anderson Creek	Periodic/PL+D	LF	5-Nov	11	1,618	<i>1,590</i>	<i>1,530</i>
16	Angus Creek	Periodic/PL+D	SN/SCSS	29-Oct	3	158	<i>10</i>	<i>190</i>
16	Brittain River	Periodic/PL+D	SN/StAD	6-Nov	3	704	<i>170</i>	<i>370</i>
16	Burnett Creek	Periodic/PL+D	SN	29-Oct	1	38	<i>0</i>	<i>30</i>
16	Carlson Creek	Periodic/PL+D	SN	22-Oct	1	5	<i>0</i>	<i>30</i>
16	Deserted River	Periodic/PL+D	SN/StAD	6-Nov	3	19,363	<i>2,570</i>	<i>11,550</i>
16	Myers Creek	Periodic/PL+D	LF	6-Nov	10	395	<i>790</i>	<i>780</i>
16	Sechelt Creek	Periodic/PL+D	SN	16-Oct	1	0	<i>N/A</i>	<i>90</i>
16	Shannon Creek	Periodic/PL+D	SN	29-Oct	1	0	<i>0</i>	<i>90</i>
16	Skwawka River	Mixed/PL+D	SN/StAD	6-Nov	3	28,530	<i>2,560</i>	<i>6,170</i>
16	Snake Bay Creek	Periodic/PL+D	SN	22-Oct	1	74	<i>20</i>	<i>690</i>
16	Tzoonie River	Periodic/PL+D	SN/StAD	6-Nov	3	6,644	<i>1,550</i>	<i>12,440</i>
16	Vancouver River	Periodic/PL+D	SN/StAD	6-Nov	3	1,160	<i>170</i>	<i>290</i>
16	Colvin Creek	Periodic/PL+D	SBS	14-Nov	1	18	<i>N/A</i>	<i>N/A</i>
29	Chapman Creek	Mixed/PL+D	SN/SEP/SCSES	18-Oct	-	60	<i>160</i>	<i>140</i>
29	Chaster Creek	Periodic/PL+D	SCSS	23-Oct	1	63	<i>40</i>	<i>30</i>
29	Malcolm Creek	Periodic/PL+D	SCSS	1-Nov	1	7	<i>N/A</i>	<i>N/A</i>
29	Roberts Creek	Periodic/PL+D	SCSS	10-Nov	6	909	<i>160</i>	<i>240</i>
29	Wilson Creek	Periodic/PL+D	SN	29-Oct	1	64	<i>10</i>	<i>50</i>
28	Hutchinson Creek	Periodic/PL+D	SCSS	24-Oct	1	45	<i>N/A</i>	<i>N/A</i>
28	Langdale Creek	Periodic/PL+D	SCSS	18-Oct	1	0	<i>0</i>	<i>20</i>
28	Ouillett Creek	Periodic/PL+D	SCSS	24-Oct	1	31	<i>N/A</i>	<i>N/A</i>
17	Chase River	Periodic/PL+D	VIU	6-Nov	3	489	910	1,110
17	Nanaimo River	Mixed/Cumulative	SFN/StAD	10-Nov	-	54,092	36,450	64,440
18	Cowichan River	Mixed/Cumulative	CT/StAD	13-Nov	-	216,781	77,730	148,110
19	Goldstream River	Periodic/PL+D	GVSEA	9-Nov	-	16,793	<i>12,440</i>	<i>15,760</i>
20	Sooke River	Periodic/PL+D	BCCF	7-Nov	5	11,271	<i>14,010</i>	<i>18,070</i>

Table 4: **Pink** escapement counts to date for 2024 Strait of Georgia salmon surveys. Averages include total return to river. Averages are total return to river for cumulative counts (black) and average in-season expanded peak live plus dead for periodic counts (*grey italics*).

Area	System	Survey Type/Count Type	Enumeration conducted by	Date of last count	Number of surveys	Peak Estimate	Even-year 3 Generation Average
14	Oyster River	Periodic/PL+D	A-T	18-Oct	3	50,000	6,420
14	Little River	Fence/Cumulative	LRES	13-Nov	-	7	N/A
14	Puntledge River	Mixed/Cumulative	SEP	13-Nov	-	3,100	2,400
14	Big Qualicum River	Mixed/Cumulative	SEP	13-Nov	-	40,604	18,360
14	Little Qualicum River	Periodic/PL+D	StAD	6-Nov	8	1,324	200
14	Tsable River	Periodic/PL+D	FBSES	19-Aug	1	170	N/A
14	Wilfred Creek	Periodic/PL+D	FBSES	6-Oct	3	395	N/A
14	Nile Creek	Periodic/PL+D	NCES	24-Oct	2	8,046	N/A
14	Englishman River	Periodic/PL+D	StAD/BCCF	1-Nov	7	8,618	670
15	Lang Creek	Fence/Cumulative	PRSS	12-Nov	-	437	50
15	Sliammon Creek	Fence/Cumulative	TFN	11-Nov	-	1,527	100
15	Theodosia River	Periodic/PL+D	TFN/CEL	7-Nov	8	0	0
29	Chapman Creek	Mixed/PL+D	SN/SEP/SCSES	18-Oct	-	2,000	0
29	Roberts Creek	Periodic/PL+D	SCSS	10-Nov	7	1,047	N/A
17	Departure Creek	Periodic/PL+D	DBNA	14-Nov	1	18	N/A
17	Nanaimo River	Periodic/PL+D	NRSS	16-Oct	6	10,790	27,330
18	Cowichan River	Fence/Cumulative	CT/StAD	18-Oct	-	65	50
19	Goldstream Rvier	Periodic/PL+D	GVSEA	9-Nov	-	27	N/A

Table 5: **Sockeye** escapement counts to date for 2024 Strait of Georgia salmon surveys. Averages include total return to river. Averages are total return to river for cumulative counts (black) and average in-season expanded peak live plus dead for periodic counts (*grey italics*).

Area	System	Survey Type/Count Type	Enumeration conducted by	Date of last count	Number of surveys	Peak Estimate	4 yr Average	12 yr Average
14	Puntledge River	Mixed/Cumulative	SEP	13-Nov	-	0	0	N/A
14	Big Qualicum River	Mixed/Cumulative	SEP	13-Nov	-	0	10	10
14	Little Qualicum River	Periodic/PL+D	StAD	6-Nov	8	2	0	0
14	Englishman River	Periodic/PL+D	StAD/BCCF	1-Nov	7	2	0	0
15	Theodosia River	Periodic/PL+D	TFN/CEL	7-Nov	8	0	0	0
16	Sakinaw Lake	Fence/Cumulative	SN/StAD/SEP/CAS	6-Nov	-	183	110	180
17	Nanaimo River	Periodic/PL+D	NRSS	16-Oct	6	0	0	0
20	Sooke River	Periodic/PL+D	BCCF	7-Nov	5	3	0	0

Table 6: Full names of 2024 enumeration participant groups for above tables

Acronym	Enumeration Participant Group
A-T	A-Tlegay Fisheries Society
BCCF	British Columbia Conservation Foundation
CAS	Creekside Aquatic Sciences
CEL	Current Environmental Ltd.
CT	Cowichan Tribes
DBNA	Departure Bay Neighborhood Association
FBSES	Fanny Bay Salmonid Enhancement Society
GVSEA	Goldstream Volunteer Salmonid Enhancement Association
LF	Loon Foundation
LRES	Little River Enhancement Society
MB&DCS	Mill Bay & District Conservation Society
NCES	Nile Creek Enhancement Society
NRSS	Nanaimo River Stewardship Society
PRSS	Powell River Salmon Society
QARS	Q'ul-Ihanumutsun Aquatic Resources Society
RCSES	Roy Creek Salmonid Enhancement Society
SCSES	Sunshine Coast Salmon Enhancement Society
SCSS	Sunshine Coast Streamkeepers Society
SEP	Salmon Enhancement Program, DFO
SFN	Snuneymuxw First Nation
SN	Sechelt (shíshá'lh) Nation
SMWS	Somenos Marsh Wildlife Society
StAD	Stock Assessment Division, DFO
TFN	Tla'amin First Nation
TRRS	Tsolum River Restoration Society
VIU	Vancouver Island University