

Special Publication No. 21-10

**Overview of the Sport Fisheries for King Salmon in
Southeast Alaska through 2020: A Report to the
Alaska Board of Fisheries**

by

Patrick A. Fowler

Richard S. Chapell

and

Southeast Region Division of Sport Fish Staff

November 2021

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



EFFORT

TOTAL NUMBER OF ANGLERS

The total number of anglers fishing in SEAK has experienced an annual growth rate of 3.2% between 1984 and 2019 (Figure 3). The growth in the fishery can be attributed to an increasing number of nonresident anglers while a slight decreasing trend has been observed in the number of resident anglers. In 2019, 127,886 anglers fished in SEAK of which 75% (95,966) were nonresident anglers.

While the general trend has been growth, the annual number of nonresident anglers is influenced by outside factors affecting the visitor industry in SEAK. Notably during 2008–2011, a decline in nonresident angler participation was observed, corresponding with the nationwide economic trends of the Great Recession. Although data from the Alaska Sport Fishing Survey (commonly known as the Statewide Harvest Survey, SWHS) is not yet available for 2020, other indicators suggest a drastic reduction in nonresident anglers resulting from travel restrictions and other impacts of COVID-19.

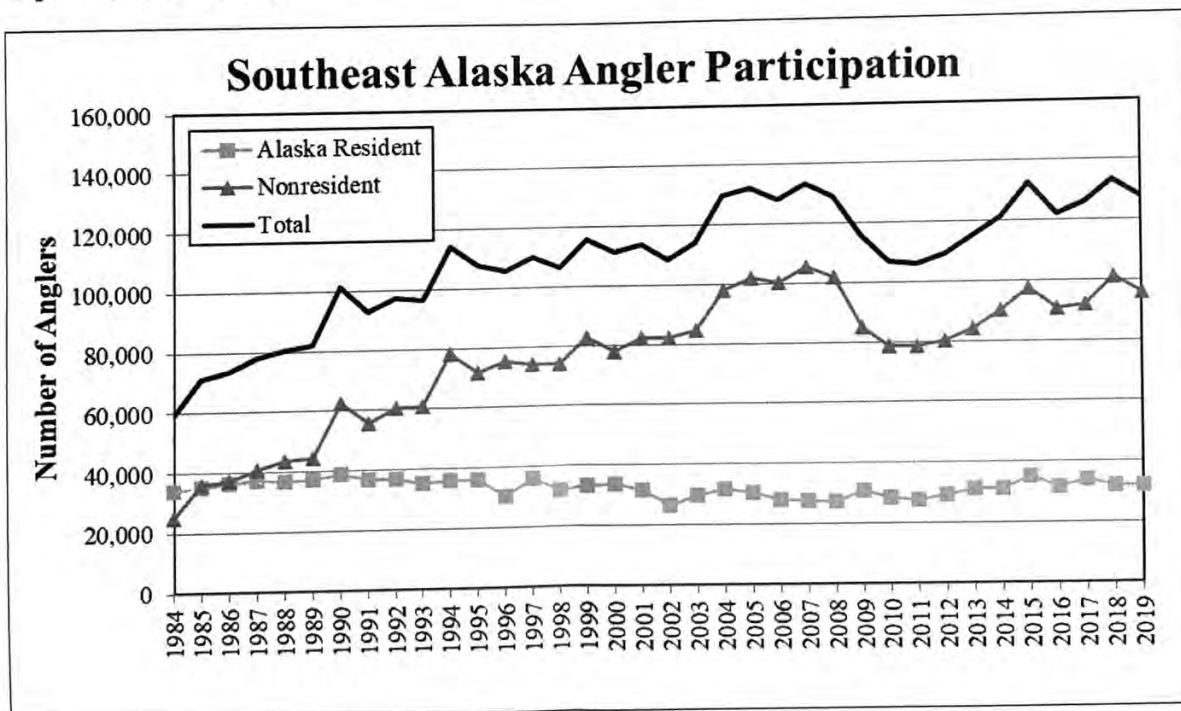


Figure 3.—Number of resident and nonresident anglers who fished in Southeast Alaska, 1984–2019 as estimated from the Alaska Sport Fishing Survey (i.e., SWHS; available at <https://www.adfg.alaska.gov/sf/sportfishingsurvey/index.cfm?ADFG=main.home>).

Note: Angler participation estimates prior to 1996 can be found on the ADF&G Historic Statewide Harvest Survey Publications website at <https://www.adfg.alaska.gov/sf/sportfishingsurvey/index.cfm?ADFG=main.historic>.

CHARTER VESSEL REGISTRATIONS AND LOGBOOK PROGRAM

In 1998, a saltwater vessel logbook program was implemented, requiring all guided charter vessels operating in saltwater to obtain and complete a logbook. Sport fishing guides and businesses are required to register with ADF&G, and each charter vessel is registered when a logbook is issued to that vessel. Each chartered vessel completes a logbook page for each fishing trip and returns that information to ADF&G. The information recorded includes the trip duration, target species, anglers and their residency status, harvest or release information by species, along with other information. While numerous program changes have been made to the logbook program since inception, the 2021 logbook page is provided in Appendix B for reference. Beginning in 2021, charter operators were required to submit information from completed chartered trips electronically.

The number of registered saltwater charter vessels within SEAK has ranged from 926 during 2006 to a low of 561 during 2020 (Figure 4 and Table 8). Beginning in 2009, the number of registered charter vessels decreased each year, declining 27% before stabilizing in 2013. Between 2015 and 2019, the number of registered vessels experienced a relatively stable growth of 3% annually to reach 783 registered vessels in 2019. In 2020, the unprecedented travel restrictions and other measures related to COVID-19 resulted in the lowest number of registered charter vessels since inception of the program. Even if a charter vessel is registered, it might not be utilized in the guided sport fishery. Summary data from the logbook program shows that on average from 2005 to 2019, 85% of registered vessels reported taking clients on at least 1 charter fishing trip, indicating that they were active during that year (Table 9 and Figure 5). During 2020, the number of active vessels not only declined in correspondence with the reduction in registered vessels, but fewer registered vessels reported being active. Only 75% of registered vessels reported being active in 2020. Before the global pandemic of 2020, the number of active charter vessels during 2019 was 15% lower than the peak observed in 2007.

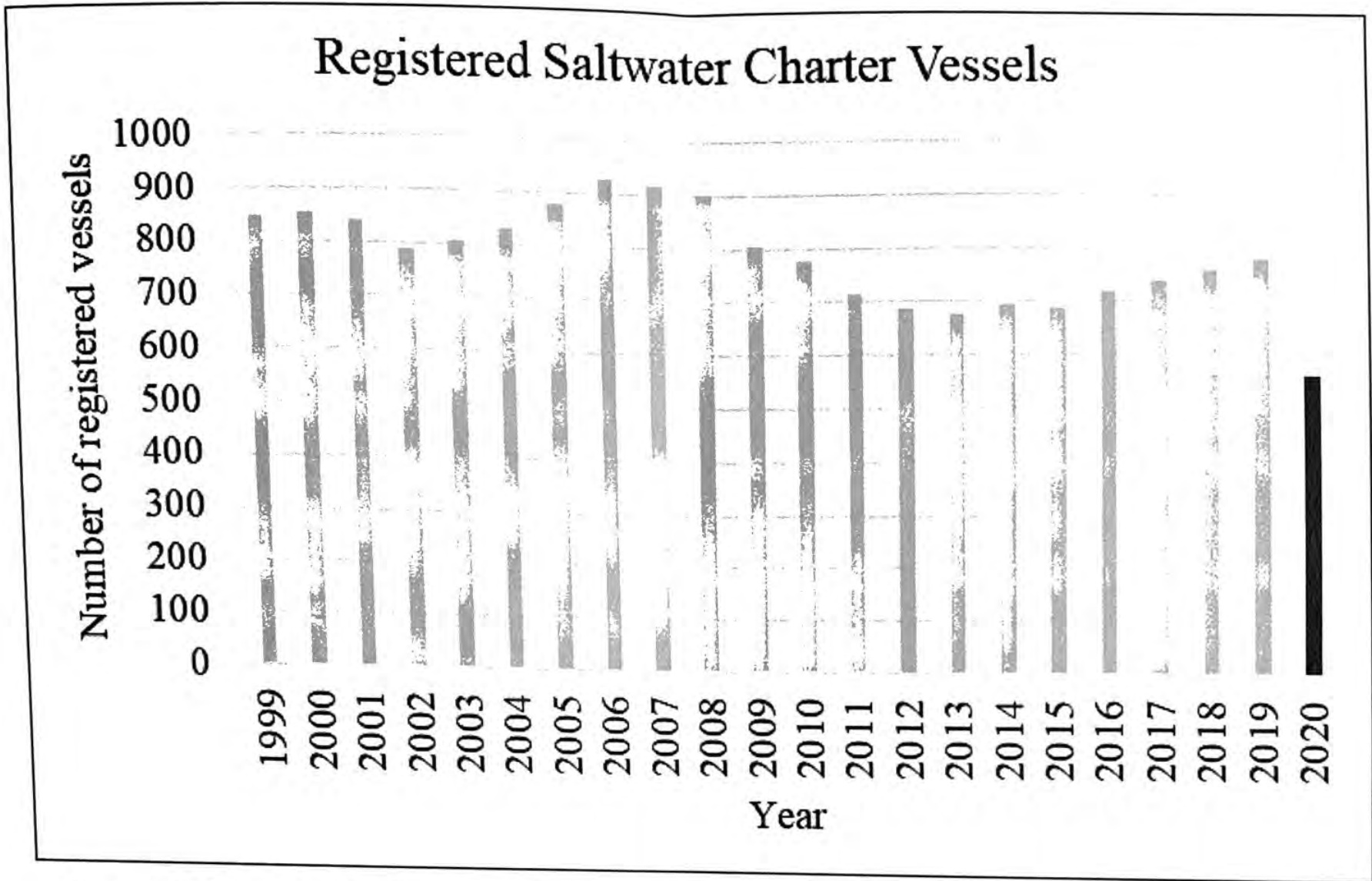


Figure 4.—Number of saltwater charter vessels registered in Southeast Alaska as determined from saltwater logbook and vessel registration program, 1999–2020.

Note: 2020 data is preliminary.

Table 8.—Number of registered (or licensed) saltwater charter vessels in Southeast Alaska by Statewide Harvest Survey (SWHS) area, determined from saltwater logbook and vessel registration program, 2005–2020.

SWHS area ^a	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ^b
Ketchikan	172	178	182	184	157	155	141	140	144	145	145	141	154	168	175	102
Prince of Wales	178	196	197	175	168	161	137	135	130	135	144	165	155	159	165	149
Petersburg/Wrangell	51	56	56	61	53	53	50	39	43	40	35	42	36	39	35	22
Sitka	239	241	242	232	202	194	194	185	173	168	162	166	173	170	180	146
Juneau	119	134	119	117	110	109	96	88	89	99	103	108	95	97	102	51
Skagway	9	9	8	7	8	4	4	6	4	7	7	5	6	3	4	0
Haines	6	5	3	4	3	3	3	3	3	1	2	2	2	4	3	0
Glacier Bay	85	83	93	108	93	85	81	80	77	80	75	77	85	88	88	71
Yakutat	18	19	20	17	13	13	12	14	16	17	15	13	15	16	16	14
Other ^c	2	7	2	2	2	2	2	2	2	5	1	1	20	17	15	6
TOTAL^d	879	926	918	904	807	778	716	689	678	695	686	718	741	761	783	561

^a SWHS area is based on the homeport listed on the sign out sheet for the vessel.

^b 2020 data is preliminary.

^c Includes multiple homeports in different SWHS area.

^d Column is not additive; some vessels registered in more than one SWHS area and are counted in each SWHS area.

Table 9.—Overall number of active saltwater charter vessels in Southeast Alaska by Statewide Harvest Survey (SWHS) area as determined from saltwater logbook and vessel registration program, 2005–2020.

SWHS area ^a	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ^b
Ketchikan	152	143	154	141	130	129	129	120	121	128	134	127	132	141	146	60
Prince of Wales	162	171	182	183	162	146	127	128	127	132	134	145	150	154	159	134
Petersburg/Wrangell	62	53	59	53	54	52	44	43	41	37	38	39	48	40	37	27
Sitka	223	228	223	222	194	180	172	168	162	163	157	166	179	170	172	128
Juneau	120	117	113	112	105	88	101	97	101	105	102	111	102	106	97	44
Skagway	9	9	7	6	8	5	4	6	4	7	6	5	6	3	3	0
Haines	5	4	4	4	3	4	2	3	2	2	2	2	4	4	4	0
Glacier Bay	79	80	87	96	84	91	76	75	72	78	69	71	76	84	74	57
Yakutat	14	15	16	14	10	11	12	12	13	13	15	12	15	15	16	13
TOTAL^c	738	747	768	757	670	644	611	592	579	601	601	617	630	645	653	423
Percent of registered vessels active	84%	81%	84%	84%	83%	83%	85%	86%	85%	86%	88%	86%	85%	85%	83%	75%

Note: Active vessels are those that turned in logbook forms reporting at least one trip with clients.

^a SWHS area is assigned based on port of offloading, bottomfish statistical area and salmon statistical area in that order.

^b 2020 data is preliminary

^c Column is not additive; some vessels fished in more than one SWHS area and counted in each SWHS where they fished.

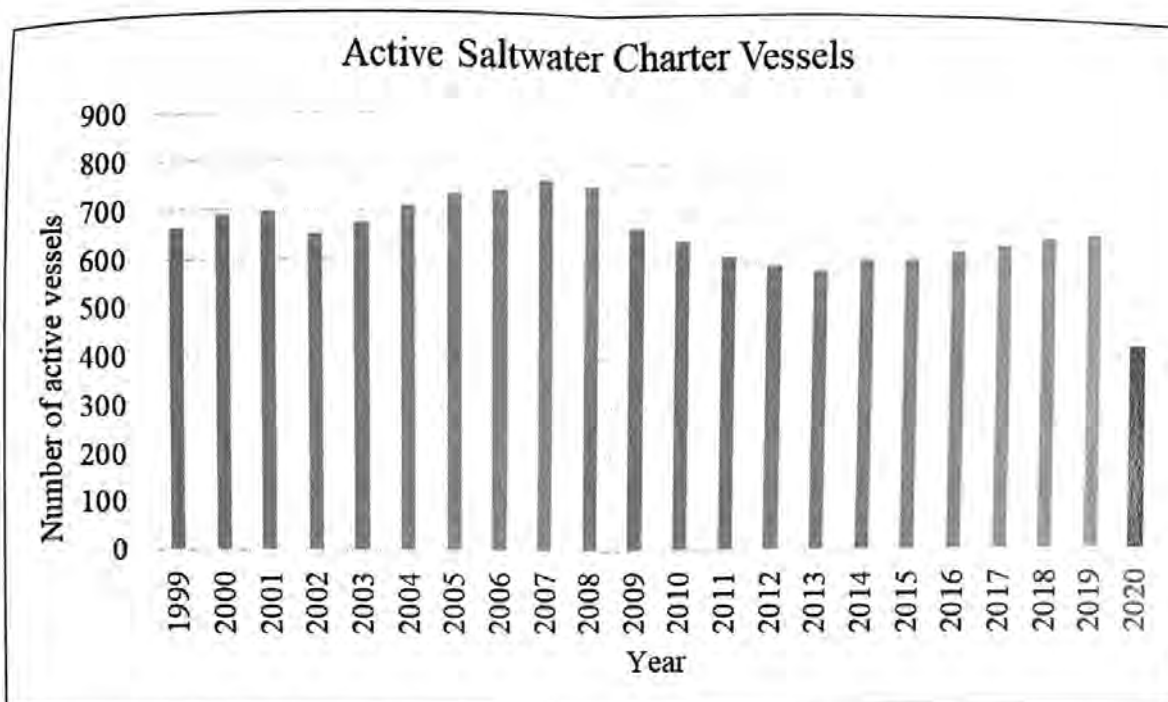


Figure 5.—Number of active saltwater charter vessels in Southeast Alaska as determined from saltwater logbook and vessel registration program, 1999–2020.

Note: Active vessels are those that turned in logbook forms reporting at least one trip with clients.

Note: 2020 data is preliminary.

HARVEST

REGIONWIDE HARVEST

The annual harvest of king salmon is driven by several factors including abundance of king salmon, angler effort, and annual regulatory actions. Marine and freshwater sport harvest of king salmon in SEAK from 1977 to 1988 was relatively stable; however, harvest began increasing rapidly in 1989 (Table 10). From 1977 to 1990, the average harvest was approximately 24,500 fish, whereas the 1991–2000 average was about 56,400 fish. From 2001 to 2010, the total sport harvest averaged nearly 72,400 king salmon. The largest observed sport harvest occurred in 2014, when nearly 87,000 fish king salmon were harvested. The average regionwide harvest during 2011–2019 was approximately 58,100 king salmon.

Distribution of king salmon harvest by area in SEAK has changed substantially since the 1980s (Figure 6 and Table 10). Average harvest in the Glacier Bay, Sitka, and Prince of Wales Island (PWI) areas displayed similar trends across 4 time periods that amounted to an increase in harvest for each subsequent time period, resulting in the highest harvest during the latest period (2011–2019). Ketchikan, Petersburg-Wrangell, and Juneau displayed somewhat similar trends (increased harvest through the first 3 time periods) until 2011–2019, when harvest levels decreased. During the most recent time period (2011–2019), the outer coast fisheries of Sitka and PWI accounted for over 60% of the regionwide harvest. Ketchikan (14%), Juneau (10%), and Petersburg-Wrangell (7%) collectively accounted for about 30% of the remaining harvest from 2011 to 2019. While recent management actions (2017–2020) to protect wild stock king salmon