

Findings and Results from a Modified Optimum Numbers Study on the Cook Inlet Eastside Set Gillnet Fishery

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Commercial Fisheries Entry Commission
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Table 8. Matrix of Number of Viable ESSN Permits Based on Price and Harvest

Total Harvest Pounds	Price/Pound							
	\$1.25	\$1.50	\$1.75	\$2.00	\$2.09	\$2.25	\$2.50	\$2.75
500,000	6	12	18	24	26	30	37	43
1,000,000	11	24	36	48	53	61	73	85
1,500,000	17	36	54	73	79	91	110	128
2,000,000	23	47	72	97	106	122	146	171
2,500,000	28	59	90	121	132	152	183	214
3,000,000	34	71	108	145	159	182	219	256
3,500,000	40	83	126	169	185	213	256	299
4,000,000	45	95	144	194	211	243	292	342
4,500,000	51	107	162	218	237	273	329	385
5,000,000	57	119	180	242	264	304	366	427
5,500,000	62	130	198	266	290	334	402	470
6,000,000	68	142	216	290	316	365	439	513
6,500,000	74	154	234	315	343	395	475	555
7,000,000	80	166	252	339	369	425	512	598
7,500,000	85	178	270	363	395	456	548	641
8,000,000	91	190	288	387	422	486	585	684
8,500,000	97	202	307	411	448	516	621	726
9,000,000	102	213	325	436	474	547	658	769
9,500,000	108	225	343	460	501	577	695	812
10,000,000	114	237	361	484	527	608	731	855
10,500,000	119	249	379	508	554	638	768	897
11,000,000	125	261	397	532	580	668	804	940
11,500,000	131	273	415	557	606	699	841	983
12,000,000	136	285	433	581	633	729	877	1025
12,500,000	142	296	451	605	659	759	914	1068

The second step in this analysis is to see how these numbers fare based on past harvest levels. Figure 11 provides the ESSN fleet’s harvest of sockeye in pounds from 1975-2021, in contrast to the survey findings of how large a harvest is needed to keep all 428 permits viable in the fishery. Referring to Table 7 and using the highest price of \$2.68/lb for all the years 1975-2021, the fleet would need to harvest between 5.5 and 6 million pounds to achieve a minimum desired level of profit. At the lowest price \$1.61/lb from 2002-2021, the fleet would need to harvest over 12.0 million pounds to achieve the minimum desired level of profit. When looking at the more current price of \$2.09/lb the fleet would need more than 8 million pounds of sockeye to remain fully viable. That level of harvest has not been achieved since 2011. It is worth repeating that this is based on a minimum level of profit to remain viable.

It should be noted that the average harvest for 2020 and 2021 was only 1.7 million pounds, and that when looking at the most recent price of \$2.09/lb someplace between 79 and 106 permits would be able to obtain the desired profit level of \$14,482/permit (Table 8).