

2022 Post Season Review

Ketchikan Management Area

Purse Seine
Districts 1-4



Bo Meredith
Area Management Biologist
Commercial Fisheries - Ketchikan

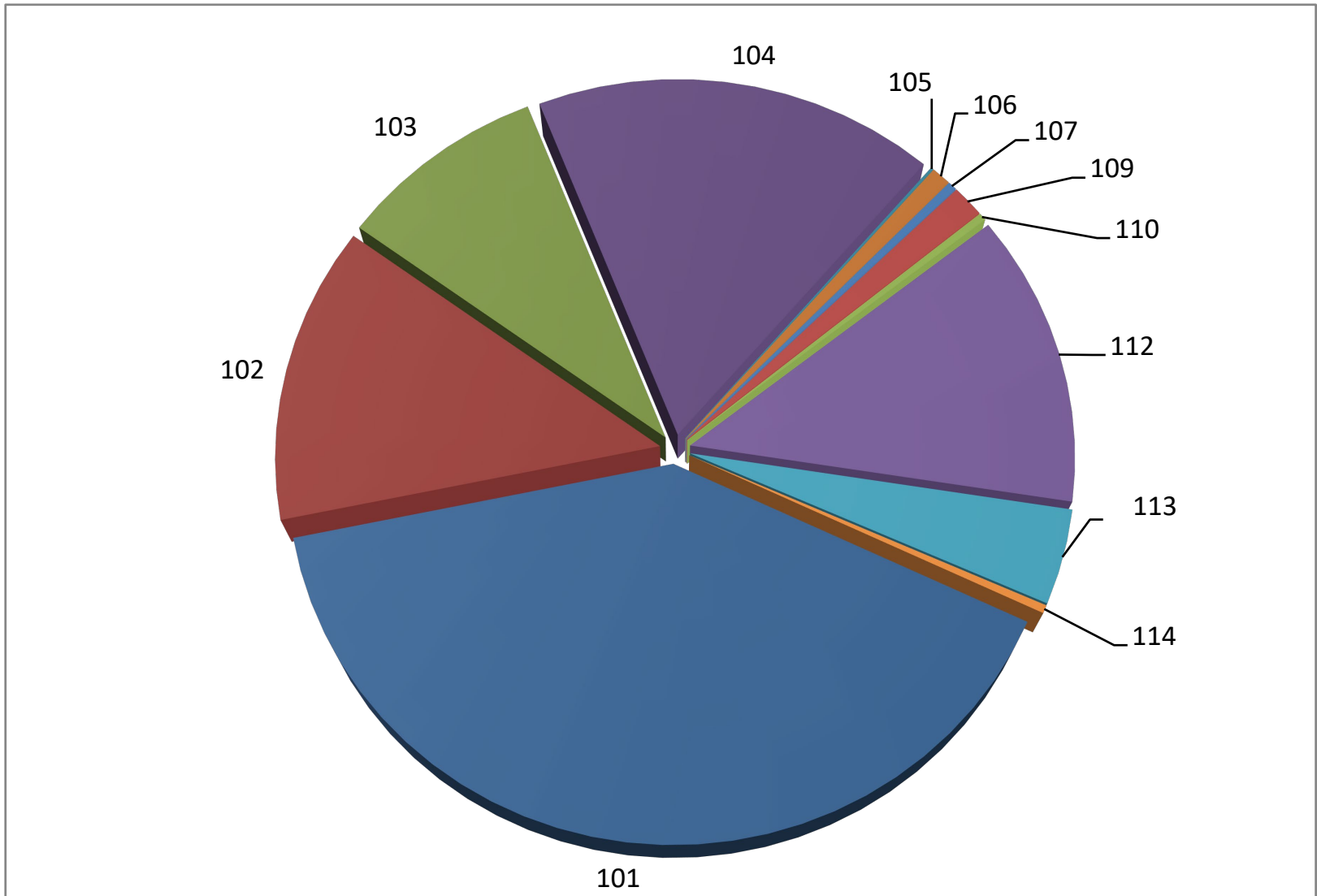
Purse Seine Harvest – Southeast Traditional Harvest Only – no THA's

Year	District	Chinook	Sockeye	Coho	Pink	Chum	Total	Number of Permits
2022	101	105	49,398	25,880	5,776,497	201,483	6,053,363	99
2022	102	80	42,681	20,108	1,898,198	779,958	2,741,025	106
2022	103	817	25,323	31,380	1,313,395	311,180	1,682,095	73
2022	104	12,981	476,385	64,381	2,525,681	338,060	3,417,488	72
2022	105	2	1,160	1,068	17,103	6,872	26,205	6
2022	106	7	8,288	1,978	123,222	10,267	143,762	23
2022	107	3	952	377	57,289	23,641	82,262	30
2022	109	33	1,171	5,913	206,704	16,243	230,064	19
2022	110	3	157	210	49,748	5,541	55,659	3
2022	112	47	13,724	4,178	1,871,431	189,156	2,078,536	61
2022	113	74	4,865	2,119	603,060	146,812	756,930	63
2022	114	5	1,313	172	51,179	6,446	59,115	3
TOTAL	TOTAL	14,157	625,417	157,764	14,493,507	2,035,659	558	194

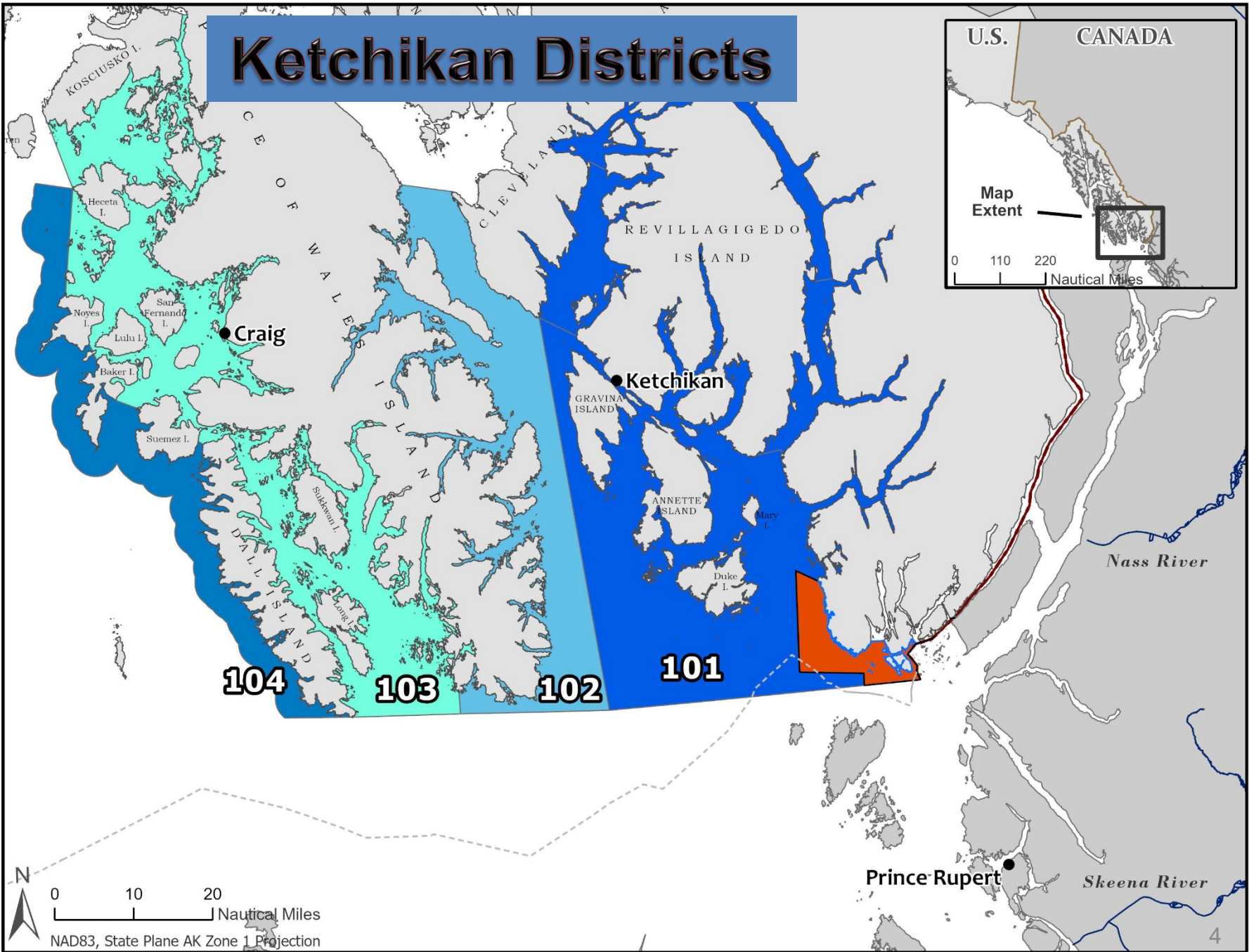
Total boats Ketchikan = 168

Total boats all Southeast = 194

Southeast Alaska Purse Seine Traditional Pink Salmon Harvest by District - 2022



Ketchikan Districts



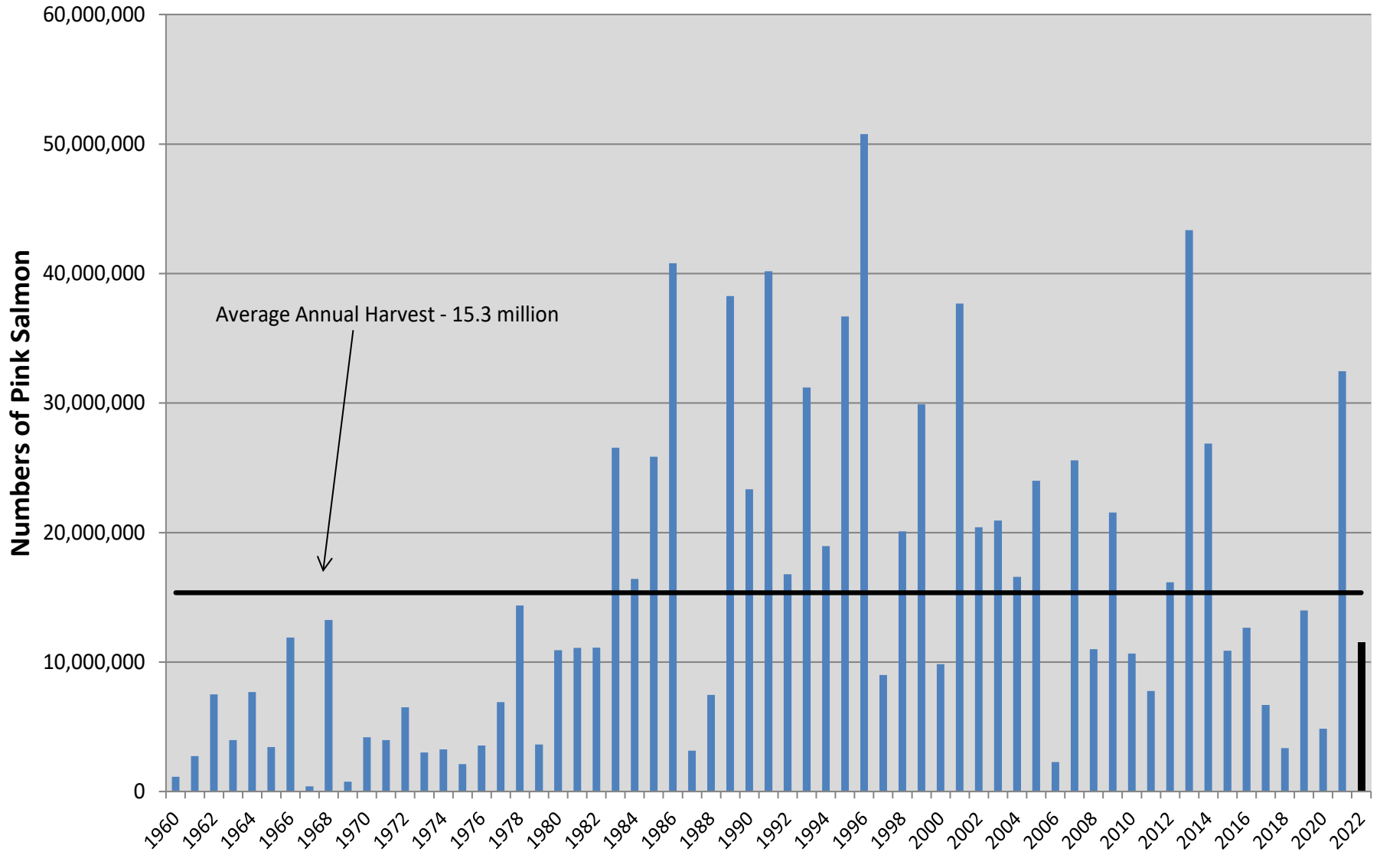
2022 Ketchikan Area Commercial Net Harvests

Purse Seine and Gillnet Common Property Fisheries - Districts 1-4

Fishery	Chinook	Sockeye	Coho	Pink	Chum	Totals
PS 101	105	49,398	25,880	5,776,497	201,483	6,053,363
PS 102	80	42,681	20,108	1,898,198	779,958	2,741,025
PS 103	817	25,323	31,380	1,313,395	311,180	1,682,095
PS 104	12,981	476,385	64,381	2,525,681	338,060	3,417,488
GN 101	1,881	26,551	27,424	381,600	332,075	769,531
Carroll THA GN	1,901	0	0	0	30	1,931
Carroll THA SN	5,294	12	1	13	46	5,366
Neet Bay THA GN	2,354	0	1	3	123	2,481
Neets Bay THA PS	3,269	13	1	16	2,190	5,489
Nakat THA GN	1	112	2,159	12,544	58,155	72,971
Kendrick THA PS	0	11	74	104	5,123	29,455
Annette Island GN	1,137	4,428	1,759	265,238	69,314	341,876
Annette Island PS	394	9,651	5,751	1,709,069	46,279	1,771,144
Totals	30,214	634,565	178,919	13,882,358	2,144,016	16,894,215

*Nakat and Kendrick harvest shown began on August 12 when it opened for common property.

Ketchikan Management Area Traditional Purse Seine Pink Salmon Harvest, 1960-2022

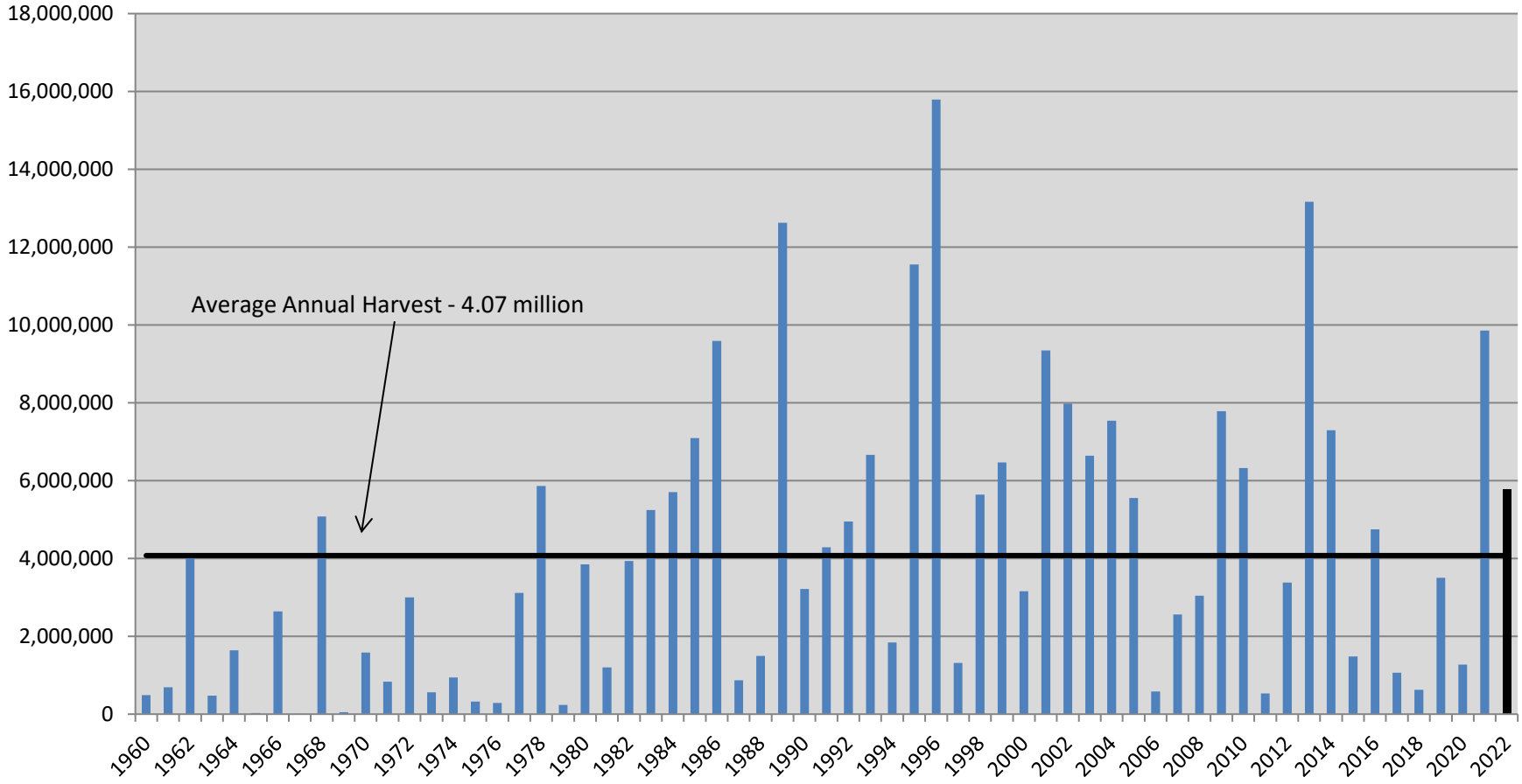


2022 District 1 Purse Seine – Harvest by Opening

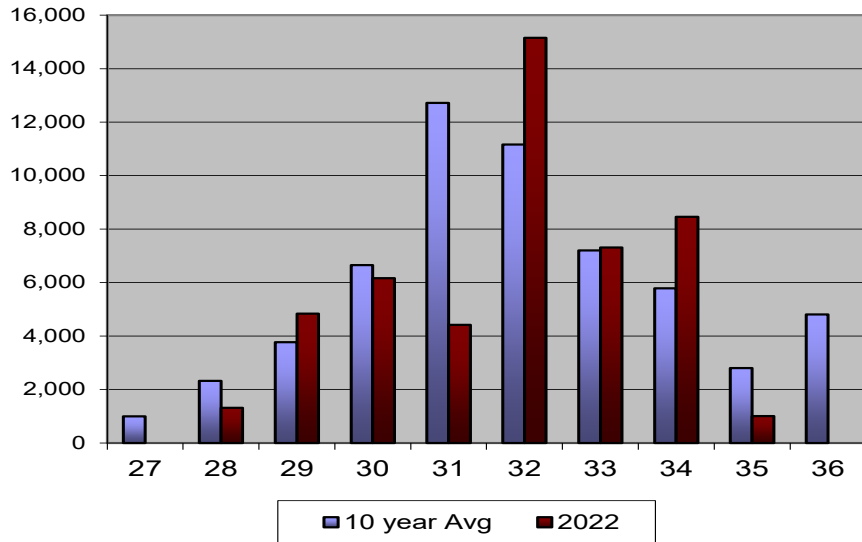
Opening	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
28		695	162	15,542	6,216	21	15
28B		610	117	34,094	3,011	22	15
29		511	125	24,024	3,427	24	15
29B		4,327	786	110,582	10,499	42	15
30		2,753	459	67,899	8,201	23	15
30B		3,407	808	81,822	12,268	23	15
31		1,341	416	120,033	8,340	14	15
31B		3,079	1,014	332,774	22,879	40	15
32		4,335	1,960	861,892	37,995	46	39
32B	7	11,465	2,049	756,934	23,476	41	39
33		4,351	3,256	1,239,236	24,286	62	39
33B	50	3,066	3,024	804,299	12,476	61	39
34	26	7,123	6,048	812,615	14,131	50	39
34B	19	1,675	3,046	364,653	8,505	41	39
35	3	660	2,610	150,098	5,773	22	39
Total	105	49,398	25,880	5,776,497	201,483	116	393

- Pinks ranked 18th of 62 since 1960.
- 10-year avg = 4.0 million pinks.
- Hugh Smith restrictions persisted from SW 29-33. Hugh Smith final esc of 1,640 is less than a quarter of the lower end of the 8K escapement goal.
- Strong returns to George, Carroll, and Bostwick and the late run Quadra and Portland Canal stocks. Die offs in Bostwick and White River. White River was significant.

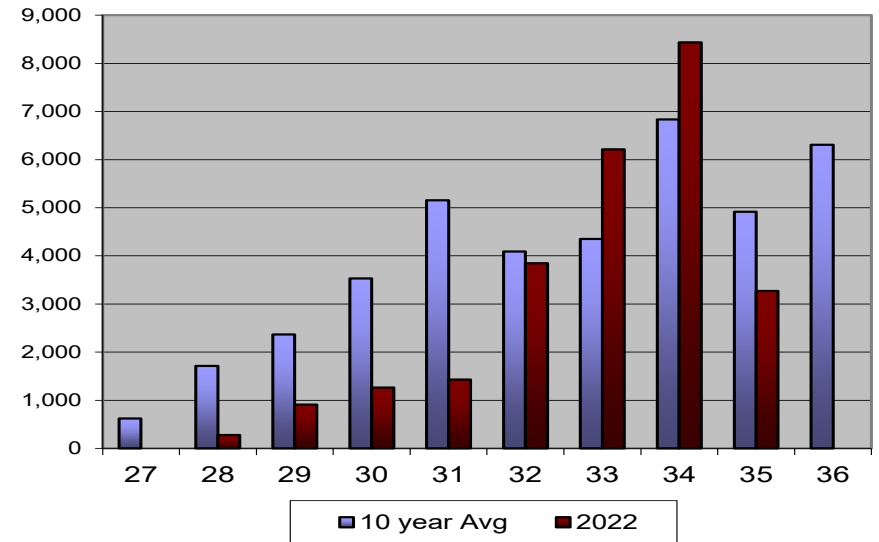
District 1 Traditional Purse Seine Pink Salmon Harvest 1960-2022



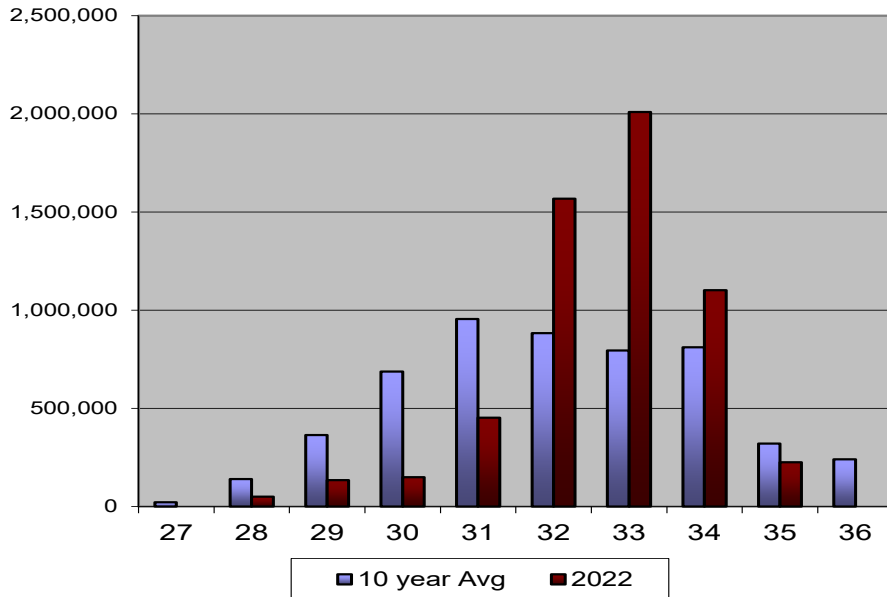
**District 1 Purse Seine Weekly Harvest
10 year avg vs 2022 - sockeye**



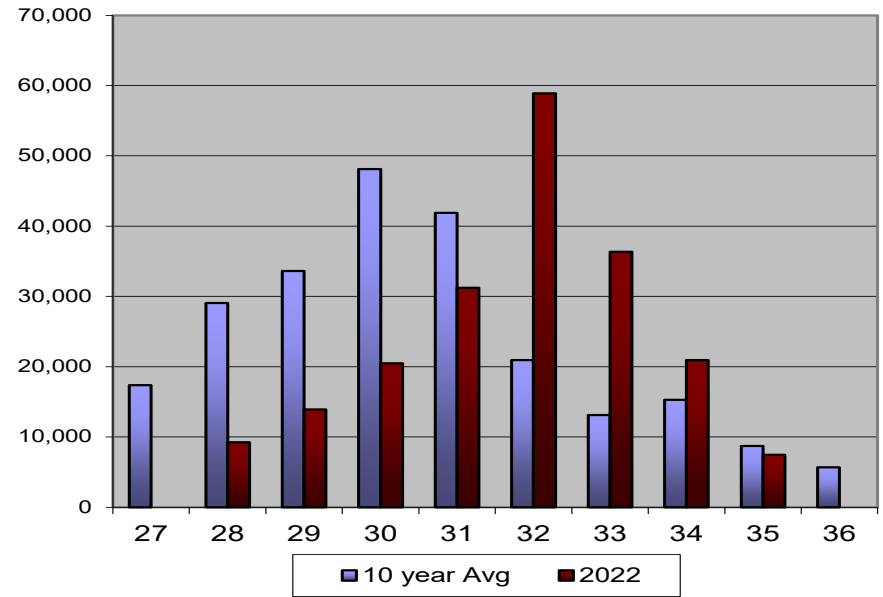
**District 1 Purse Seine Weekly Harvest
10 year avg vs 2022 - coho**



**District 1 Purse Seine Weekly Harvest
10 year avg vs 2022 - pink**



**District 1 Purse Seine Weekly Harvest
10 year avg vs 2022 - chum**



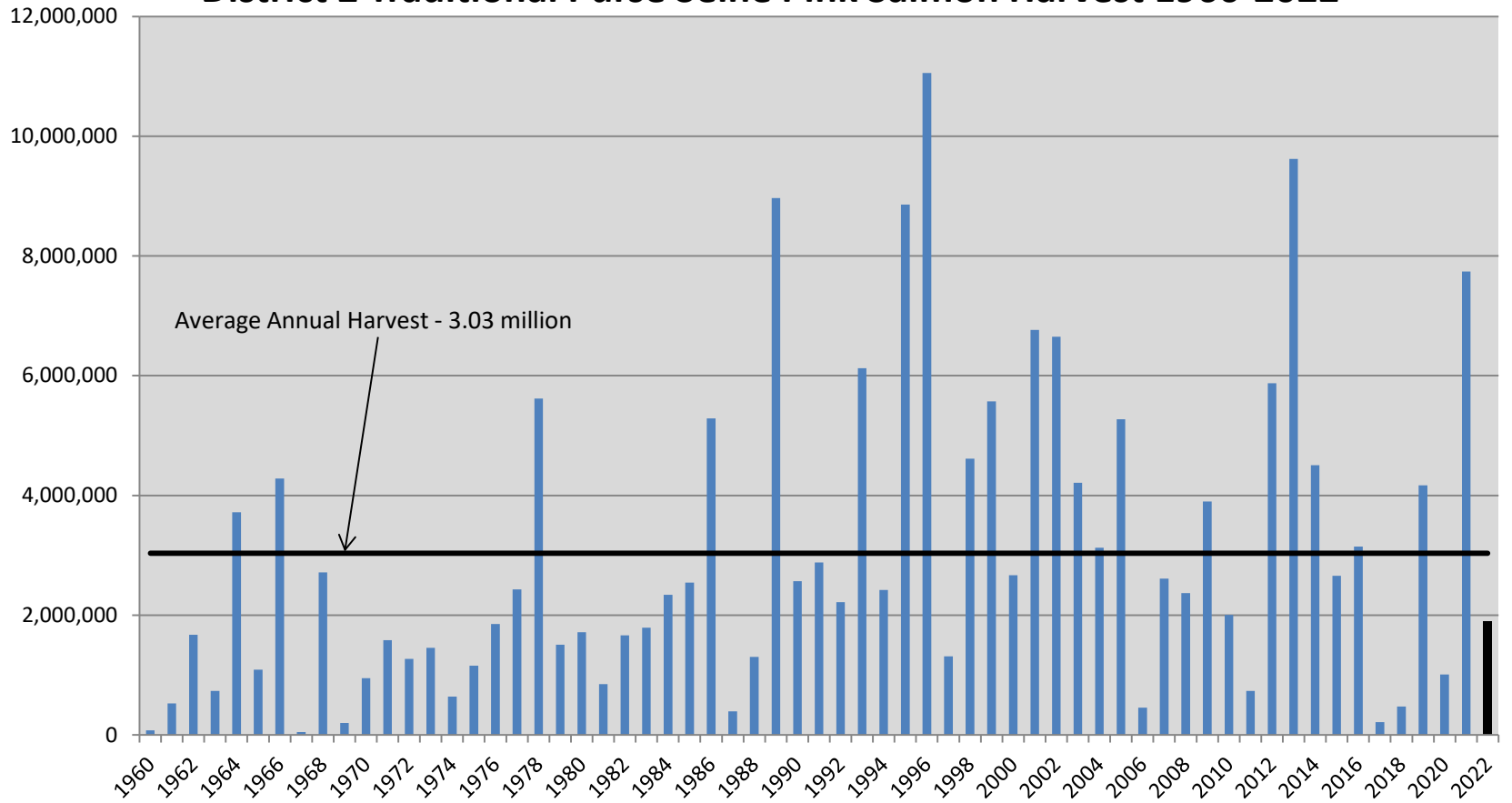
2022 District 2 Purse Seine – Harvest by Opening

Fall Chum fishing

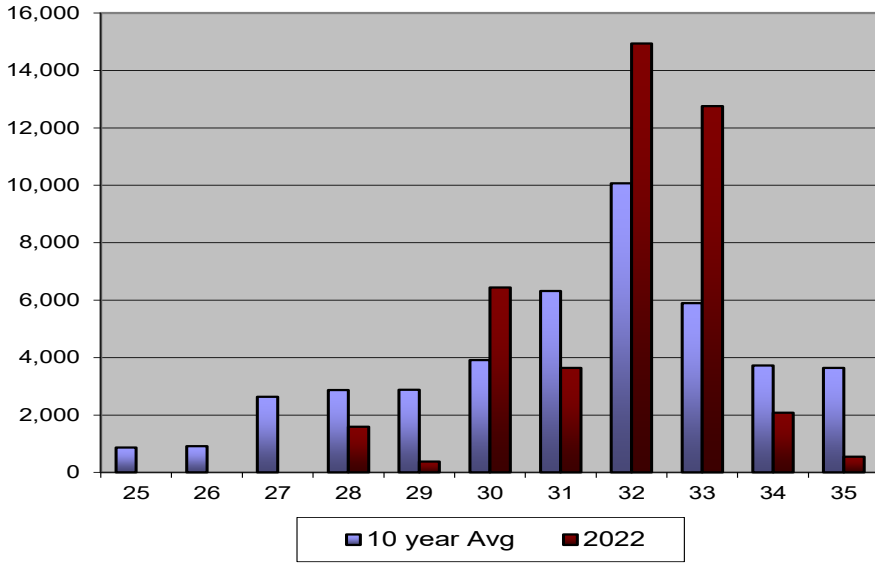
Opening	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
28		525	237	4,921	36,100	19	15
28B		1,065	401	9,141	71,847	47	15
29		43	27	36	9,719	12	15
29B		334	101	615	42,460	6	15
30		2,807	913	91,799	116,793	45	15
30B		3,636	2,024	110,782	151,856	50	15
31		2,470	2,144	196,158	134,987	41	15
31B		1,394	806	75,347	24,565	16	15
32		5,091	2,245	474,520	63,651	25	39
32B		9,850	2,506	416,464	50,190	30	39
33	6	8,681	1,997	194,243	19,025	26	39
33B	49	4,090	1,806	166,530	20,346	20	39
34	2	1,649	1,682	87,949	19,336	10	39
34B	5	427	384	24,515	3,533	5	15
35	5	547	1,886	44,084	6,071	14	39
37	13	68	671	984	4,852	10	12
38		4	278	110	4,627	7	12
Total	80	42,681	20,108	1,898,198	779,958	107	393

- Pinks rank 36th out of 62 since 1960.
- 10 yr avg = 3.0 million
- Escapements mixed. Moira weak. Harris River weak (~100K) but other Kasaan systems did well. Chomly had a nice bounce back year as the parent pink year was extremely weak.
- Limited fall chum fishery. Escapements ended up slightly above the upper bound of SEG.

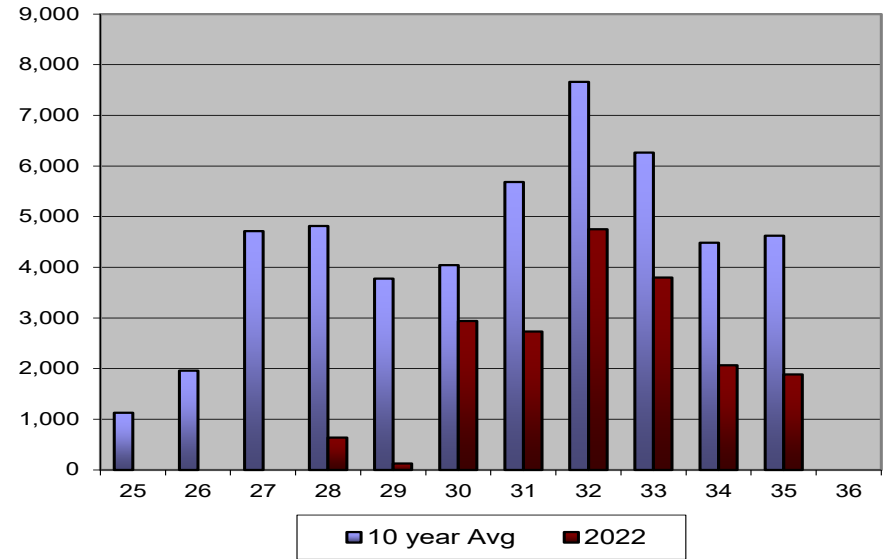
District 2 Traditional Purse Seine Pink Salmon Harvest 1960-2022



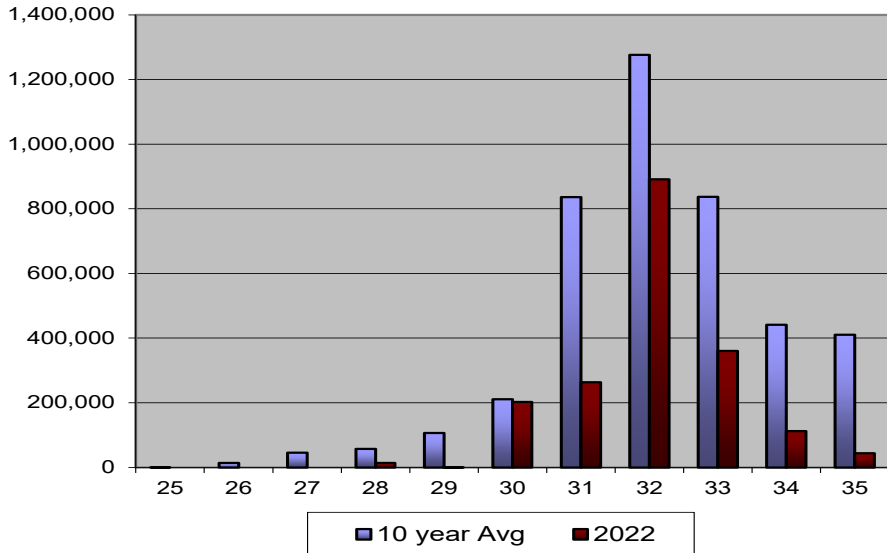
**District 2 Purse Seine Weekly Harvest
10 year avg vs 2022 -sockeye**



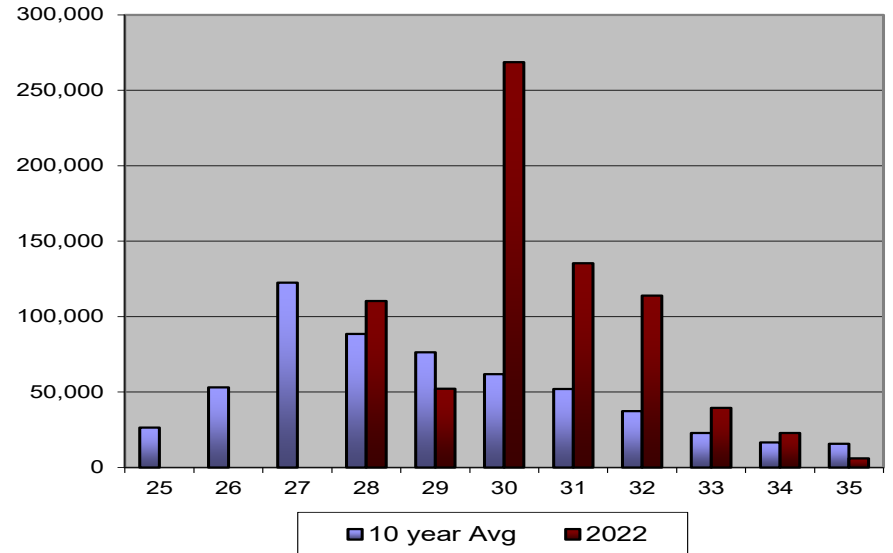
**District 2 Purse Seine Weekly Harvest
10 year avg vs 2022 -coho**



**District 2 Purse Seine Weekly Harvest
10 year avg vs 2022 -pink**



**District 2 Purse Seine Weekly Harvest
10 year avg vs 2022 -chum**

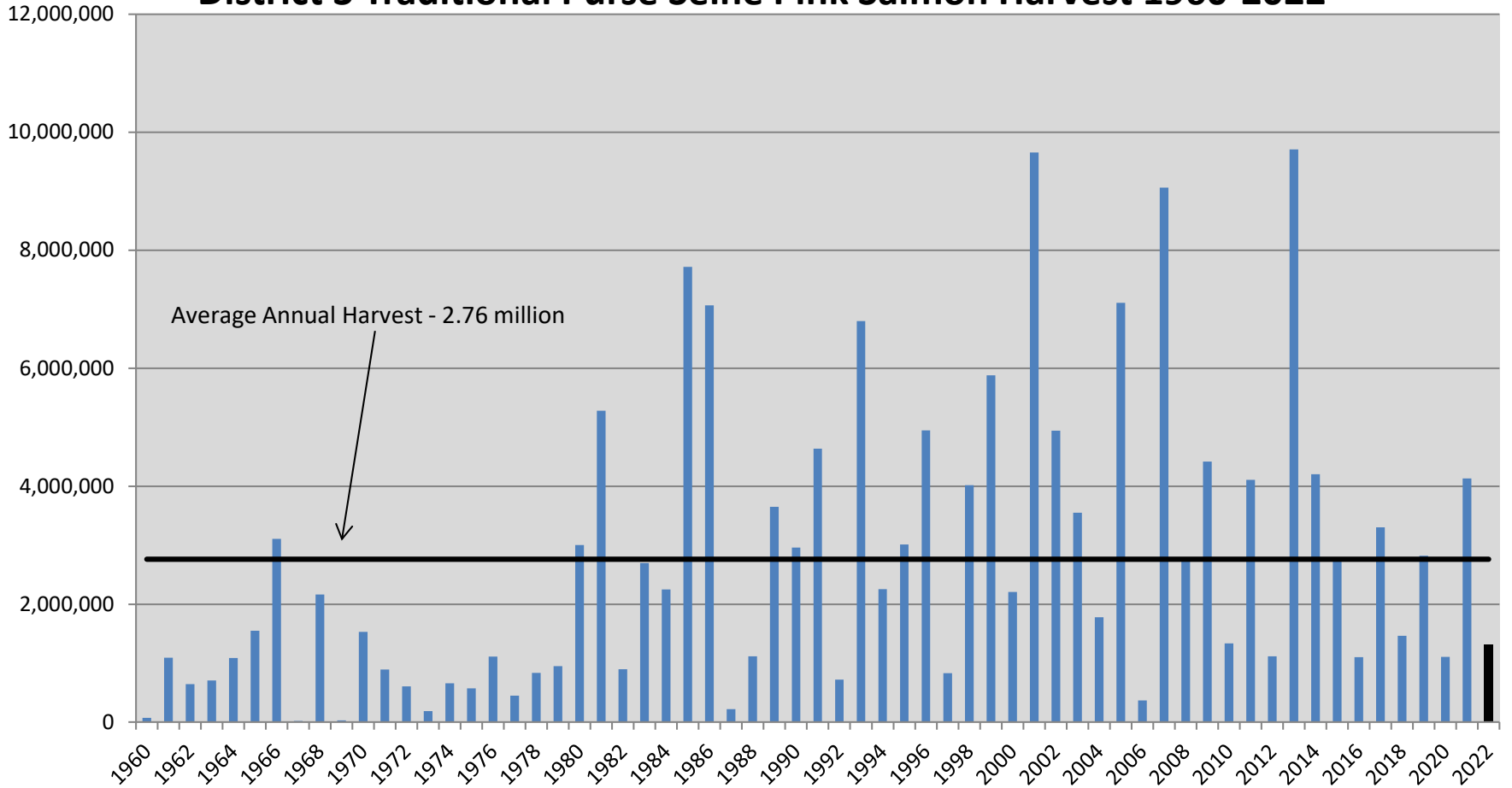


2022 District 3 Purse Seine – Harvest by Opening

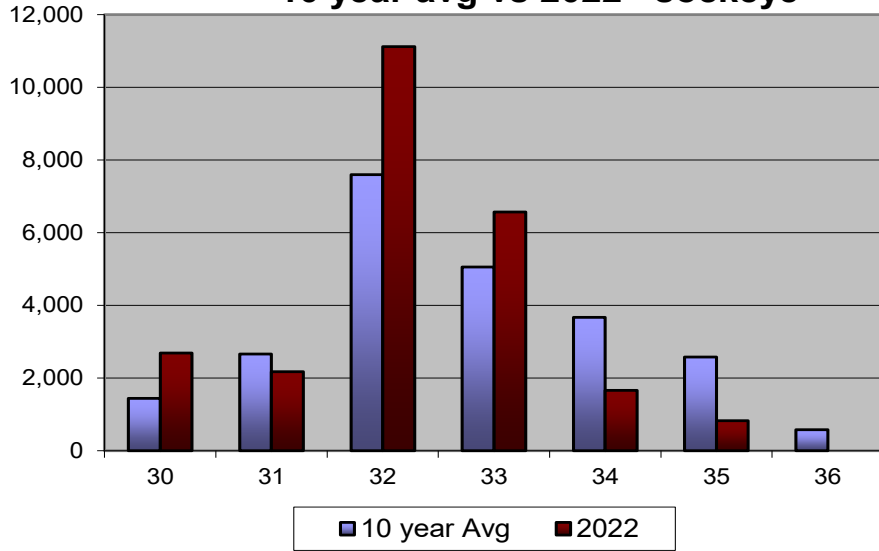
Opening	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
29B		261	96	684	28,957	13	15
30		1,038	487	5,560	33,310	14	15
30B		1,657	1,165	20,097	49,916	13	15
31	16	929	893	12,935	33,439	12	15
31B	46	1,249	865	22,300	19,671	9	15
32	247	5,158	6,023	134,295	52,347	18	39
32B	338	5,964	7,314	348,702	44,974	33	39
33	5	4,973	5,079	278,798	19,046	30	39
33B	119	1,593	1,708	79,350	5,964	13	15
34	4	294	313	42,065	712	3	15
34B	38	2,000	5,752	316,243	19,726	34	39
35	4	207	1,685	52,366	3,118	12	39
Total	817	25,323	31,380	1,313,395	311,180	76	300

- Pinks rank 38th out of 61.
- 10 yr avg = 2.7 million
- Pockets of strength but overall not good. Juggled lines and time all season to balance effort and opportunity.

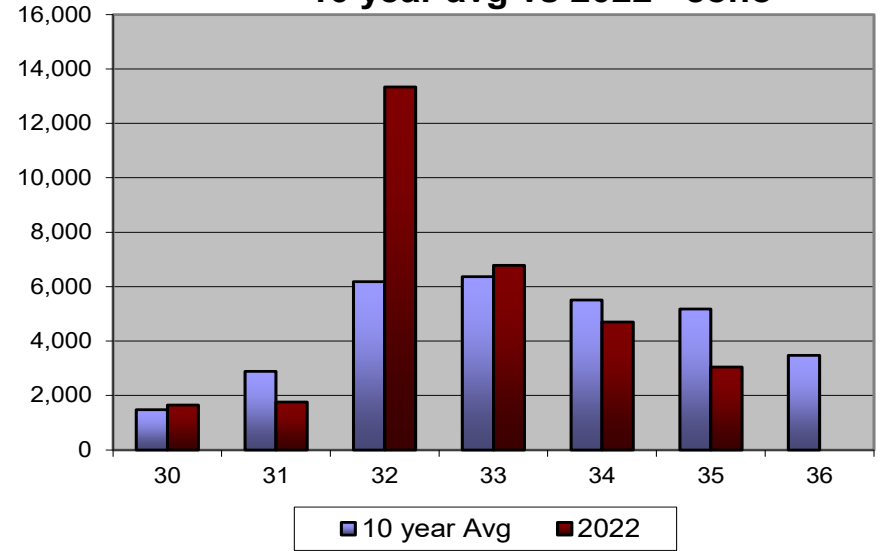
District 3 Traditional Purse Seine Pink Salmon Harvest 1960-2022



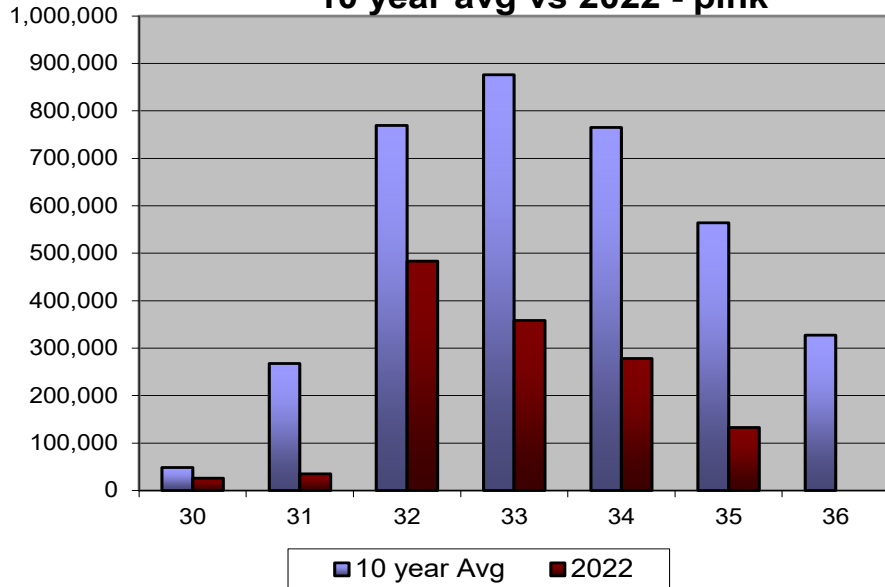
**District 3 Purse Seine Weekly Harvest
10 year avg vs 2022 - sockeye**



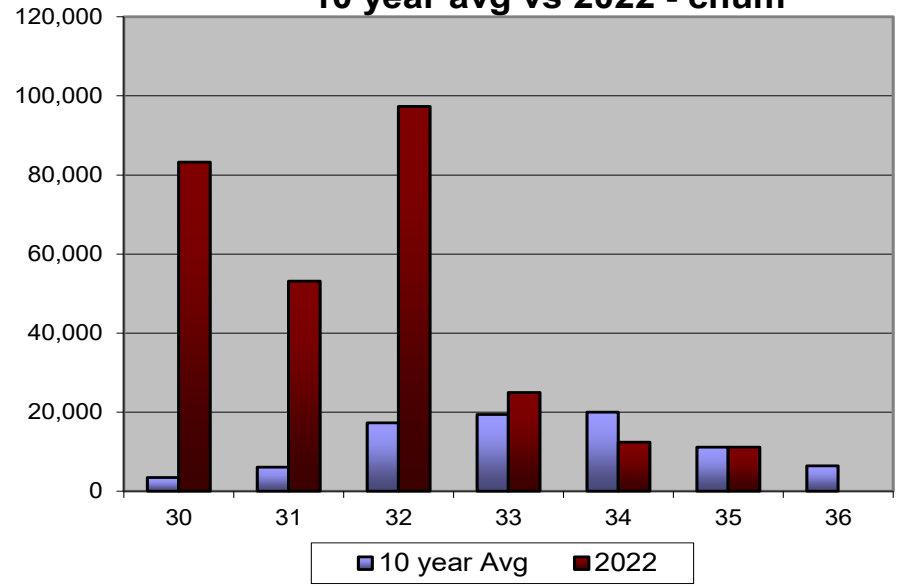
**District 3 Purse Seine Weekly Harvest
10 year avg vs 2022 - coho**



**District 3 Purse Seine Weekly Harvest
10 year avg vs 2022 - pink**



**District 3 Purse Seine Weekly Harvest
10 year avg vs 2022 - chum**



The District 4 Purse Seine fishery is managed prior to statistical week 31 to achieve 2.45% of the Annual Allowable Harvest (AAH) of the combined Nass/Skeena sockeye run in that year.

- The AAH is calculated as the combined total run of adult Nass and Skeena sockeye salmon in that year minus the combined Nass and Skeena escapement target of 1.1 million fish or the actual in-river escapement; whichever is less.
- The total run calculation includes the catch of Nass and Skeena sockeye in the boundary area fisheries and the escapement to the Nass and Skeena rivers. The cumulative catch includes sockeye salmon in the Alaskan Districts of 101-108 net fisheries, including Annette Island, and Canadian areas 1, 3, 4 and 5 net fisheries plus Canadian in-river fisheries.

For 2022:

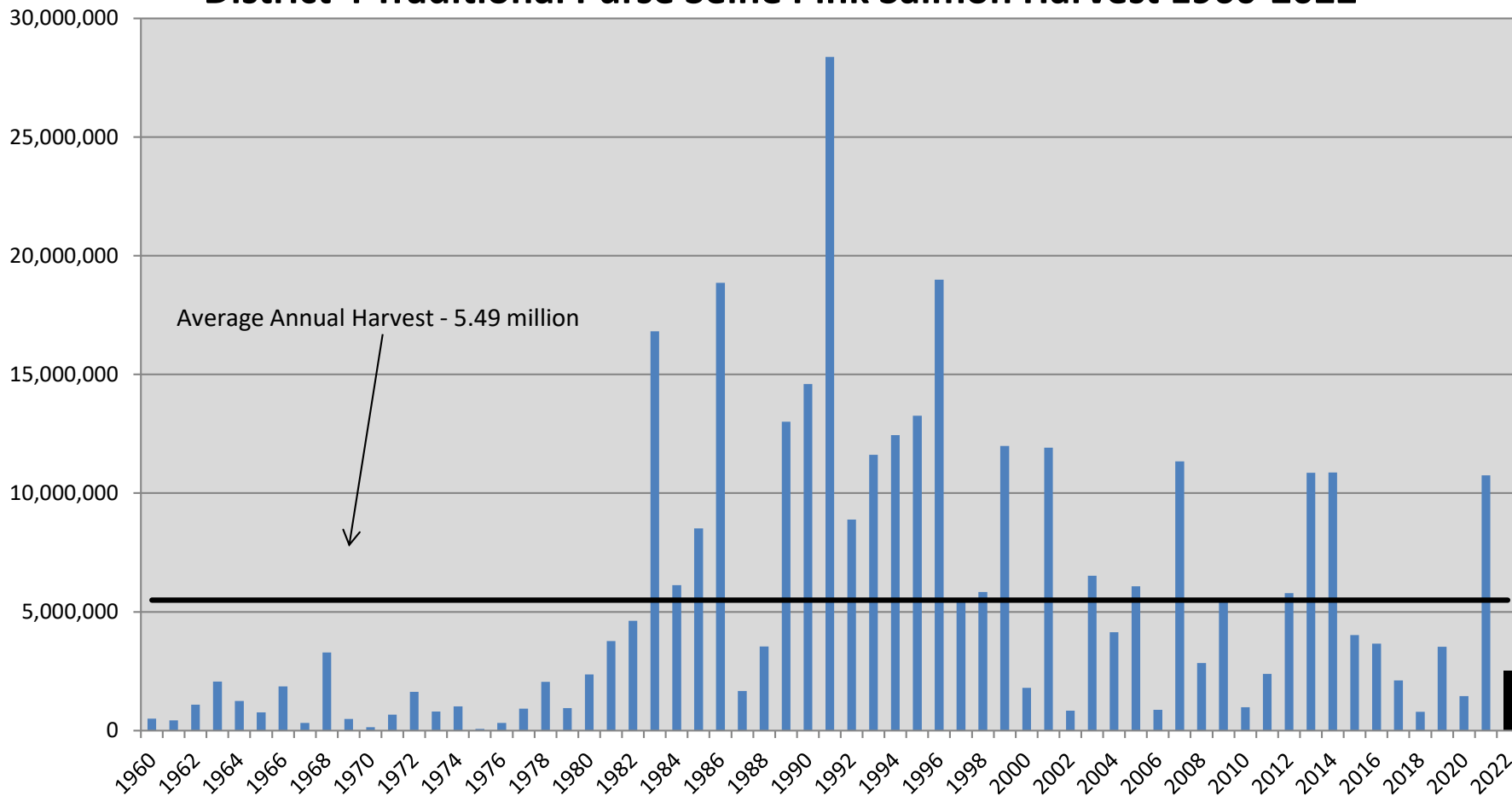
- Skeena preseason forecast of 2.13M
- Nass preseason forecast of 560K
- Combined preseason forecast of 2.693 million
 - Estimated pre-week 31 AAH of ~39K Canadian sockeye
 - First official in-season forecast did not come out until July 12. The projected inseason at this point was 2.37M.

2022 District 4 Purse Seine – Harvest by Opening

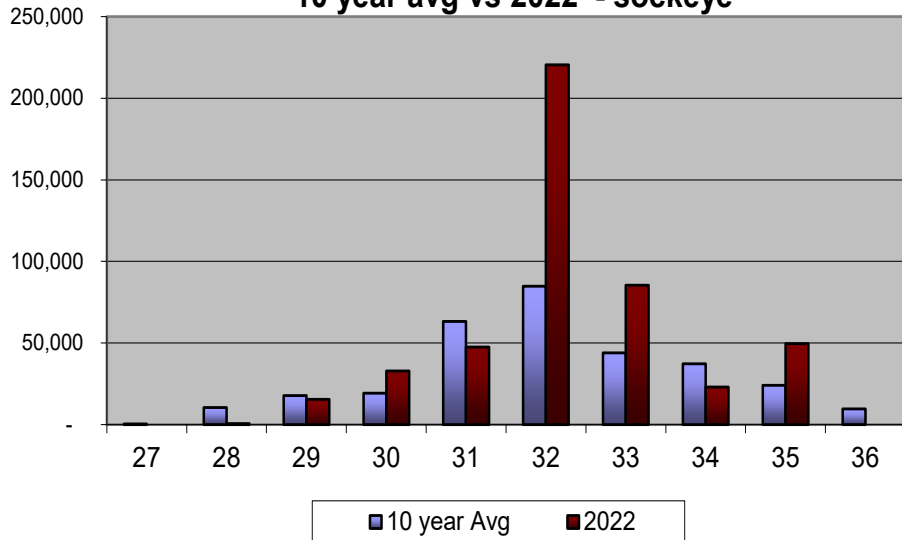
	Opening	Chinook	Sockeye	Coho	Pink	Chum	Boats	Hours
Treaty Period	28		716	182	734	2,154	4	8
	28B				CLOSED			
	29		1,765	299	3,462	11,217	18	12
	29B		13,732	2,975	31,749	27,484	19	15
	30		6,116	1,674	32,831	20,165	23	15
	30B	20	26,696	3,086	226,673	30,535	15	15
	31	444	20,307	3,527	148,599	33,097	21	15
	31B	778	28,207	4,831	167,884	30,411	35	15
	32	1,906	110,481	7,134	408,985	45,731	33	39
	32B	6,767	110,178	13,964	682,543	70,673	51	39
	33	9	69,434	9,344	339,864	33,633	50	39
	33B	1,598	16,009	5,656	227,105	17,017	45	39
	34	701	27,371	5,382	161,040	8,661	22	39
	35	758	45,373	6,327	94,212	7,282	25	39
	Total	12,981	476,385	64,381	2,525,681	338,060	73	329

- Pre-week 31 sockeye catch = 49,025 Approx 29K Canadian
- D4 was open for one 8-hour period, one 12-hour period, and three 15-hour periods for a total of 65 hours out of a potential 90 hours during the treaty period. Avg. hours is 56.
- Treaty concerns were minimal after July 11.

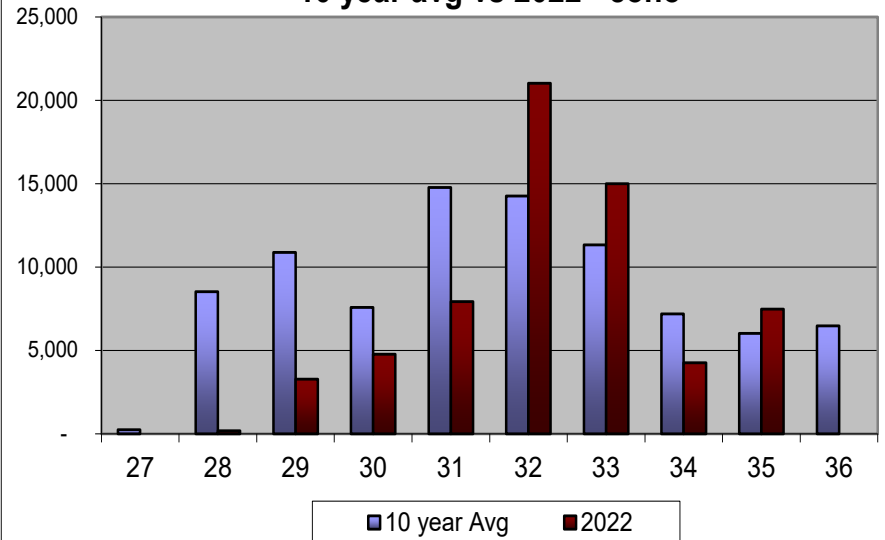
District 4 Traditional Purse Seine Pink Salmon Harvest 1960-2022



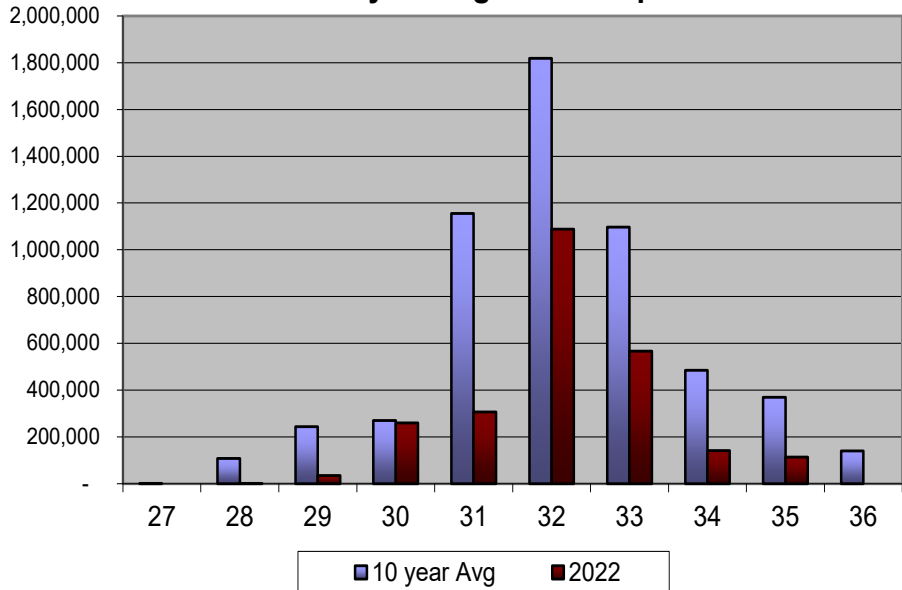
**District 4 Purse Seine Weekly Harvest
10 year avg vs 2022 - sockeye**



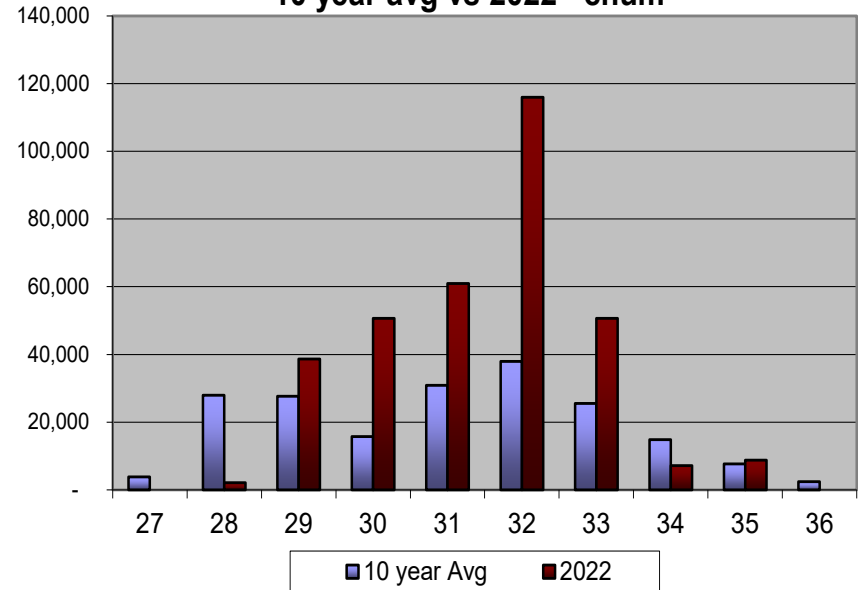
**District 4 Purse Seine Weekly Harvest
10 year avg vs 2022 - coho**



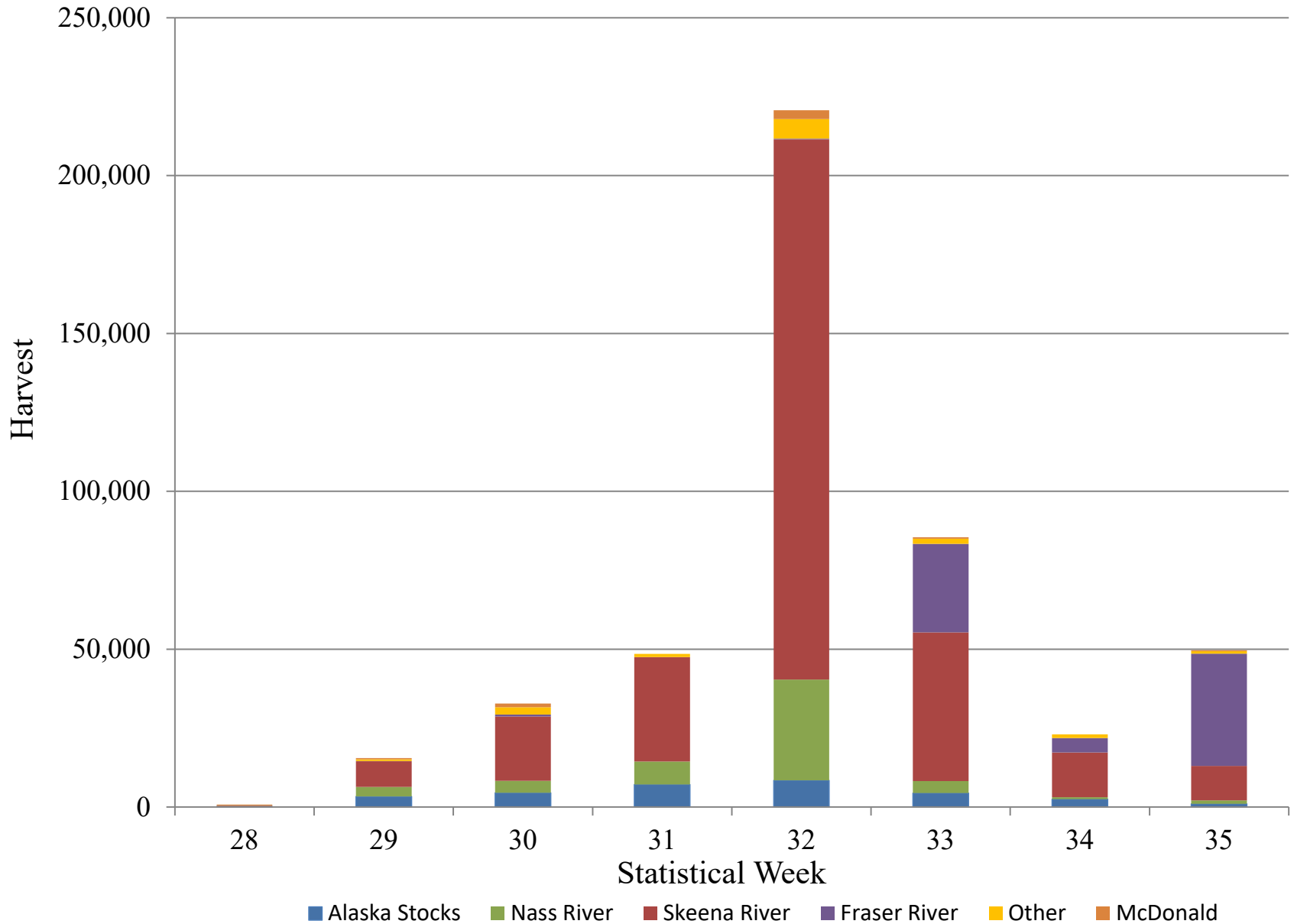
**District 4 Purse Seine Weekly Harvest
10 year avg vs 2022 - pink**



**District 4 Purse Seine Weekly Harvest
10 year avg vs 2022 - chum**



District 104 Purse Seine Fishery Sockeye Harvest Stock Composition - 2022



District 104 – Purse Seine

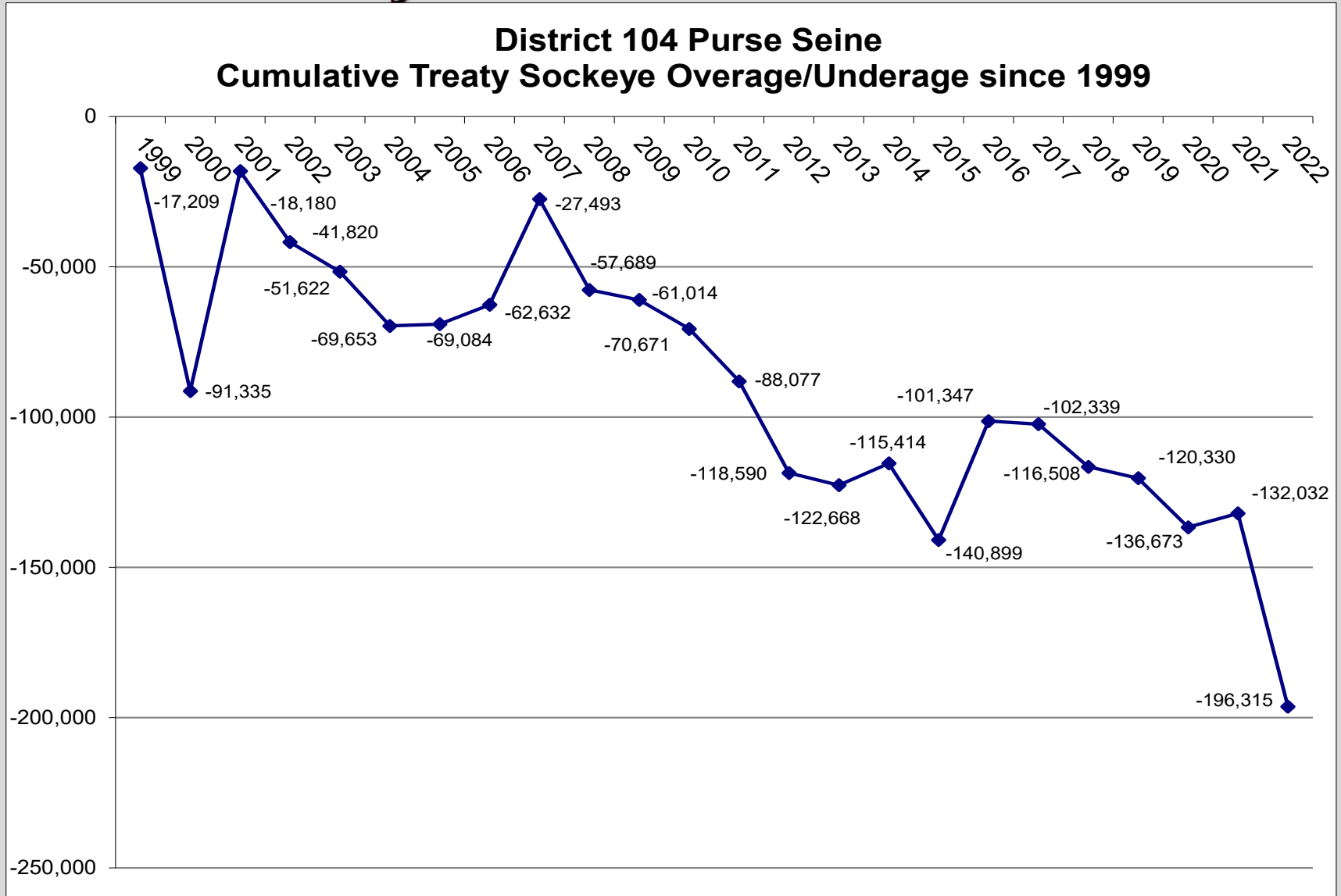
Treaty Performance, 2022 (preliminary)

	Nass/Skeena Total Return	Nass/Skeena Escapement	Allowable Nass/Skeena AAH	Allowable D4 Harvest (2.45%)	Total Pre- Week 31 Sockeye Harvest	Actual Nass/Skeena Harvest	Overage/ Underage Per Year	Cumulative overage / (underage)
1999	1,771,048	936,705	834,343	20,441	7,664	3,232	-17,209	-17,209
2000	5,318,227	1,100,000	4,218,227	103,347	48,969	29,221	-74,126	-91,335
2001	4,965,286	1,100,000	3,865,286	94,700	203,090	167,854	73,154	-18,180
2002	2,776,504	1,051,335	1,725,169	42,267	26,554	18,627	-23,640	-41,820
2003	3,306,526	1,100,000	2,206,526	54,060	84,742	44,258	-9,802	-51,622
2004	2,620,994	1,100,000	1,520,994	37,264	30,758	19,233	-18,031	-69,653
2005	1,770,472	1,000,142	770,330	18,873	35,690	19,442	569	-69,084
2006	3,650,525	1,100,000	2,550,525	62,488	89,615	68,940	6,452	-62,632
2007	2,752,076	1,100,000	1,652,076	40,476	112,135	75,615	35,139	-27,493
2008	2,531,703	1,100,000	1,431,703	35,077	6,262	4,880	-30,197	-57,689
2009	1,602,960	1,053,859	549,101	13,453	15,971	10,128	-3,325	-61,014
2010	1,395,619	956,957	438,662	10,747	4,612	1,091	-9,656	-70,671
2011	2,487,985	1,100,000	1,387,985	34,006	25,280	16,599	-17,407	-88,077
2012	2,737,168	1,100,000	1,637,168	40,111	18,300	9,598	-30,513	-118,590
2013	981,476	642,461	339,015	8,306	13,102	4,228	-4,078	-122,668
2014	3,824,537	1,100,000	2,724,537	66,751	114,375	74,005	7,254	-115,414
2015	3,015,042	1,100,000	1,915,042	46,919	43,873	21,433	-25,486	-140,899
2016	2,140,259	1,100,000	1,040,259	25,486	110,346	65,039	39,553	-101,347
2017	1,422,783	1,100,000	322,783	7,909	12,036	6,916	-993	-102,340
2018	2,086,466	1,100,000	986,466	24,168	19,743	9,999	-14,169	-116,509
2019	1,200,155	862,549	337,606	8,271	9,399	4,450	-3,821	-120,331
2020	1,983,411	1,100,000	883,411	21,644	6,923	5,300	-16,344	-136,674
2021	2,229,421	1,100,000	1,129,421	27,671	49,304	32,312	4,641	-132,033
2022	5,185,000	1,100,000	4,085,000	100,083	49,025	35,800	-64,283	-196,315

2.45% of Nass/Skeena Sockeye AAH - pre week 31 (AAH=Nass and Skeena Sockeye Total Return - 1.1 million escapement)

- 2022 pre-season AAH = approx. 39K post-season AAH = approx. 100K

District 104 – Purse Seine Treaty Performance 1999-2022

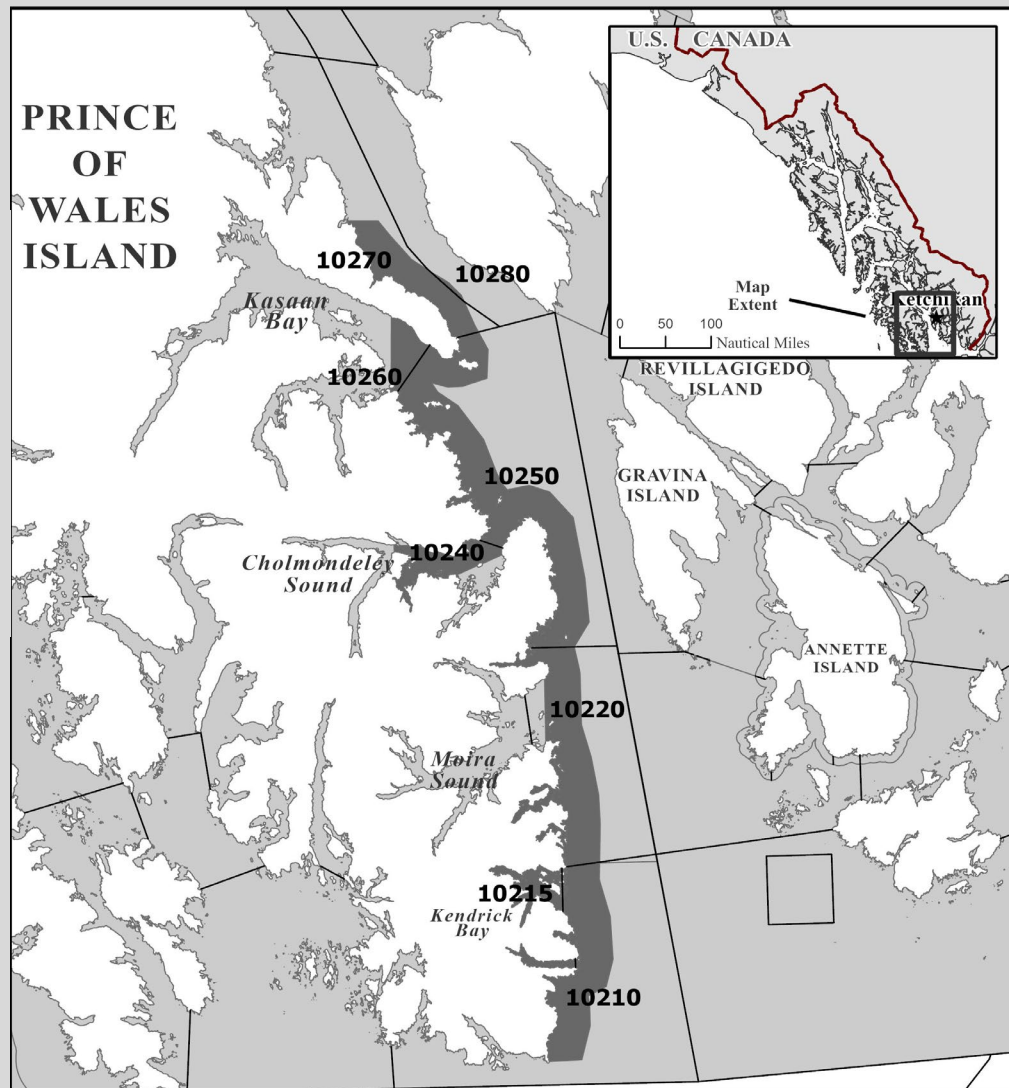


District 102 Fall Fishing

- Limited fall chum fishing in the Ketchikan area for 2022
- Two 12-hour openings
 - 10 vessels landed 9.5K chum

Peak Cholmondeley Sound Chum
Index counts
Total = 42,000

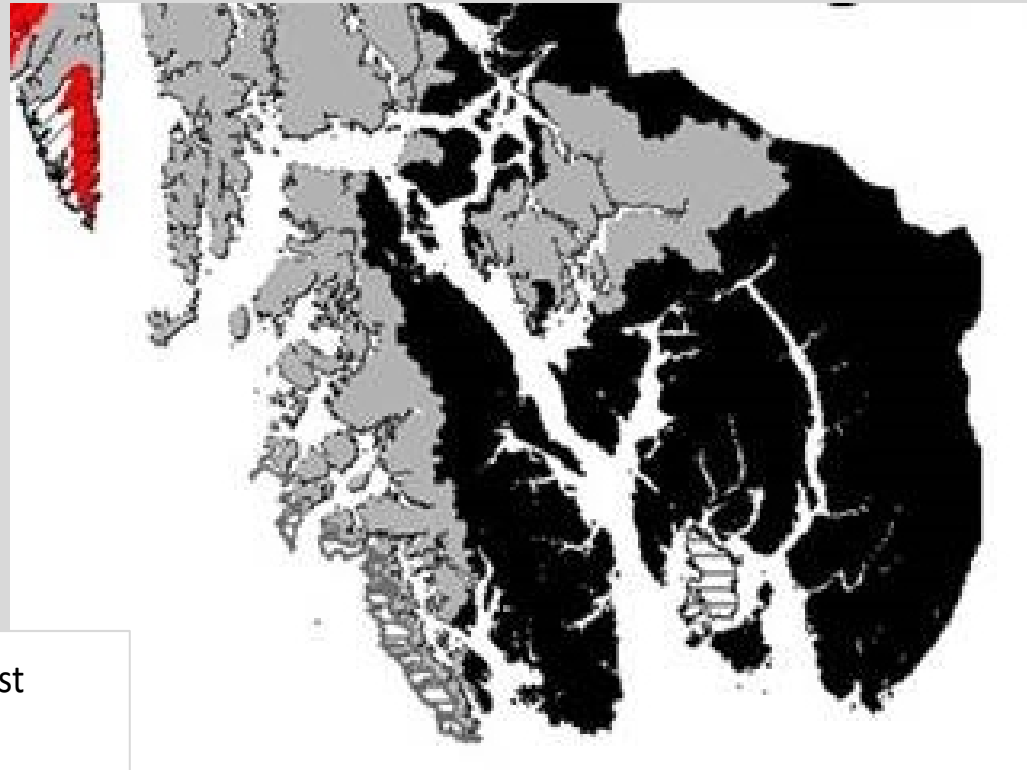
Disappearance – 25,000
Lagoon – 17,000



2023 Expectations

2021 Conditions & Esc.

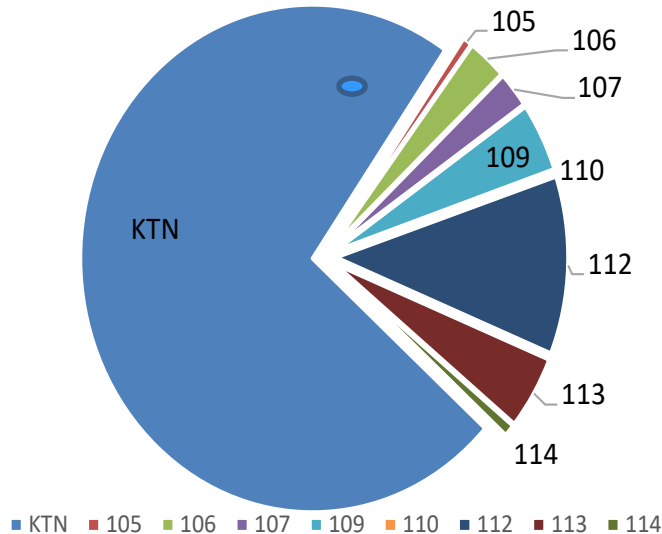
- Decent spawning conditions.
- Water levels were adequate throughout the summer.
- Escapements ended up extremely strong in District 1 and 2, above the upper end in Cordova Bay, and approaching the upper end of the esc goal range in the rest of D3.
- Extremely cold, draught conditions persisted in SE for almost 6 weeks, from early Dec-mid January.



2021 Traditional Pink Harvest – SE

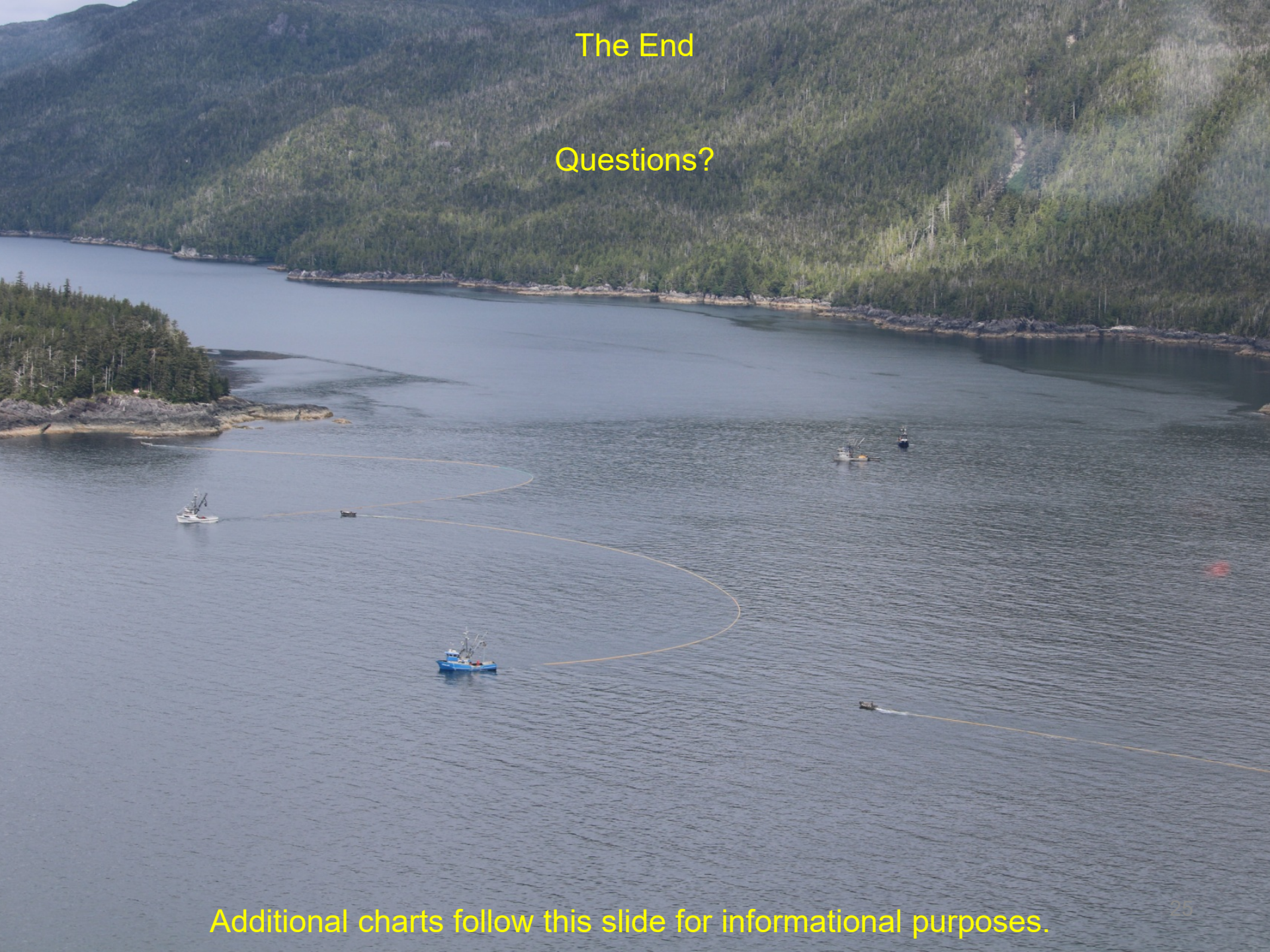
- Total Pink Harvest 44.2M. 35M in Ktn.

2021 Traditional Purse Seine Pink Salmon Harvest



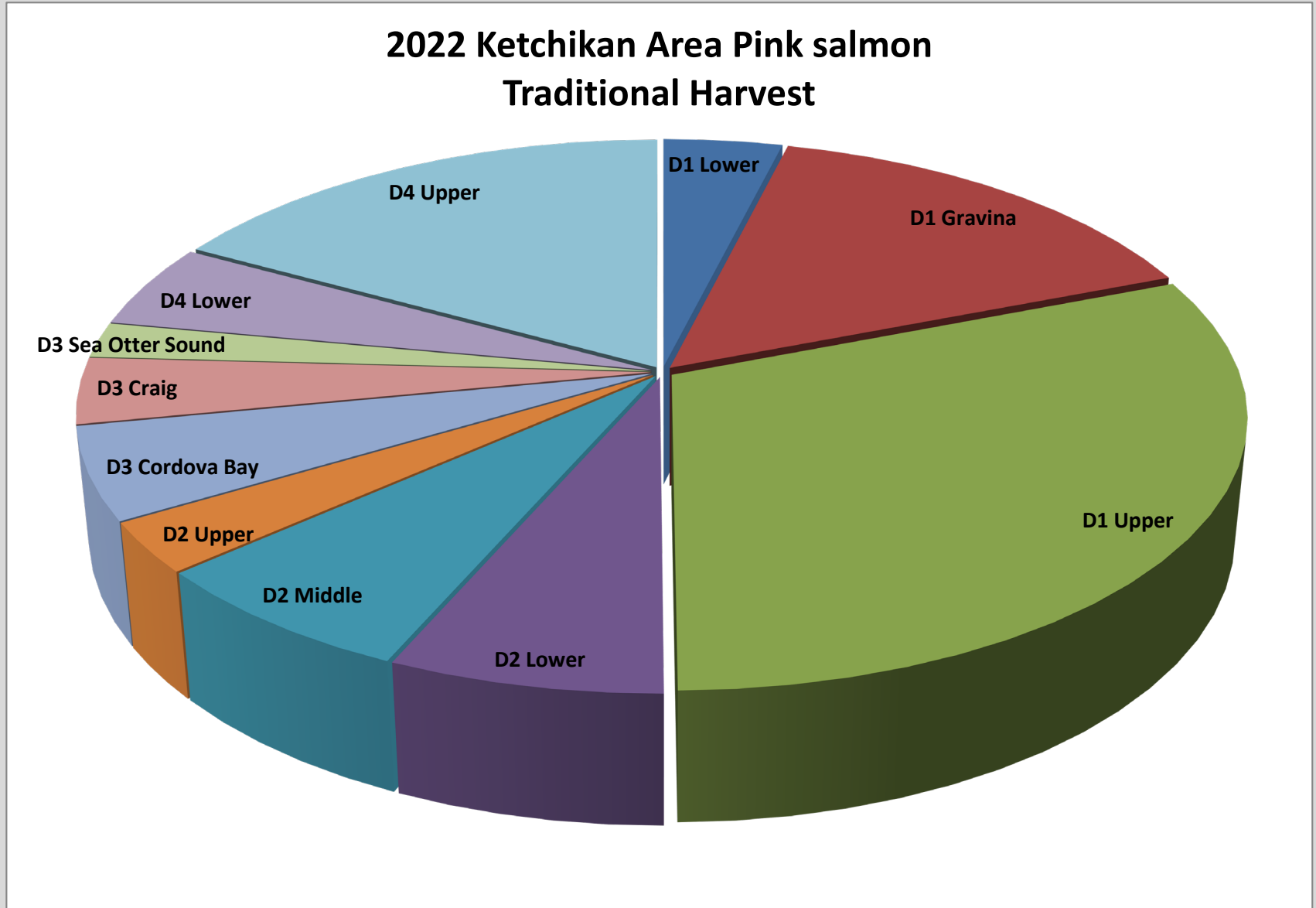
The End

Questions?



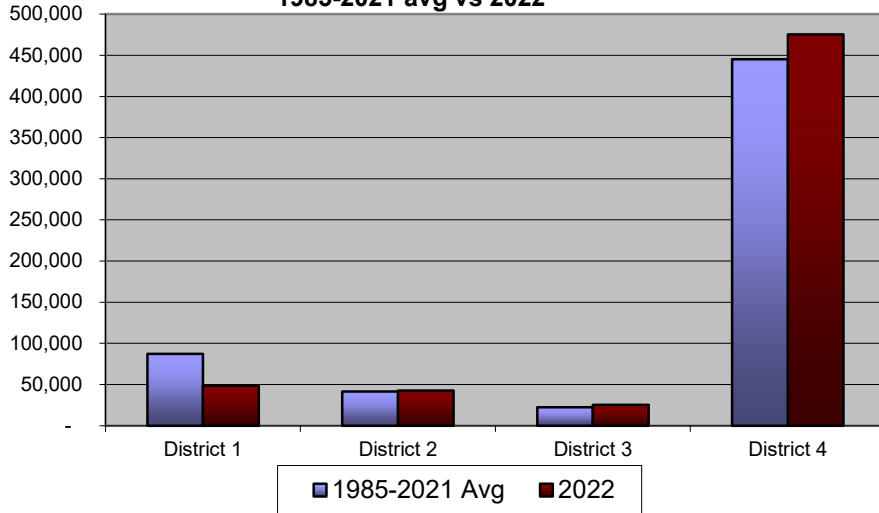
Additional charts follow this slide for informational purposes.

2022 Pink Salmon Harvest in the Ketchikan Management Area

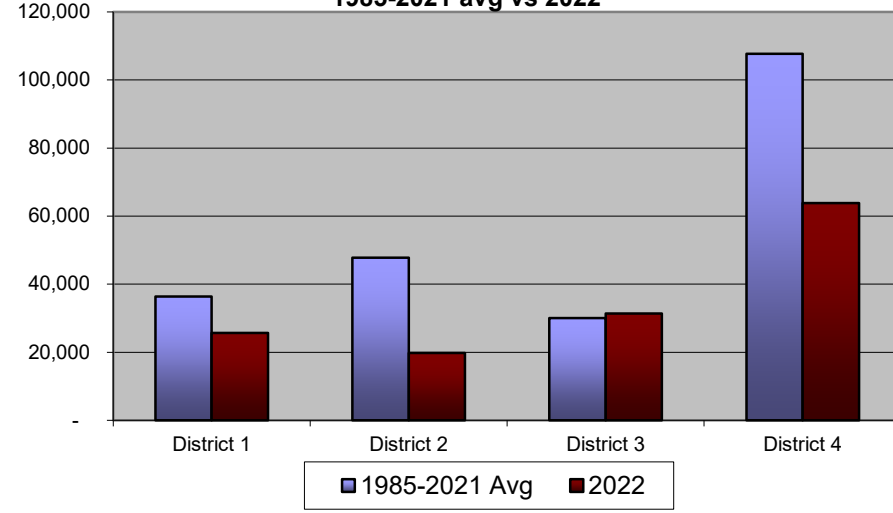


Purse Seine Traditional Harvest by District by Species

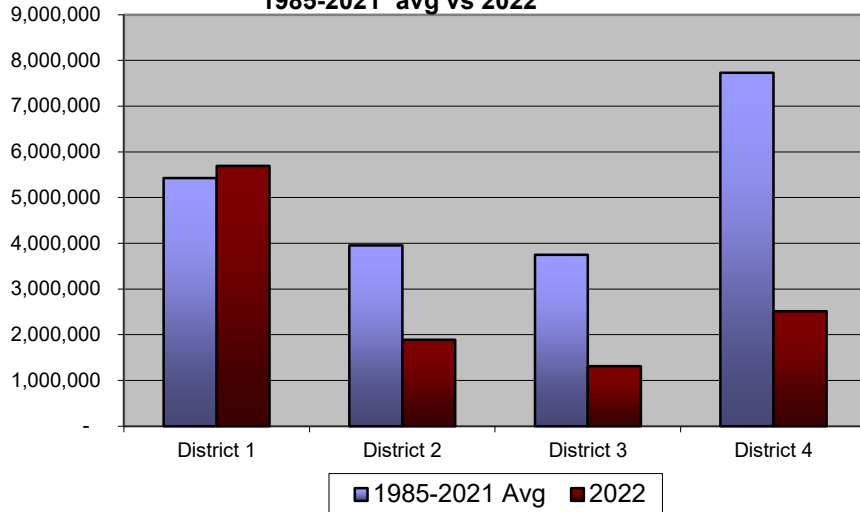
**Purse Seine Sockeye Harvest
1985-2021 avg vs 2022**



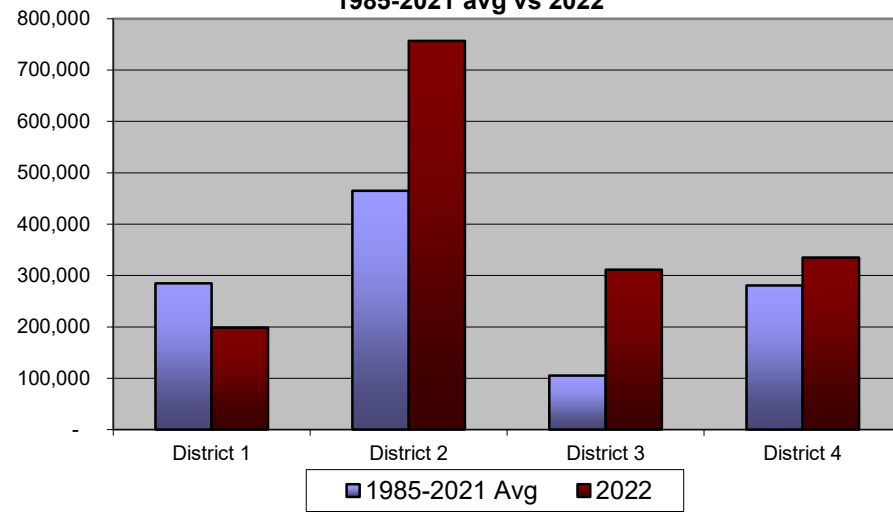
**Purse Seine Coho Harvest
1985-2021 avg vs 2022**



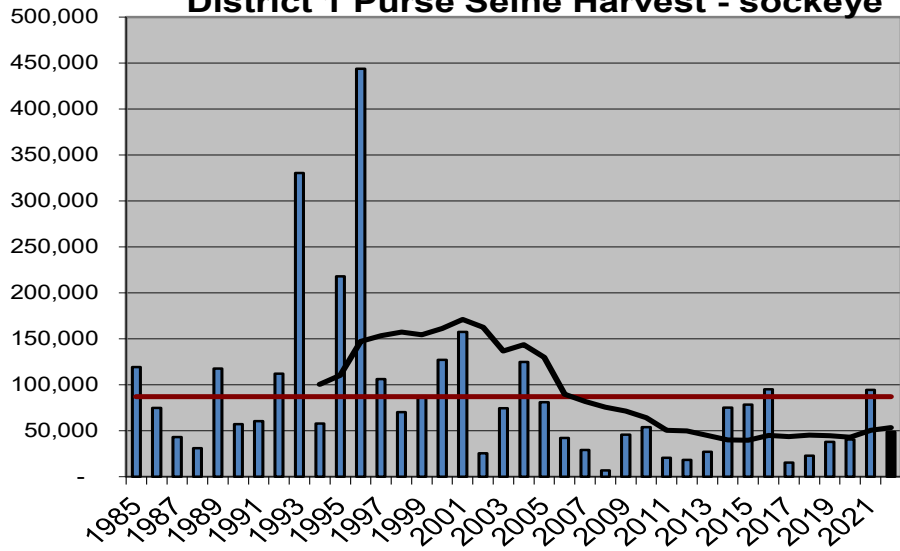
**Purse Seine Pink Harvest
1985-2021 avg vs 2022**



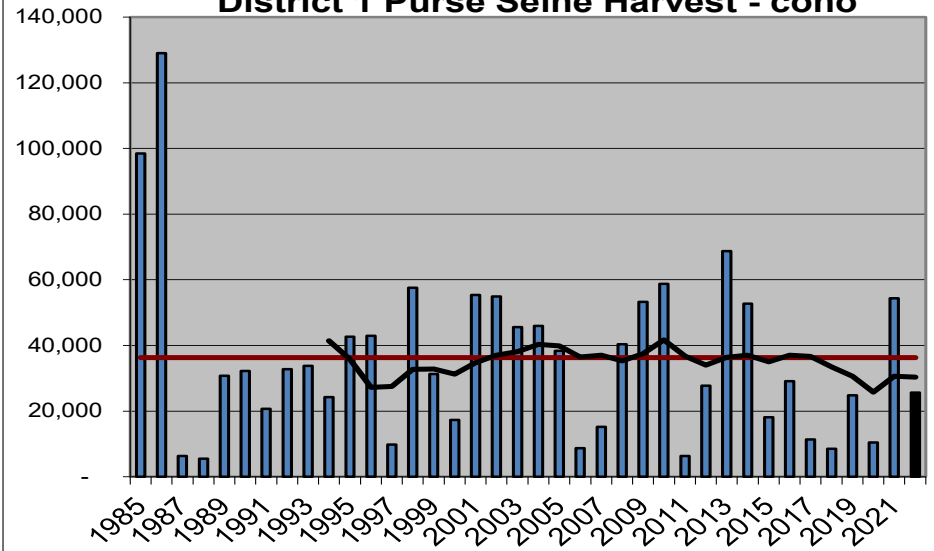
**Purse Seine Chum Harvest
1985-2021 avg vs 2022**



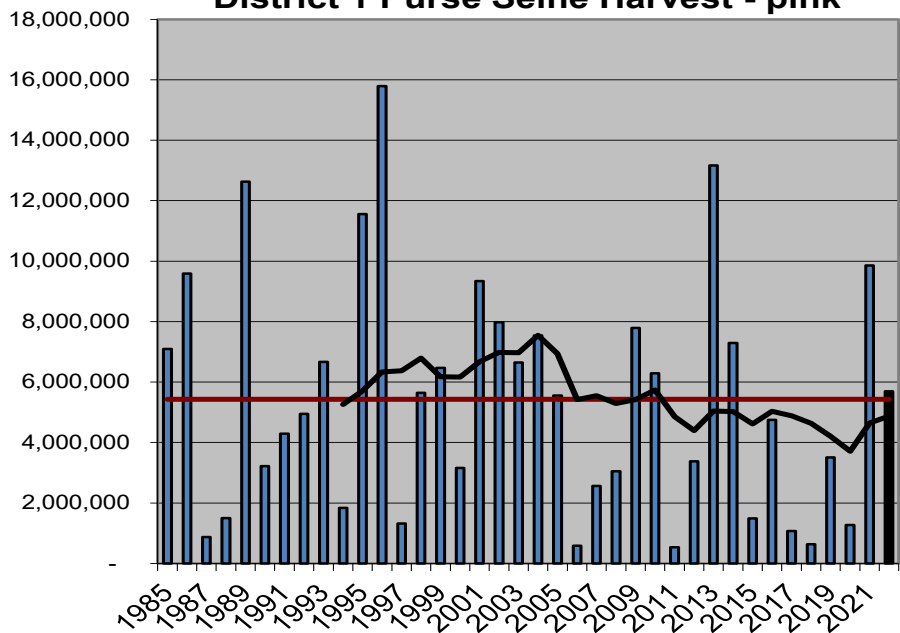
District 1 Purse Seine Harvest - sockeye



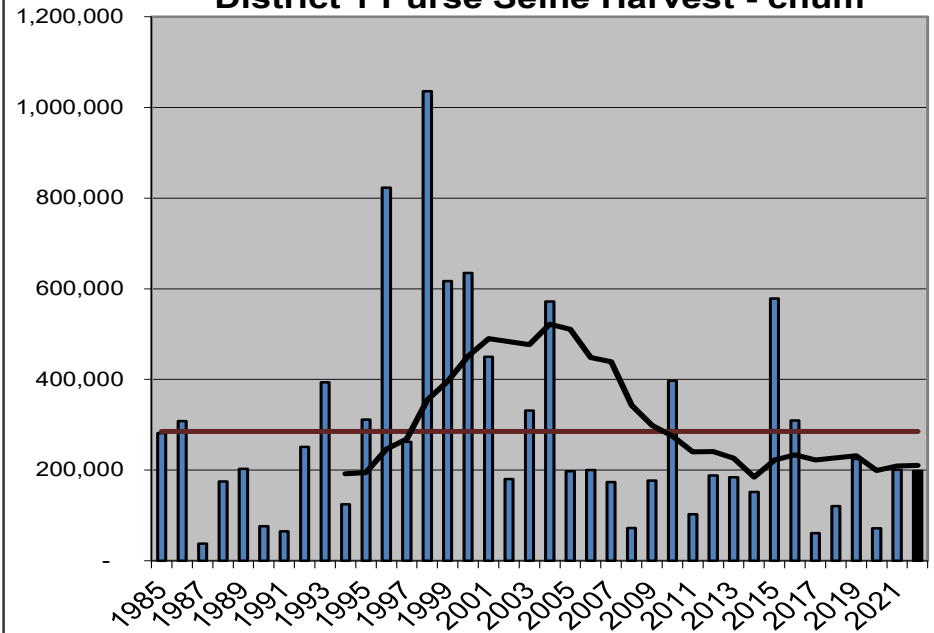
District 1 Purse Seine Harvest - coho



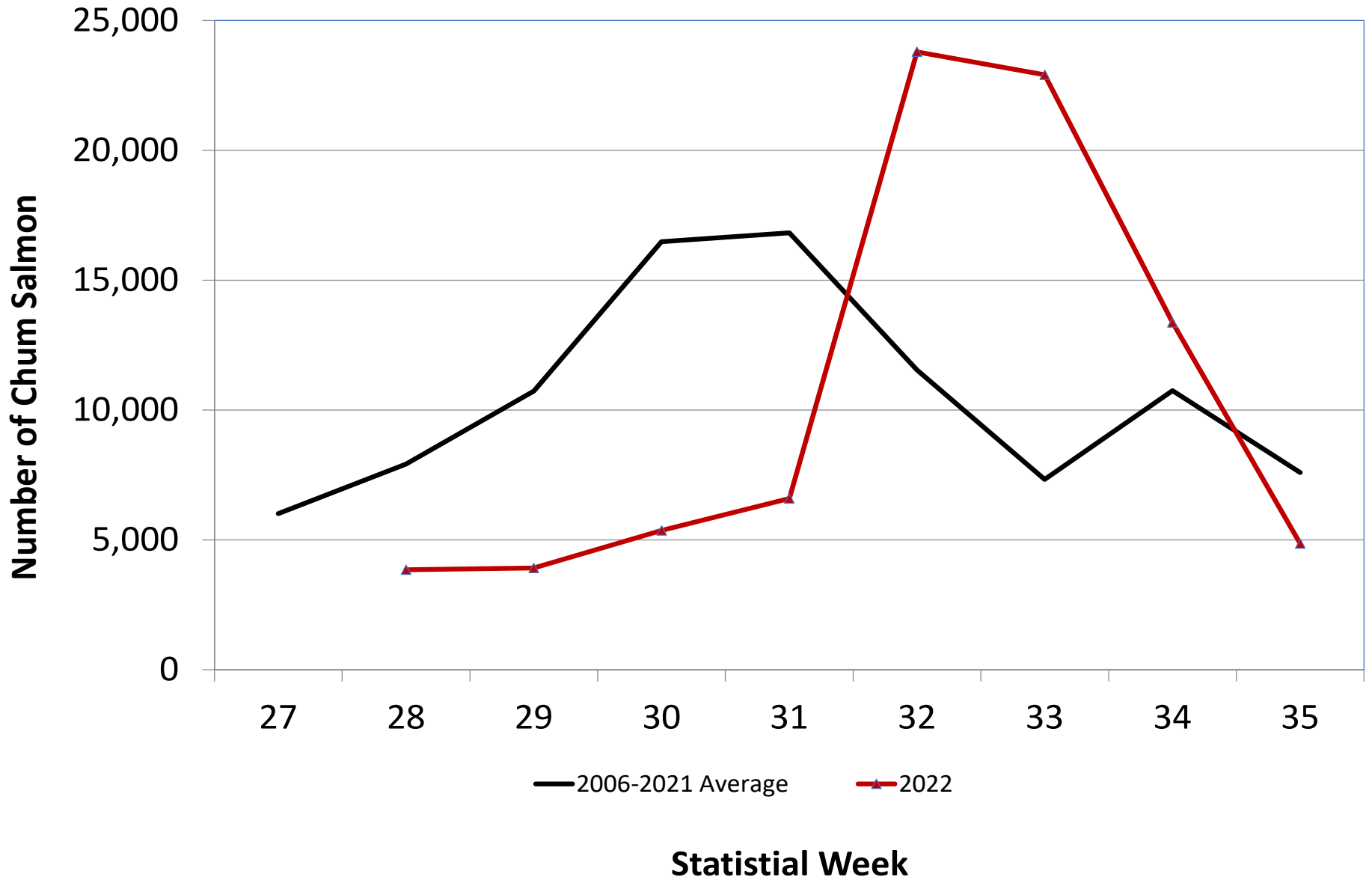
District 1 Purse Seine Harvest - pink



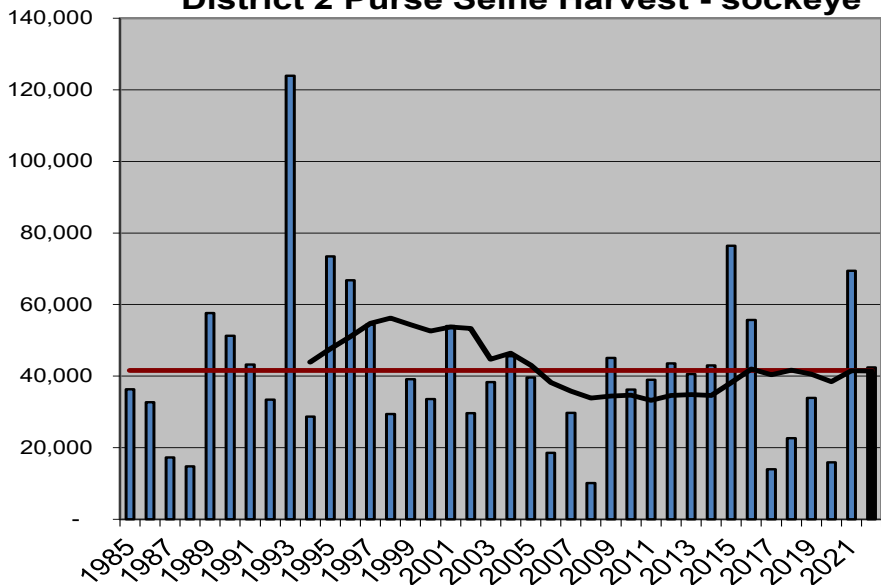
District 1 Purse Seine Harvest - chum



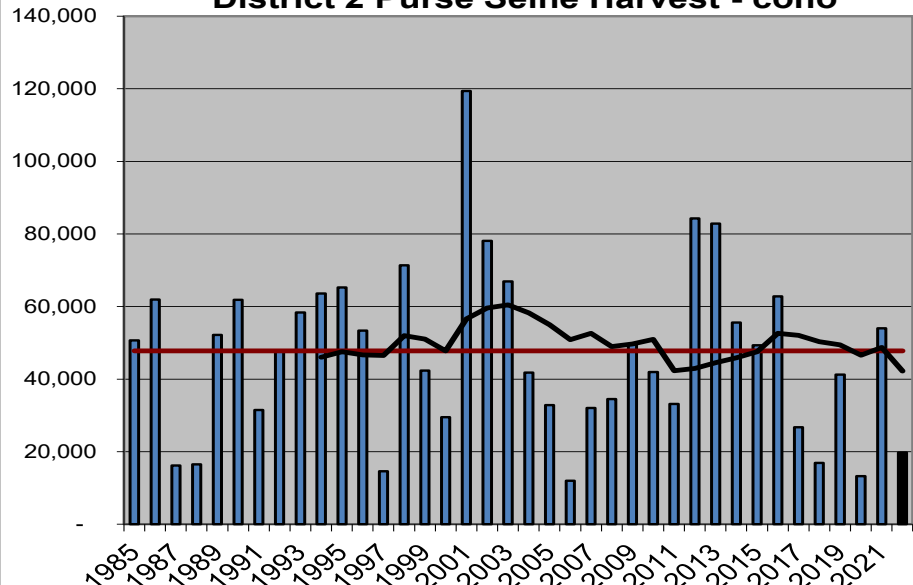
District 1 Seine - Harvest of Unmarked Chum Salmon



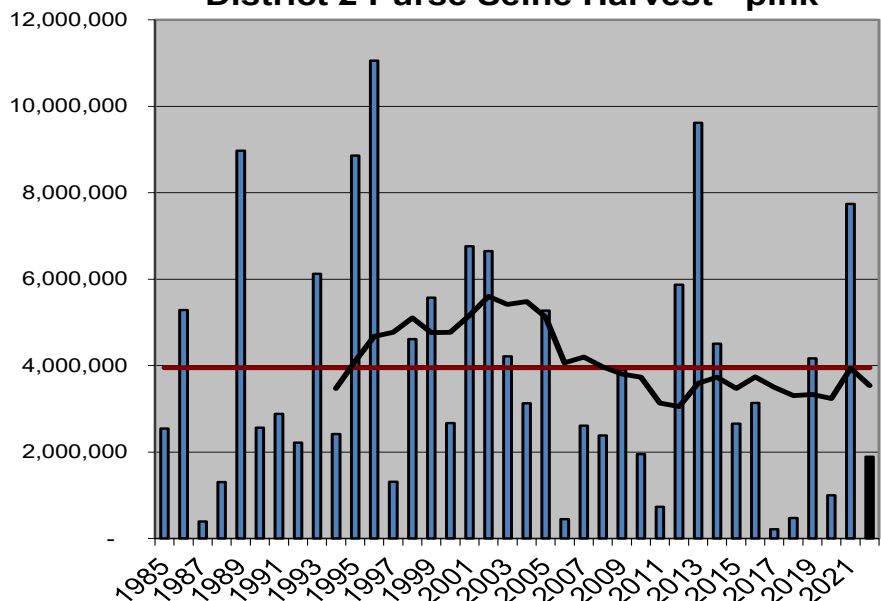
District 2 Purse Seine Harvest - sockeye



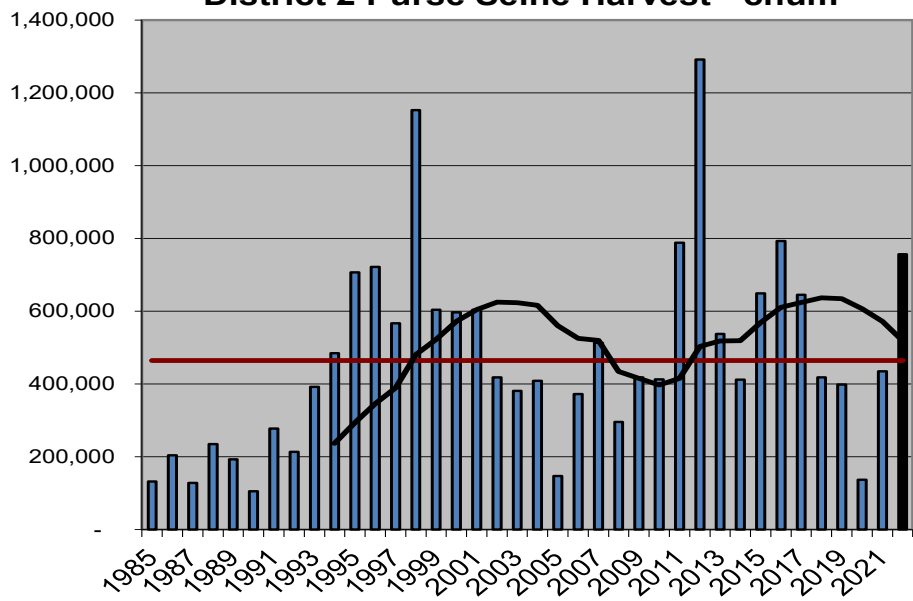
District 2 Purse Seine Harvest - coho



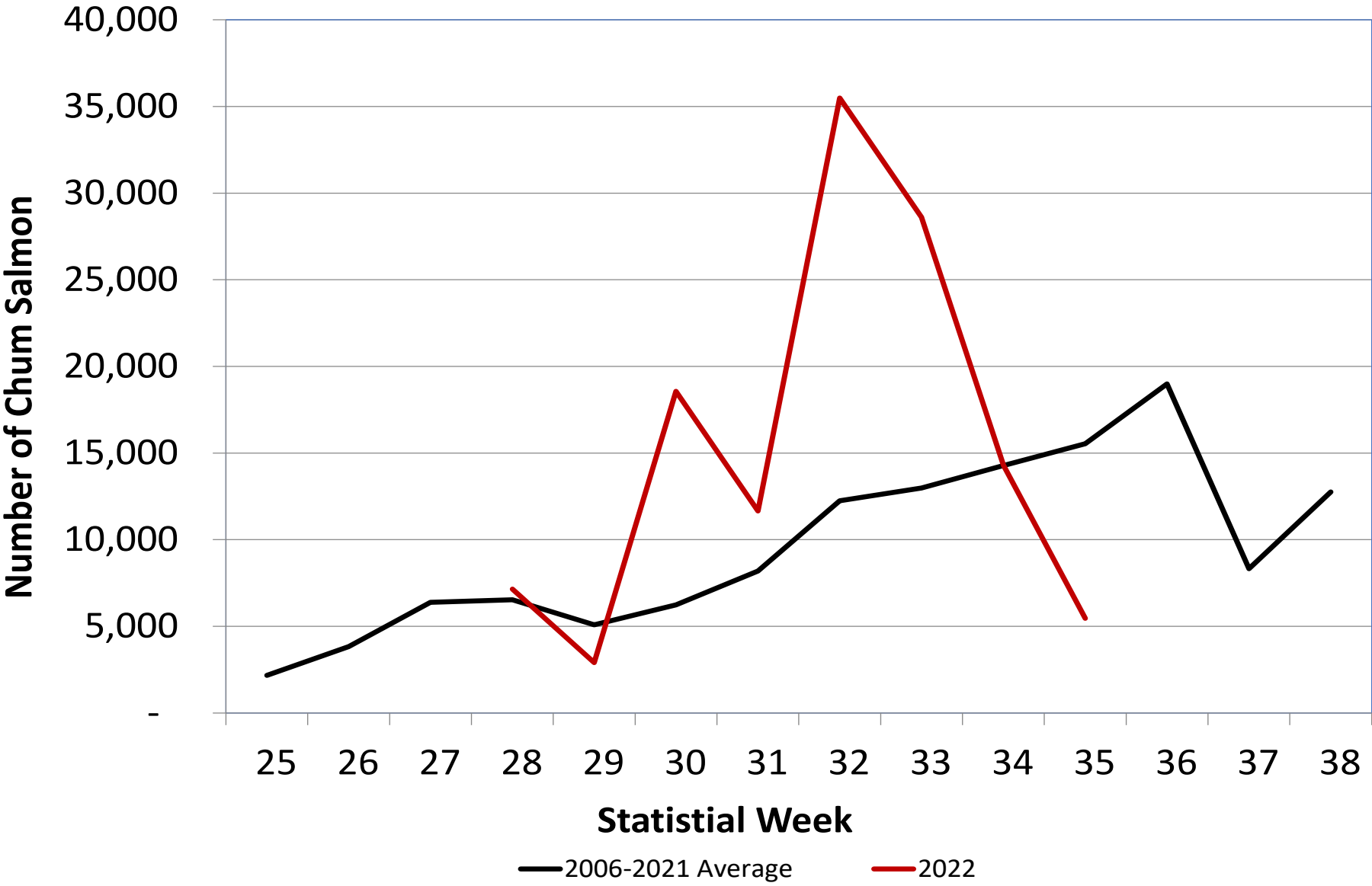
District 2 Purse Seine Harvest - pink



District 2 Purse Seine Harvest - chum

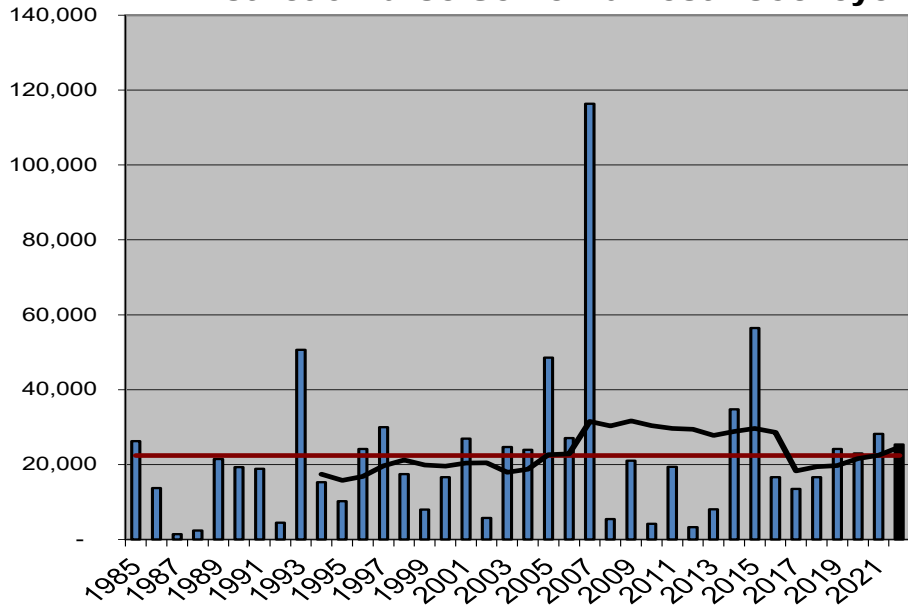


District 2 Seine - Harvest of Unmarked Chum Salmon

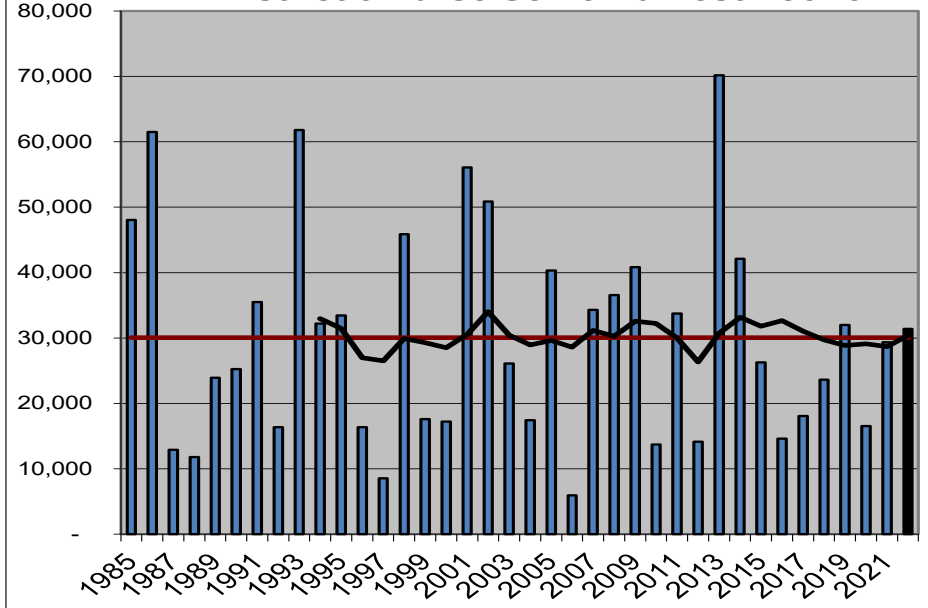


Source: Data provided by Tessa Frost and the SSRAA otolith lab.

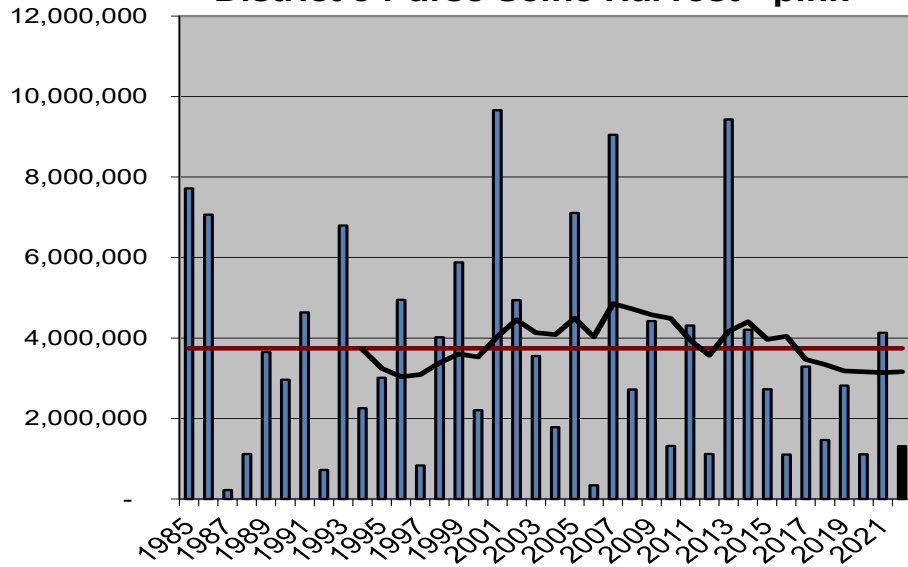
District 3 Purse Seine Harvest - sockeye



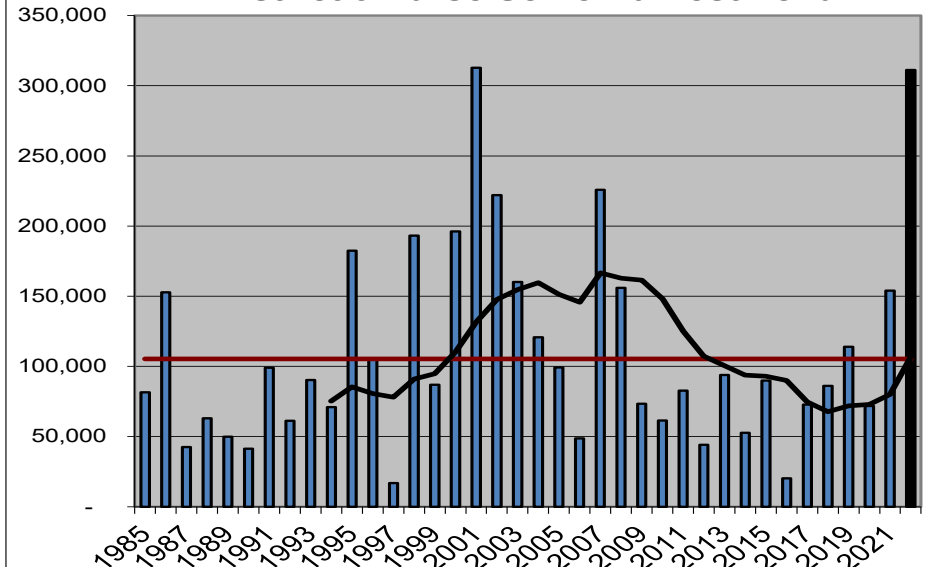
District 3 Purse Seine Harvest - coho



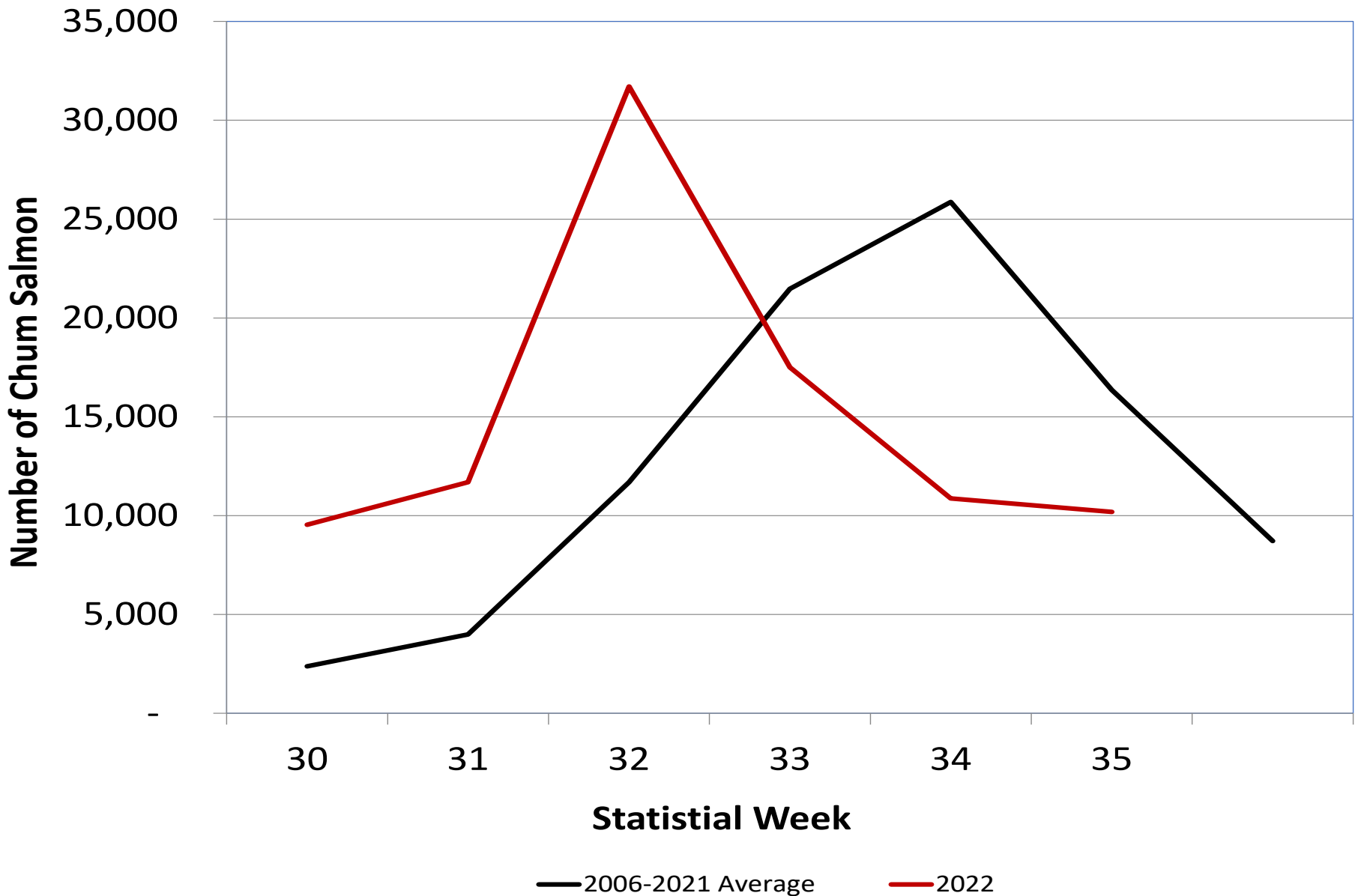
District 3 Purse Seine Harvest - pink



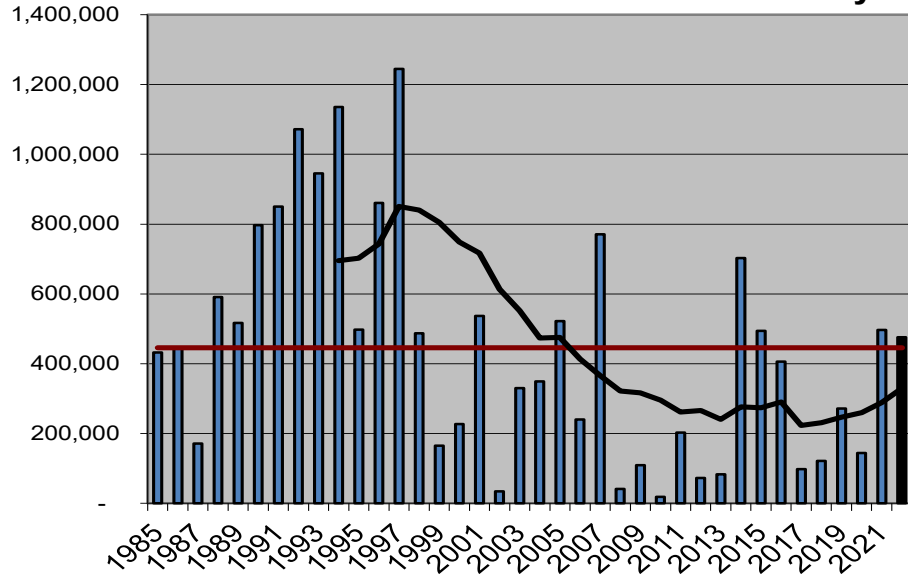
District 3 Purse Seine Harvest - chum



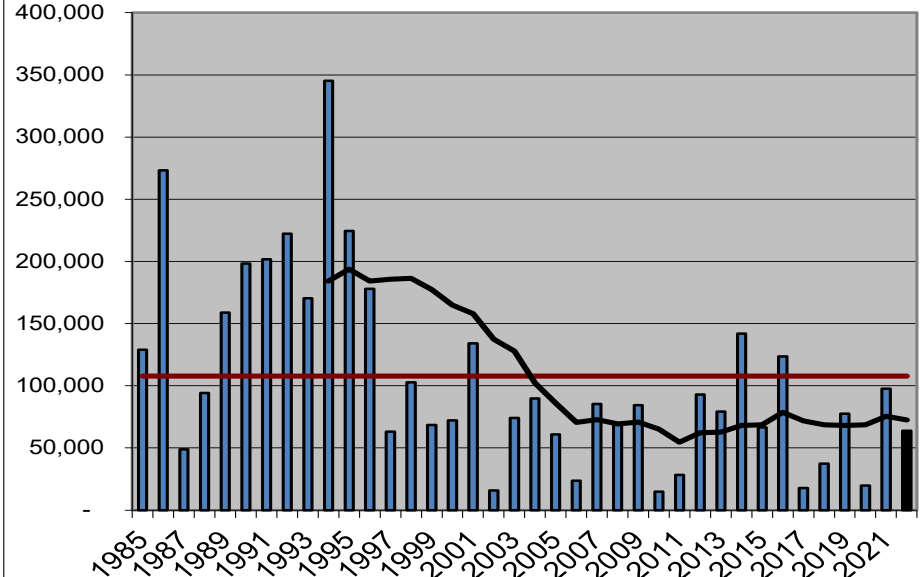
2022 District 3 Seine - Harvest of Unmarked Chum Salmon



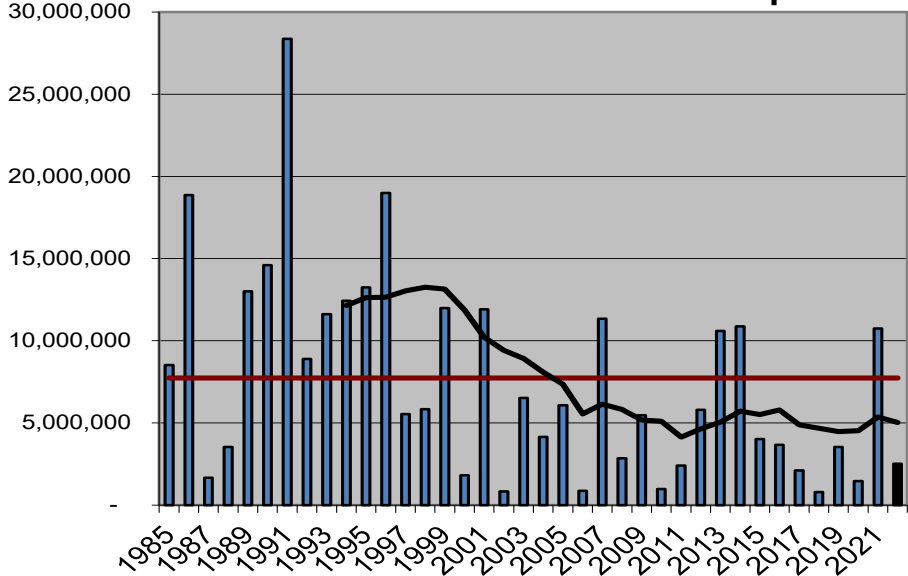
District 4 Purse Seine Harvest - sockeye



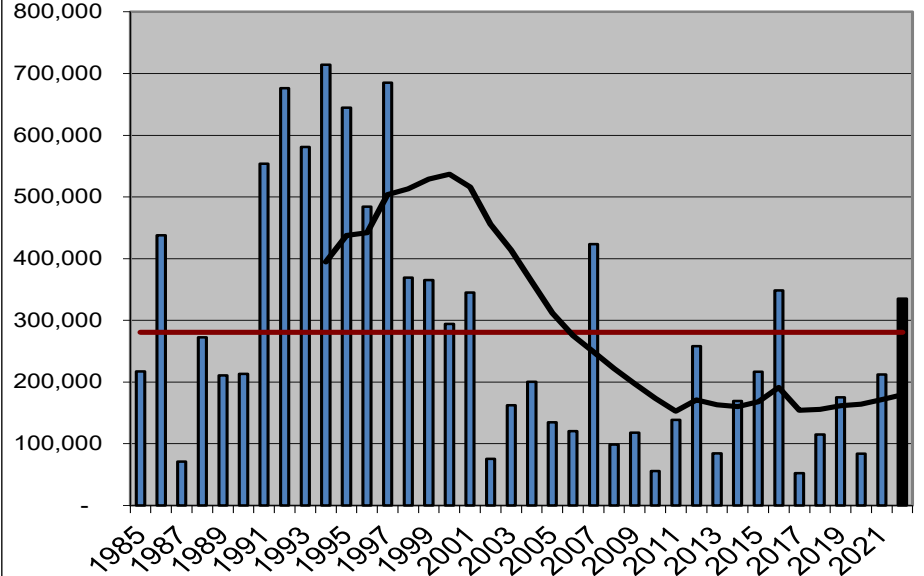
District 4 Purse Seine Harvest - coho



District 4 Purse Seine Harvest - pink



District 4 Purse Seine Harvest - chum



2022 District 4 Seine - Harvest of Unmarked Chum Salmon

