



**South Coast Assessment Bulletin
July 2021 Creel Survey Update
Recreational Fishery South Coast Tidal Waters**

Overview:

This bulletin provides a monthly update on estimates of recreational fin fishing effort and catch in the marine waters of southern British Columbia, within Pacific Fishery Management Areas 11 through 29 and 111, 121 to 127. These estimates are generated from data collected by the DFO's South Coast Creel Survey. A brief overview of the survey, the study area and methods used to collect data and generate these estimates is provided in the first bulletin of 2021, available on the Federal Science Library catalogue:

<http://science-libraries.canada.ca/eng/home/>

The search term 'South Coast assessment bulletin, creel survey' is helpful to find the bulletins
The estimates presented in this bulletin are based on in-season data and should be interpreted as preliminary and subject to revision as the data are finalized.

Recreational Fishery Links:

It is the responsibility of all fishers to be familiar with the current regulations prior to fishing. The online British Columbia Sport Fishing Guide will provide you with information on regulations and management measures in place. The guide can be accessed from the Fisheries and Oceans Canada Pacific Region Recreational Fishery webpage at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.html>

In-season management measure are sometimes required that are not published in the guide. These decisions are implemented by the issuance of a fishery notice which can be viewed at:

<http://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm>

Creel Survey Data:

A summary of survey statistics and preliminary recreation effort, measured in boat trips, by Pacific Fishery Management Area (PFMA) are presented in Table 1. Maps identifying the PFMA's are available by following the link provided above to the Fisheries and Oceans Canada Pacific Region Recreational Fishery webpage.

Cumulative totals are calculated from June to July inclusive.

Recreational Catch Estimates:

A summary of preliminary kept and released catch estimates for key species by PFMA are presented in Tables 2 through 5. Table 6 presents kept Chinook catch estimates by Pacific Fishery Management Area, divided into Aggregate Abundance-based Management (AABM) and Individual Stock-based Management (ISBM) groupings.

Contacts:

For additional information on the South Coast Creel Survey Programs, please contact:

Johnstone Strait and North Island Surveys (PFMA's 11, 12, 27, 111 & 127)

Matthew Clarke– Biologist, Johnstone Strait Salmon Stock Assessment
Matthew.Clarke@dfo-mpo.gc.ca
250-527-0157

Strait of Georgia Survey (PFMA's 13 – 20, 28 & 29)

Kevin Pellett– Program Head, Strait of Georgia Salmon Stock Assessment
Kevin.Pellett@dfo-mpo.gc.ca
250-756-7273

West Coast Vancouver Island Survey (PFMA's 20 – 26 & 121 – 126)

Pieter Van Will– Program Head, WCVI Salmon Stock Assessment
Pieter.VanWill@dfo-mpo.gc.ca
250-230-0048

All South Coast Area

Wilf Luedke - Area Chief South Coast Salmon Stock Assessment
Wilf.Luedke@dfo-mpo.gc.ca
250-756-7222

Table 1: Creel survey statistics (number of interviews and flights) and preliminary effort estimates (number of boat trips) by Pacific Fishery Management Area, July 2021.

Pacific Fishery Management Area (PFMA)	Number of Creel Interviews	Number of Effort Count Flights ¹	Effort			
			Estimate	%SE ²	Year to date ³	Year to date 5-yr avg
11	98	7	506	23%	897	1175
111	69	7	354	25%	900	469
12	457	8	3619	9%	4250	6453
13	381	12	9086	8%	11368	10678
14	201	12	6238	7%	8911	8002
15	92	12	2468	13%	2714	3430
16	68	12	3119	7%	5098	4579
17	186	12	2525	7%	4196	4253
18	56	12	965	11%	1844	2313
19	218	12	1696	21%	2847	4150
20	536	13	4663	17%	6352	8857
21	186	3	199	13%	428	242
121	237	3	603	33%	1011	1953
23	1074	13	7876	7%	12501	10117
123	291	6	1280	32%	1596	1840
24	220	5	506	27%	867	1411
124	137	5	781	21%	1369	1149
25	576	8	3732	11%	4922	6775
125	92	8	371	59%	555	1419
26	Based on Logbooks	8	2193	0%	2745	1786
126	Based on Logbooks	11	213	0%	394	1067
27	243	8	1533	6%	2271	2013
127	69	8	281	41%	399	921
28	73	12	673	9%	1302	2538
29	61	12	1384	10%	2495	4000
Total ⁴	5687		56864	3%	82232	91590

¹ The number of flights where weather conditions allowed effort counts; not including on-water counts

² %SE is a measure of uncertainty; one Standard Error as a percentage of the estimate.

³ Cumulative effort (from June 2021) to date summed across periods where surveys are active
- note that WCVI 5 year averages including September are unavailable (N/A)

⁴ Individual flights cover multiple PFMA's, so an additive total is not appropriate

Table 2: Preliminary recreational kept catch estimates (number of fish) for key salmon species by Pacific Fishery Management Area (PFMA), July 2021. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Chinook				Coho				Sockeye			
	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹
11	1257	31%	1852	3015	216	36%	233	259				
111	1309	26%	2417	1249	224	31%	469	57				
12	1223	13%	1223	3329	2148	13%	2168	2468				
13	9356	10%	9551	8805								
14	4042	14%	4042	3933	151	70%	210	2302				
15	1907	23%	1907	2062								
16	2364	26%	2715	1550								
17	1337	24%	1337	1042	115	59%	115	684				
18												
19												
20	1345	25%	1345	4408	1059	36%	2510	1225				
21	610	11%	1101	533								
121	754	23%	754	5895	1912	31%	2036	3587				
23	4780	9%	8081	7029	3087	10%	3575	2028	27066	12%	34059	14646
123	3147	23%	3153	5052	2189	34%	2457	1341				
24	509	25%	887	1366	341	25%	496	700				
124	1531	17%	1541	2292	447	29%	457	276				
25	3787	11%	5589	7251	1048	18%	2103	1749				
125	367	51%	367	1711	164	64%	164	263				
26	3137		4404	2168	101		489	220				
126												
27	1372	9%	1856	2094	1547	10%	2246	1772				
127					120	57%	233	259				
28												
29												
Kept Total ²	44134	5%	54122	64784	14869	8%	19961	19190	27066	12%	34059	14646

¹Cumulative kept catch (from June 2021) to date summed across periods where surveys are active

²Including only those areas with in-season estimates this month

Table 3: Preliminary recreational released catch estimates (number of fish) for key salmon species by Pacific Fishery Management Area (PFMA), July 2021. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Chinook				Coho				Sockeye			
	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ¹	Year to date 5-yr. average ¹
11	594	62%	757	1019	26	91%	26	71				
111	258	33%	388	535	10	56%	10	30				
12	6227	16%	6576	6841	1452	34%	1476	2496				
13	24822	10%	34508	14461	354	34%	386	6567	44	102%	44	212
14	12600	14%	20578	10925	823	44%	998	6947				
15	4870	31%	4954	1530	22	105%	22	893				
16	4483	25%	4981	1835	115	76%	156	1238				
17	8173	18%	13634	8675	177	49%	648	1961				
18	8	100%	8	209								
19	271	43%	325	986	22	73%	22	212				
20	6110	23%	7675	9030	3221	33%	8747	2751	71	65%	89	72
21	112	48%	112	102	3	59%	3	60	0		0	
121	13	104%	44	2681	536	34%	608	5841	2	140%	2	0
23	20797	12%	34290	16636	3152	20%	3744	1864	2932	21%	3458	666
123	4626	40%	4657	3676	6847	31%	7337	2670				
24	217	46%	714	607	124	88%	166	506				
124	473	29%	473	741	984	33%	984	418				
25	7317	13%	16305	5148	591	32%	1477	814	0		0	8
125	387	80%	387	354	273	77%	273	473				
26	631		631	876	11		11	60				
126					5		5	235				
27	2729	14%	3016	917	2172	14%	2531	901				
127	69	36%	85	223	191	55%	191	479				
28	86	71%	431	345	79	106%	79	238				
29	1017	35%	2189	2008	259	57%	259	937	20	116%	20	
Released Total ²	106890	5%	157718	90360	21449	12%	30159	38662	3069	20%	3613	958

¹Cumulative released catch (from June 2021) to date summed across periods where surveys are active

²Including only those areas with in-season estimates this month

Table 4: Preliminary recreational kept catch estimates (number of fish) for key groundfish species by Pacific Fishery Management Area (PFMA), July 2021. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Halibut				Lingcod				Rockfishes ¹			
	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²
11	189	55%	579	857	578	32%	706	638	1176	20%	1497	1944
111	217	35%	400	171	104	67%	593	60	333	29%	1604	451
12	584	25%	733	730	310	24%	395	484	976	16%	1017	1280
13	57	73%	69	26	969	21%	1248	1598	523	21%	935	713
14	2	128%	2	34	225	26%	434	271	437	20%	531	538
15	0		0	0	18	70%	265	282	137	23%	155	460
16	0		0	0	610	43%	639	824	1464	41%	1464	1185
17	0		0	0	96	55%	177	361	956	63%	1100	771
18	0		0	0	62	86%	94	174	332	15%	452	706
19	349	42%	708	328	109	47%	112	121	475	22%	698	887
20	36	115%	113	249	848	43%	1075	347	813	29%	1440	1787
21	21	48%	22	26	59	45%	59	48	71	29%	71	189
121	1884	33%	3672	4294	117	47%	374	312	123	40%	348	1047
23	29	58%	136	134	805	25%	1305	823	1662	15%	2299	2372
123	2208	35%	2706	2286	141	63%	160	175	79	42%	123	595
24	14	107%	68	128	54	64%	169	359	266	34%	384	786
124	759	26%	1711	637	1115	44%	1352	586	756	31%	1591	820
25	123	44%	357	400	802	32%	1221	958	584	25%	816	2217
125	143	64%	187	896	1041	65%	1637	1276	607	38%	853	1928
26	344		626	159	2238		2238	1397	1105		1105	3303
126	305		711	1419	737		737	2018	165		165	1361
27	307	24%	445	401	1536	23%	2448	942	1184	16%	1594	1337
127	478	47%	510	929	703	34%	768	1566	322	26%	354	1395
28	0		0	5	0		0	34	0		0	145
29	0		0	2	47	67%	229	414	961	12%	961	573
Kept Total ³	8049	15%	13755	14111	13324	11%	18435	16068	15507	8%	21557	28790

¹ All rockfishes; including those not identified to species

² Cumulative kept catch (from June 2021) to date summed across periods where surveys are active

³ Including only those areas with in-season estimates this month

Table 5: Preliminary recreational released catch estimates (number of fish) for key groundfish species by Pacific Fishery Management Area (PFMA), July 2021. Percent standard error (%SE; one standard error as a percentage of the estimate), a measure of uncertainty, is indicated for estimates from PFMA's where they are calculated in-season.

Pacific Fishery Management Area (PFMA)	Halibut				Lingcod				Rockfishes ¹			
	Estimate	%SE	Year to date ²	Year to date 5-yr. average ¹	Estimate	%SE	Year to date ²	Year to date 5-yr. average ²	Estimate	%SE	Year to date ²	Year to date 5-yr. average ¹
11	11	131%	88	70	132	36%	429	328	957	26%	1500	1326
111	38	70%	62	10	48	35%	541	234	196	30%	1447	563
12	190	64%	215	172	165	30%	199	267	2450	17%	2914	2882
13	0		0	44	2622	24%	3943	2486	1231	29%	2775	1855
14	0		0	38	2078	14%	5419	500	746	24%	2174	983
15	0		0	0	194	46%	430	319	706	40%	872	786
16	0		0	0	1051	38%	1626	288	2127	31%	2286	2960
17	0		0	1	305	65%	1507	499	350	52%	1406	1383
18	0		0	58	119	46%	236	313	173	54%	340	1163
19	8	113%	15	108	1290	27%	1644	1280	739	25%	920	1633
20	24	115%	33	89	1353	41%	1894	1315	1268	67%	2436	2811
21	0		0	1	0		0	43	33	92%	33	68
121	5	75%	93	176	4	140%	12	111	30	69%	75	364
23	1	112%	13	43	880	20%	1371	1371	1231	19%	1649	2738
123	119	52%	136	414	280	52%	283	172	37	75%	41	281
24	4	176%	4	10	105	107%	114	151	33	66%	62	414
124	70	63%	788	44	221	42%	274	173	369	33%	791	317
25	9	103%	31	148	336	37%	681	741	1055	32%	1422	2331
125	0		15	105	404	68%	805	234	268	63%	1085	868
26	4		4	58	64		64	180	570		570	1108
126	57		57	558	46		46	241	307		307	748
27	14	69%	14	105	340	23%	485	324	675	43%	757	1487
127	85	51%	85	230	173	28%	173	330	488	45%	488	839
28	0		0	0	0		11	30	0		46	287
29	0		0	0	29	106%	29	411	75	80%	982	708
Released Total ³	639	27%	1653	2482	12239	9%	22216	12341	16114	9%	27378	30903

¹ All rockfishes; including those not identified to species

² Cumulative released catch (from June 2021) to date summed across periods where surveys are active

³ Including only those areas with in-season estimates this month

Table 6: Preliminary recreational kept Chinook catch estimates (number of fish) by Pacific Fishery Management Area (PFMA), July 2021, divided into Aggregate Abundance-based Management (AABM) and Individual Stock-based Management (ISBM) groupings.

Area	Region	AABM			ISBM		
		Estimate	Year to date ¹	Year to date 5-yr. average ²	Estimate	Year to date ¹	Year to date 5-yr. average ²
121	Swiftsure Bank	754	754	5900	0	0	0
123	Offshore Barkley	3147	3153	5050	0	0	0
124	Offshore Clayoquot	1531	1541	2850	0	0	0
125	Offshore Nootka	367	367	1700	0	0	0
126	Offshore Kyuquot	0	0	2150	0	0	0
127	Offshore Quatsino	0	0	800	0	0	0
20 (West)	Juan de Fuca	0	0	0	1048	1048	1500
21	Nitinat	610	1101	550	0	0	0
23-1,2	Alberni Inlet	0	0	150	0	0	0
23-3 to 11	Barkley Sound	4763	8065	6950	0	0	0
24	Clayoquot Sound	509	887	1350	0	0	0
25	Nootka Snd. / Esperanza Inlet	0	1803	1150	3787	3787	6100
26	Kyuquot Sound	0	1267	800	3137	3137	1650
27	Quatsino Sound	0	484	700	1372	1372	1400
Total		11681	19422	30100	9344	9344	10650

¹Cumulative kept (from June 2021) to date summed across periods where surveys are active.

²Cumulative kept to date 5 year averages have been rounded to the nearest 50 fish.