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An update on trends in catch of Pacific salmon in Canada

by

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INTRODUCTION

Six species of Pacific salmon are harvested in British Columbia coastal waters. Sockeye, pink, and chum salmon are mainly harvested in commercial net fisheries while chinook and coho salmon are targeted by commercial, troll, and (increasingly) by sport fisheries located primarily in the Strait of Georgia. Steelhead constitute a minor component of the catch, and are not discussed in this document.

In general, escapement goals are established in Canada for major sockeye, pink, and chum stocks, and fisheries are managed to meet these escapement objectives. Chinook and coho fisheries are managed to achieve specified harvest rates although escapement goals have also been established for key stocks.

This document reports data on the changes in catch (numbers and Total weight) for the five major salmon species caught in British Columbian waters for the period 1952-1995.

Catch Trends

The 1995 catch of 45,048 tonnes was well below average for the period 1952-1995 (65,910 tonnes). Approximately half the 1995 catch was composed of pink (18,611 tonnes). Pink catches rebounded from the 1994 all time low (3,277 tonnes) to near the historical average (20,807 tonnes). Sockeye catches in 1995 at 10,300 were nearly one third of those recorded in 1994 and well below the average catch of 16,995 tonnes. Catches of chum (10,641 tonnes) were about one half of those in 1994 and below the 1952-1995 average of 13,601. Chinook salmon production has decreased steadily since the early 1970s and the 1995 catch of 1,342 tonnes was the lowest catch on record and well below the average catch of 5,380 tonnes. Coho salmon catches (4,154 tonnes) were also down from 1994 and well below the long term average of (9,127 tonnes).

Total catch by weight and numbers is reported in Tables 1 and 2 for the period 1952-95. Table 3 and 4 provides a breakdown of salmon catch by major statistical area in 1995 by weight and numbers. Table 5 and 6 provides a breakdown of salmon catch by major statistical area in 1994 by weight and numbers.

FIGURES

Fig. 1 a,b. Major statistical reporting areas for Pacific salmon catches in British Columbia.

Table 1. Total salmon catch (tonnes) by species in British Columbia 1952 -1995.*

<u>Year</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>Total</u>
1952	5828	13965	8892	23200	14452	66338
1953	6379	16029	9570	27901	24686	84565
1954	5551	21319	8586	11673	33747	80875
1955	5129	7549	9768	28624	8245	59315
1956	5544	9751	10531	13125	12441	51391
1957	5079	7130	9349	25840	12355	59753
1958	5828	33571	10140	15308	17283	82131
1959	5540	8172	8085	15601	10481	47878
1960	4248	7017	5827	7672	9214	33978
1961	3719	12063	10209	22464	6623	55079
1962	3712	9107	10952	42281	8186	74238
1963	4147	5376	10465	27079	6991	54058
1964	5485	10397	12967	16532	10847	56229
1965	5151	7350	15040	10310	3014	40864
1966	6176	11636	15889	33064	6965	73730
1967	6048	16587	9035	22612	5379	59661
1968	5956	18921	13052	25407	16644	79980
1969	5545	10877	7024	5991	6073	35510
1970	5745	11243	12347	23528	16744	69606
1971	7669	17039	12640	17202	5410	59960
1972	7387	9467	9429	17653	29925	73861
1973	6692	21413	10146	12936	32644	83831
1974	6721	21276	9264	11061	12465	60786
1975	6436	5635	7091	9961	5380	34502
1976	6841	12295	8283	16869	10913	55200
1977	6693	17328	8798	23759	6013	62591
1978	6987	21813	8139	15221	15804	67964
1979	6080	14343	9137	23406	4723	57690
1980	5893	8054	8225	13766	17358	53296
1981	5244	20950	6688	36861	6137	75881
1982	6341	28980	8224	3933	15055	62533
1983	4786	14197	9173	38720	4890	71767
1984	5509	12792	8779	11695	8978	47753
1985	4865	31062	7971	36546	23479	103924
1986	4486	29811	11666	29264	24922	100148
1987	4622	14714	7357	25865	11037	63596
1988	5218	11842	6155	31467	30205	84887
1989	4698	33674	7704	29593	9288	84956
1990	4642	35861	9221	25615	17184	92523
1991	4538	24525	8733	34130	10203	82129
1992	4731	20785	6370	14563	17953	64403
1993	4301	41797	3764	15328	17167	82357
1994	3179	29757	6758	3277	20295	63265
1995	1342	10300	4154	18611	10641	45048

* All 1994 and 1995 salmon catches are preliminary

Table 2. Total salmon catch (numbers) by species in British Columbia 1952 -1995.*

<u>Year</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>Total</u>
1952	806820	4887841	2966553	11416053	2645125	22722392
1953	888958	5920736	2972662	11213989	4885716	25882061
1954	781990	6964773	2558635	5617377	6535457	22458232
1955	718182	2835650	3039679	11427754	1632837	19654102
1956	749114	3258034	3179493	7591671	2588733	17367045
1957	720938	3040484	3256678	11442233	2440689	20901022
1958	813548	12050515	3052587	7520634	3215829	26653113
1959	771060	3255621	2953544	6784159	2029961	15794345
1960	593796	2859754	2104415	4459446	1841197	11858608
1961	512902	4565756	3391118	8323400	1287168	18080344
1962	518202	3503898	3768580	24285980	1604063	33680723
1963	812272	2089350	3543012	12208649	1603430	20256713
1964	982681	3620732	4331933	9683589	3035439	21654374
1965	999699	3020880	4538723	5113191	802166	14474659
1966	1190649	4022769	5600971	17767361	1499944	30081694
1967	1088940	6691284	3231030	9792822	1105098	21909174
1968	1031123	6345646	5004088	20166469	3094683	35642009
1969	1056304	4267694	2376685	2569217	1310445	11580345
1970	1179975	4077930	3897760	13516991	3679390	26352046
1971	1593252	6306007	4788842	8455992	1262977	22407070
1972	1548849	3562689	3355852	13996264	6031462	28495116
1973	1423792	7585778	3530197	6521341	6225042	25286150
1974	1466846	7225360	3693968	7373961	2201804	21961939
1975	1411706	2271494	2331676	4633607	1147184	11795667
1976	1543060	4813793	3698416	10348865	1901061	22305195
1977	1492516	6346302	3316546	10356377	1088184	22599925
1978	1367868	7221754	3349967	10748013	2978708	25666310
1979	1329230	5691342	3646858	11822526	866324	23356280
1980	1476408	3260096	3835871	8418658	3452751	20443784
1981	1331589	8443091	3138642	18085803	1122961	32122086
1982	1365458	10074474	3588233	2679553	2974848	20682566
1983	1154668	5523728	4534183	24000538	1005661	36218778
1984	1424876	5081199	4048203	7500864	1850797	19905939
1985	1137642	12250917	3681122	20319522	5492723	42881926
1986	1019717	10557884	5479257	17980804	5581417	40619079
1987	937419	5418141	4027972	13446962	2302062	26132556
1988	892440	4490092	3835265	23131194	6194142	38543133
1989	847471	13796395	3977130	17174907	1828401	37624304
1990	859345	14242568	4522247	17268954	3224319	40117433
1991	855936	10467706	3742379	24275731	2364147	41705899
1992	881621	8339244	3645070	10321920	4029580	27217435
1993	827351	18258281	2748680	10300434	4231334	36366080
1994	559554	11607744	2869334	2225765	4336256	21598653
1995	288194	4428061	1980069	11714235	2212359	20622918

* All 1994 and 1995 salmon catches are preliminary

Table 3. 1995 commercial salmon catch (tonnes) by statistical area.*

<u>Area</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>TOTAL</u>
1	415	334	698	2105	536	4088
2E	22	3	59	39	113	236
2W	4	50	49	530	56	689
3	76	3212	295	6390	1985	11958
4	84	3896	134	2490	923	7528
5	12	113	125	420	153	823
6	14	18	36	50	181	298
7	9	4	36	56	673	778
8	63	168	55	300	2969	3555
9	2	123	6	7	92	230
10	2	62	6	2	41	114
11	18	70	19	37	12	156
12	5	903	42	2775	805	4530
13	2	329	8	693	669	1701
14	1	0	0	0	98	99
15	0	0	0	0	0	0
16	0	1	0	1	1	3
17	0	0	0	0	0	0
18	0	3	0	47	2	52
19	0	0	0	0	0	0
19A	0	0	0	0	0	0
19B	0	0	0	0	0	0
20	4	256	78	1441	7	1786
21	14	1	129	30	853	1026
22	0	0	0	0	0	0
23	208	8	1472	417	4	2109
23A	0	0	0	0	0	0
23B	0	0	0	0	0	0
24	63	11	233	156	5	469
25	59	8	176	106	103	452
26	79	6	236	104	10	434
27	71	42	226	335	99	773
28	0	0	0	0	0	0
29	49	514	2	79	241	886
30	0	0	0	0	0	0
Taku	3	36	19	0	0	59
Stikine	9	128	13	0	1	152
Unknown	53	0	0	0	10	63
TOTAL	1342	10300	4154	18611	10641	45048

* All 1995 salmon catches are preliminary

Table 4. 1995 commercial and sport salmon catch (numbers) by statistical area.*

	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>TOTAL</u>
1	49699	154448	209227	1454331	154443	2022148
2E	2801	1260	17363	27065	28650	77139
2W	463	22257	13617	344403	17013	397753
3	16169	1485856	90308	3977639	416025	5985997
4	13641	1654721	39623	1493653	191443	3393081
5	1863	51875	35962	261443	32453	383596
6	2247	7311	10383	35756	29905	85602
7	1209	1727	10261	37320	167878	218395
8	7449	64332	15729	216417	532201	836128
9	378	44408	2215	4215	18404	69620
10	332	26425	2092	1629	8171	38649
11	2099	25985	5779	23338	2999	60200
12	1046	352648	14512	1582973	160257	2111436
13	18007	128792	8305	389871	142533	687508
14	12146	17	4675	1616	19781	38235
15	1990	4	234	310	1	2539
16	6013	508	572	806	255	8154
17	5107	153	438	672	9	6379
18	1551	1539	182	33099	403	36774
19	0	0	0	0	0	0
19A	176	0	60	0	0	236
19B	14327	2563	71107	154561	44	242602
20	1520	100636	36567	841737	1575	982035
21	2535	380	73234	20306	186503	282958
22	0	0	0	0	0	0
23	38640	3782	859852	286418	940	1189632
23A	1684	5104	416	4	0	7208
23B	14937	11	22841	1157	16	38962
24	16735	5045	145139	107435	1262	275616
25	8557	3393	75935	71718	23353	182956
26	11040	2773	101645	69800	2381	187639
27	9226	18604	99346	226386	25345	378907
28	1342	308	2580	2988	33	7251
29	7783	201861	1013	44938	45872	301467
30	0	0	0	179	0	179
Taku	745	14406	5314	2	0	20467
Stikine	1645	44848	3442	50	252	50237
Unknown	13092	81	101	0	1959	15233
Total	288194	4428061	1980069	11714235	2212359	20622918

* All 1995 salmon catches are preliminary

Table 5. 1994 commercial salmon catch (tonnes) by statistical area.*

<u>Area</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>TOTAL</u>
1	804	356	1575	408	144	3288
2E	74	36	124	131	593	958
2W	449	1926	212	109	59	2754
3	95	836	741	750	1219	3640
4	104	1605	273	374	660	3017
5	11	87	114	71	114	397
6	27	50	82	182	406	747
7	28	34	66	21	659	807
8	110	587	250	838	2423	4208
9	3	128	21	35	52	239
10	10	325	39	19	96	490
11	81	1792	72	20	39	2004
12	57	9991	142	256	3590	14036
13	36	3875	25	37	3101	7075
14	31	2	69	1	1635	1738
15	3	0	2	0	0	5
16	5	401	2	0	1	409
17	2	0	4	0	42	47
18	0	81	0	0	2	84
19	0	1	0	0	0	1
19A	0	0	0	0	0	0
19B	0	0	0	0	0	0
20	56	2332	305	4	3	2700
21	93	33	569	1	3903	4598
22	0	0	0	0	0	0
23	249	506	1078	1	4	1837
23A	0	0	0	0	0	0
23B	0	0	0	0	0	0
24	122	182	386	0	12	702
25	107	80	142	1	841	1170
26	134	71	166	1	7	379
27	291	137	218	14	22	681
28	0	0	0	0	0	0
29	113	4127	18	0	615	4873
30	0	2	0	0	0	3
Taku	14	61	49	0	0	124
Stikine	8	116	13	0	1	139
Unknown	62	0	0	0	52	114
Total	3179	29757	6758	3277	20295	63265

* All 1994 salmon catches are preliminary

Table 6. 1994 commercial and sport salmon catch (numbers) by statistical area.*

<u>Area</u>	<u>Chinook</u>	<u>Sockeye</u>	<u>Coho</u>	<u>Pink</u>	<u>Chum</u>	<u>Total</u>
1	98530	145515	482477	296825	43492	1066839
2E	9179	15129	37583	87525	134349	283765
2W	54521	788703	60114	76318	17599	997255
3	14117	352267	219015	505359	295607	1386365
4	13378	654687	82960	230860	164112	1145997
5	1593	36777	33180	48260	28026	147836
6	3693	20558	22455	117840	75494	240040
7	3391	13385	17484	12157	191751	238168
8	14238	232600	64244	562828	494138	1368048
9	553	48185	5760	19840	11014	85352
10	1558	128395	10968	11058	20403	172382
11	10295	728751	19817	12967	10222	782052
12	9552	3721610	44262	181970	680851	4638245
13	27384	1478292	51305	41709	607919	2206609
14	18465	978	137393	2788	368825	528449
15	3716	157	4003	363	29	8268
16	11852	156490	7733	153	261	176489
17	7895	1047	21523	138	8615	39218
18	1605	37590	632	28	548	40403
19	0	593	0	0	0	593
19A	167	0	141	0	0	308
19B	14372	3043	118617	292	9	136333
20	13840	877777	124245	2488	714	1019064
21	15705	13784	286542	513	825918	1142462
22	0	0	0	0	0	0
23	42803	217389	560683	529	1003	822407
23A	14224	30261	19	0	0	44504
23B	32415	1038	15522	61	5	49041
24	19879	78067	201567	378	2322	302213
25	14877	33229	56395	605	198783	303889
26	18240	29600	67481	1021	1900	118242
27	38170	56925	83890	10389	5915	195289
28	986	1138	3699	2	1	5826
29	14947	1641239	10926	147	128846	1796105
30	29	943	8	89	4	1073
Taku	1811	23155	13321	168	17	38472
Stikine	1151	38447	3370	97	187	43252
Unknown	10423	0	0	0	17377	27800
Total	559554	11607744	2869334	2225765	4336256	21598653

* All 1994 salmon catches are preliminary

READ CAREFULLY

1. Reporting of all catches to the Dept. of Fisheries and Oceans is the responsibility of the fisherman and a condition of licence renewal.
2. Accurate catch reports must include the map number or numbers showing the area in which your fish were caught.
3. The statistical areas shown on this map are to be used as a guide only. For more exact information refer to the Pacific Fishery Management Area Regulations.

- Dept. of Fisheries and Oceans Office
- Statistical areas are divided by red lines
- Surfline



Fisheries and Oceans
Pêches et Océans

Figure 1a
Canada

Note: All areas revised February 1985

STATISTICAL AREA MAP

SHOWING AREAS OF CATCH FOR
BRITISH COLUMBIA WATERS
SOUTHERN HALF

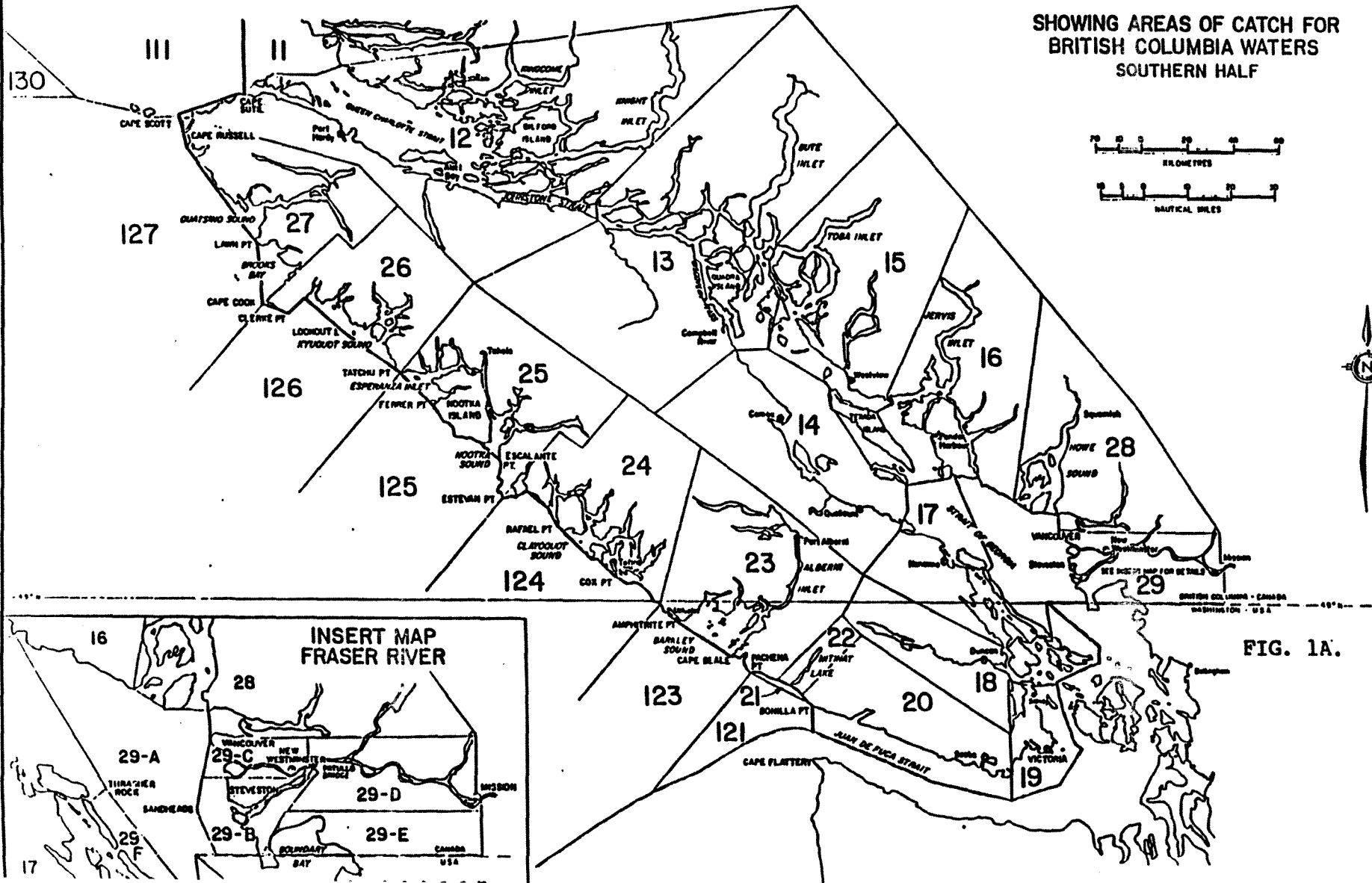


FIG. 1A.

READ CAREFULLY

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Fig. 1b.
Canada

- 3 Dept. of Fisheries and Oceans Office
- Statistical areas are divided by red lines
- Surfline

Note: All areas revised February 1965

STATISTICAL AREA MAP

SHOWING AREAS OF CATCH FOR
BRITISH COLUMBIA WATERS
NORTHERN HALF

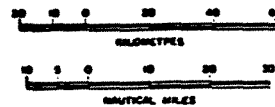
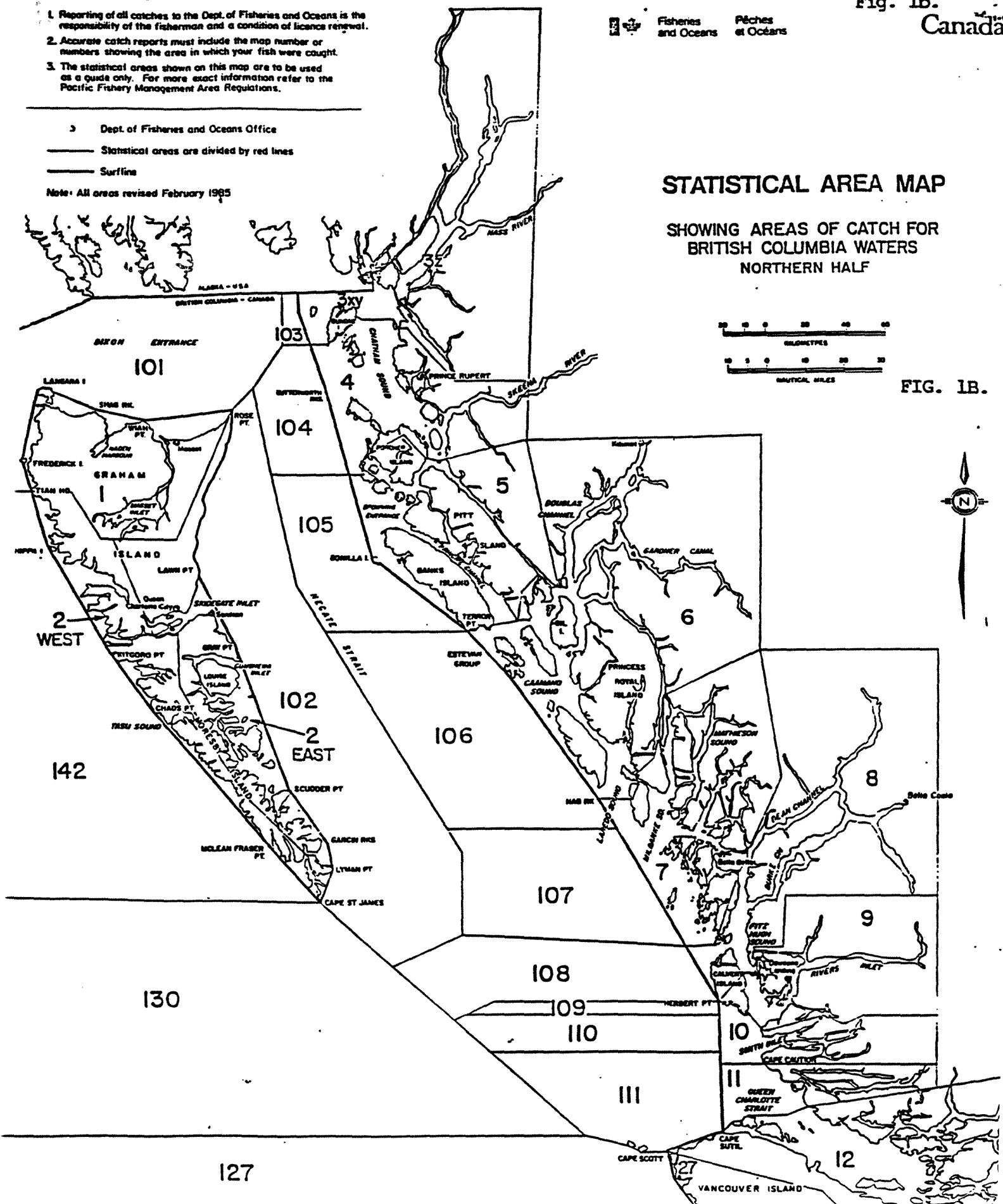


FIG. 1B.



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