MEMORANDUM

State of Alaska

TO: Anne Reynolds-Manney DATE: November 6, 2024

THRU: Troy Thynes FILE NO.: November 6, 2024

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FROM: Whitney Crittenden SUBJECT 2023/24 SEAK Sea

Cucumber Fishery

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The commercial harvest of sea cucumbers in Southeast Alaska began on October 2, 2023, with an overall guideline harvest level (GHL) of 1,673,000 pounds of sea cucumbers. The total Southeast Alaska harvest of 1,639,237 pounds was 2.0% under the GHL. Participation throughout the season varied, with maximum participation of 136 divers during the first and fourth opening of the season, and a minimum of 1 diver for multiple openings during the middle and end of the season. Throughout the season 150 divers made 1,342 landings from 115 vessels registered to fish for miscellaneous shellfish in Southeast Alaska.

In the Ketchikan management area, seven harvest areas were open for a combined GHL of 613,300 pounds. A total of 600,103 pounds of sea cucumbers were harvested across 17 openings. The final harvest was 2.1% under the total GHL. During the first opening, 104,577 pounds of sea cucumbers were harvested by 89 in the Ketchikan area, over half of the harvest from the West Shore of Gravina Island (101-29) area. Harvest remained steady, averaging about 57,000 pounds for statistical weeks 41 through 46, before dropping off in SW 47. Throughout the weeks when processors were purchasing, there was a seasonal average of 37 divers harvesting an average of 42,684 pounds of eviscerated sea cucumbers per week, with an average of 1,153 pounds per diver per opening. Local processors did not buy the weeks of Christmas and New Years and ceased purchasing sea cucumbers after the statistical week (SW) 3 opening. Boca de Quadra (101-30) was the last area to have remaining guideline harvest level after SW 3. It did not open during SW 4 through 7, due to no interest from divers. Diver(s) indicated interest in harvesting those pounds during the remaining weeks of the season. The Ketchikan management area had an opening or the opportunity for an opening each week of the 2023/24 season.

In the Petersburg management area, the GHL was 452,100 pounds in six harvest areas. The total harvest of sea cucumbers was 447,419 pounds, harvested over 12 openings. The season harvest was 1.5% under the GHL. The average effort level was 32 divers per week with an average weekly harvest of 1,165 pounds per diver. Effort and harvest were greatest during the SW 45 when 64 divers harvested 74,643 pounds. Five of the Petersburg areas were closed after SW 51, with South Mitkof & North Zarembo (108-30) being the only area available for harvest. The Petersburg management area received no effort after SW 51, even though South Mitkof & North Zarembo (108-30) opened for four additional openings during SW 52, 53, 2, and 6. The Petersburg management area had an opening or the opportunity for an opening each week of the 2023/24 season.

In the Juneau management area, the GHL was 219,700 pounds located in three harvest areas. The total harvest of sea cucumbers was 208,888 pounds, harvested in 12 openings. An average of 11 divers per week harvested an average of 1,582 pounds per diver. Statistical weeks 44 had the highest weekly harvest with 45,788 pounds taken by 28 divers. During SW 47, 52, 53, and 2, the Juneau management area received no effort. During SW

3 through 10, two Juneau areas had guideline harvest level remaining, Northern Chatham (112-16, 17, 23, and 65) and Excursion Inlet and Homeshore (114-25-002 and 114-80), but neither was open due to lack of interest by divers. During SW 11, a confidential number of divers harvested a confidential number of pounds from Northern Chatham (112-16, 17, 23, and 65), and this marked the end of harvest from the Juneau management area for the 2023/24 season. The total harvest was 5% under the GHL.

In the Sitka management area, the GHL was 387,900 pounds located in four harvest areas. The total harvest of sea cucumbers was 381,249 pounds, harvested in 22 openings. Sitka received effort in 22 of the possible 25 opening, the most of any area office for the 2023/24 season. An average of 11 divers harvested per week with an average weekly harvest of 1,575 pounds per diver. Weekly participation ranged from 1 to 33 divers. The Sitka management area was open for 25 fishery openings during the 2023/24 season, with SW 13 being the only week without a Sitka opening. All areas were fished to guideline harvest level completion. The Sitka management area harvest was 1% under the combined GHL.

The first and fourth week of the season had the highest regional harvest, with peak weekly effort of 136 divers for both weeks. The fourth week (SW 44) which had a total of 214,737 pounds harvested, had the highest regional harvest of any of the weeks of the season. After the fifth week, participation throughout Southeast began to drop as many of the areas with larger GHLs closed. Participation decreased significantly between the seventh and eighth openings with a shift from 97 divers to 42 divers. There was a slight uptick in participation and harvest the week after the Thanksgiving holiday, likely encourage by increased time in many areas throughout the region. Fishery participation remained low with 1 to 33 divers harvesting during the ninth through final opening at the end of March. There was no closure during the holiday season, and during the corresponding statistical weeks, SW 52 there was no harvest, and SW 53 had 3,273 pounds harvested. The fishery closes by regulation March 31, and the last fishery occurred in SW 13. A total of 33,763 pounds of sea cucumber GHL was unharvested during the 2023/24 season, of which only 4,488 pounds remained available from areas which had not been closed.

The 2023/24 season occurred in a similar manner as the last time this rotation as fished in 2021/22. The 2023/24 season was similar in that it was fished until the season closure at the end of March. Management actions were taken to provide additional harvest opportunity. This included extending fishery periods in areas which have traditionally taken longer for the guideline harvest level to be harvested, beginning those fishery extensions earlier than in previous rotations, and increasing trip limits.

There were six shore-based processors, four direct marketers, three catcher sellers, one catcher exporter, and one buyer exporter purchasing throughout Southeast Alaska. Ex-vessel value for Southeast Alaska was approximately \$8.5 million based on raw fish ticket data. The ex-vessel value for the Ketchikan area was \$3.1 million. Values were based on an average price of \$5.22 per pound. Prices varied by processor, whether the product was sold dockside or to a tender, and whether the product was poked or fully cut. The price per pound fluctuated through the season and ranged from \$3.50 to \$6 per pound. The initial week of the fishery the average was \$3.50 per pound. The second week saw the addition of another processor and the average price rose to \$4.50 per pound. The third week it continued to rise to \$5.50 per pound, where it would stay until after the winter break. After the winter holidays the weekly average dropped to \$4.60 per pound and remained there until processors were done purchasing for the year.

Port sampling for sea cucumbers was discontinued beginning in the 2006/07 season. GHLs were determined from sampling cucumbers during the preseason biomass survey.

Table 1. Registration Area A (Southeast Alaska) commercial sea cucumber harvest, effort, and value, 1986/87 through 2023/24 seasons.

Season ^a	Guideline Harvest Level (lb)	Total Harvest (lb)	Average Price / lb ^b	Estimated Exvessel Value ^b	Number of Divers	Number of Landings	Average lb / Diver	Average Earnings / Diver ^b			
Data prior to 1986/1987 season is confidential.											
1986/87	34,043	34,043	\$0.21	\$7,149	7	44	4,863	\$1,021			
1987/88	65,056	65,056	\$0.21	\$13,662	11	143	5,914	\$1,242			
1988/89	801,405	801,405	\$0.21	\$169,096	57	922	14,060	\$2,967			
1989/90	2,318,305	2,318,305	\$0.42	\$969,142	205	2,263	11,309	\$4,728			
1990/91	704,491°	804,184	\$0.59	\$472,386	143	890	5,624	\$3,303			
1991/92	839,160°	869,988	\$0.80	\$697,970	187	704	4,652	\$3,732			
1992/93	1,100,440	1,249,621	\$0.79	\$988,628	240	1,003	5,207	\$4,119			
1993/94	799,235	964,343	\$1.03	\$995,783	320	949	3,014	\$3,112			
1994/95	1,351,000	1,322,219	\$1.79	\$2,361,541	261	1,379	5,066	\$9,048			
1995/96	1,157,500	1,332,095	\$1.39	\$1,846,556	424	1,582	3,142	\$4,355			
1996/97	939,300	909,789	\$1.29	\$1,169,612	294	1,234	3,095	\$3,978			
1997/98	892,410	894,739	\$1.63	\$1,458,425	226	976	3,959	\$6,453			
1998/99	1,026,345	1,055,572	\$1.55	\$1,636,137	219	971	4,820	\$7,471			
1999/00	1,580,000	1,569,626	\$1.95	\$3,060,771	200	1,378	7,848	\$15,304			
2000/01	1,122,500	1,158,385	\$2.23	\$2,583,199	220	913	5,265	\$11,742			
2001/02	1,425,200	1,438,451	\$1.75	\$2,517,289	235	1,201	6,121	\$10,712			
2002/03	1,576,700	1,639,440	\$1.26	\$2,042,882	201	1,313	8,156	\$10,164			
2003/04	1,637,700	1,698,650	\$1.42	\$2,472,456	195	1,296	8,711	\$12,679			
2004/05	1,381,200	1,374,532	\$2.12	\$2,769,116	194	1,139	7,085	\$14,274			
2005/06	1,475,800	1,437,731	\$2.00	\$2,875,462	198	1,418	14,523	\$14,523			
2006/07	1,598,700	1,597,457	\$1.97	\$3,146,990	175	1,237	17,983	\$17,983			
$2007/08^{d}$	1,384,300	1,449,301	\$2.43	\$3,774,428	181	1,290	7,923	\$21,086			
2008/09	1,122,100	1,102,637	\$2.30	\$2,536,065	176	1,072	6,301	\$13,078			
2009/10	1,574,700	1,610,826	\$2.34	\$3,769,333	169	1,240	9,532	\$22,304			
2010/11	1,262,800	1,274,541	\$2.52	\$3,211,843	180	1,109	7,081	\$17,841			
2011/12	999,000	1,023,834	\$5.06	\$5,180,600	189	1,043	5,417	\$27,411			
2012/13	1,476,000	1,512,895	\$4.05	\$6,127,225	199	1,369	7,602	\$30,790			
2013/14	1,472,600	1,556,983	\$3.97	\$6,181,223	198	1,396	7,864	\$31,218			
2014/15	1,084,800	1,073,554	\$4.00	\$4,294,216	171	1,022	6,278	\$25,083			
2015/16	1,439,900	1,525,387	\$3.50	\$5,338,855	175	1,278	8,716	\$30,508			
2016/17	1,243,200	1,319,798	\$3.93	\$5,279,192	169	1,206	7,809	\$31,238			
2017/18	1,233,900	1,294,637	\$5.25	\$6,796,844	175	1,211	7,398	\$38,839			
2018/19	1,757,600	1,768,104	\$5.37	\$9,510,249	184	1,606	9,625	\$51,686			
2019/20	1,909,000	1,994,991	\$5.16	\$10,294,153	184	1,788	10,842	\$55,946			
2020/21	1,745,300	1,721,185	\$3.58	\$6,043,721	159	1,412	10,825	\$38,010			

⁻ Table continued next page -

	Guideline	Total		Estimated	Number	Number	Average	Average
	Harvest	Harvest	Average	Exvessel	of	of	lb /	Earnings /
Seasona	Level (lb)	(lb)	Price / lb ^b	Value ^b	Divers	Landings	Diver	Diver ^b
2021/22	1,872,800	1,868,503	\$6.00	\$11,195,392	167	1,537	11,189	\$67,132
2022/23	1,962,300	1,820,895	\$3.17	\$5,723,539	160	1,485	11,381	\$35,772
2023/24	1,673,000	1,639,237	\$5.22	\$8,480,659	150	1,342	10,928	\$56,537

 ^a Season = October 1 thru September 30. Experimental fishing program prior to 1990/1991 season.
^b Based on CFEC (annual) data prior to the 1998/1999 season, then based on ADF&G fish ticket data.
^c Quota originally calculated in numbers of sea cucumbers.
^d Does not include data for the Yakutat sea cucumber fishery.

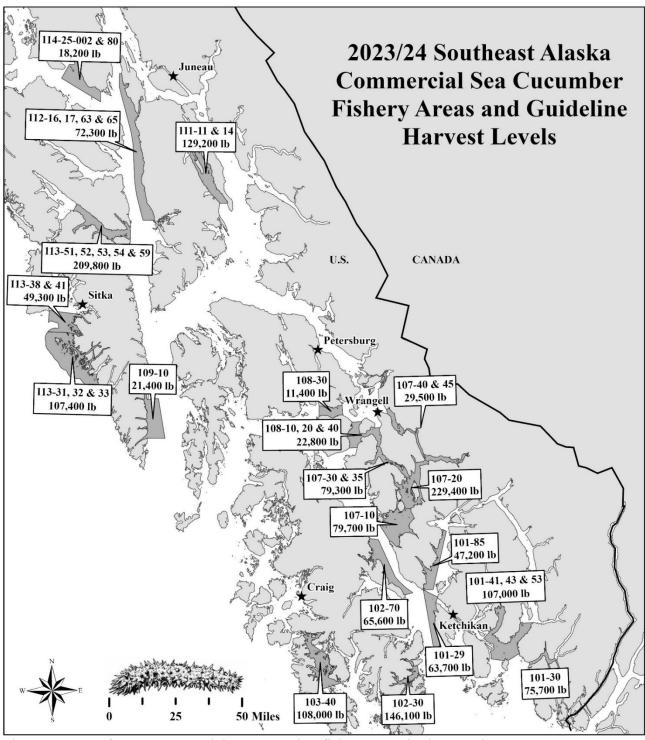


Figure 1. Map of open commercial sea cucumber fishery areas in the 2023/24 season.