

**Report on Selected Sport Fisheries of the Alaska  
Peninsula–Aleutian Islands Management Area,  
2012–2021**

by

**Tyler Polum**

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January 2023

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code		all standard mathematical signs, symbols and abbreviations	
deciliter	dL		AAC		
gram	g	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H <sub>A</sub>
hectare	ha			base of natural logarithm	<i>e</i>
kilogram	kg			catch per unit effort	CPUE
kilometer	km	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	coefficient of variation	CV
liter	L			common test statistics	(F, t, $\chi^2$ , etc.)
meter	m	at	@	confidence interval	CI
milliliter	mL	compass directions:		correlation coefficient (multiple)	R
millimeter	mm	east	E	correlation coefficient (simple)	r
<b>Weights and measures (English)</b>		north	N	covariance	cov
cubic feet per second	ft <sup>3</sup> /s	south	S	degree (angular)	°
foot	ft	west	W	degrees of freedom	df
gallon	gal	copyright	©	expected value	<i>E</i>
inch	in	corporate suffixes:		greater than	>
mile	mi	Company	Co.	greater than or equal to	≥
nautical mile	nmi	Corporation	Corp.	harvest per unit effort	HPUE
ounce	oz	Incorporated	Inc.	less than	<
pound	lb	Limited	Ltd.	less than or equal to	≤
quart	qt	District of Columbia	D.C.	logarithm (natural)	ln
yard	yd	et alii (and others)	et al.	logarithm (base 10)	log
<b>Time and temperature</b>		et cetera (and so forth)	etc.	logarithm (specify base)	log <sub>2</sub> , etc.
day	d	exempli gratia (for example)	e.g.	minute (angular)	'
degrees Celsius	°C	Federal Information Code	FIC	not significant	NS
degrees Fahrenheit	°F	id est (that is)	i.e.	null hypothesis	H <sub>0</sub>
degrees kelvin	K	latitude or longitude	lat or long	percent	%
hour	h	monetary symbols (U.S.)	\$, ¢	probability	P
minute	min	months (tables and figures): first three letters	Jan.,...,Dec	probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
second	s	registered trademark	®	probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
<b>Physics and chemistry</b>		trademark	™	second (angular)	"
all atomic symbols		United States (adjective)	U.S.	standard deviation	SD
alternating current	AC	United States of America (noun)	USA	standard error	SE
ampere	A	U.S.C.	United States Code	variance	
calorie	cal			population sample	Var var
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

***FISHERY MANAGEMENT REPORT NO. 23-01***

**REPORT ON SELECTED SPORT FISHERIES OF THE ALASKA  
PENINSULA–ALEUTIAN ISLANDS MANAGEMENT AREA, 2012–2021**

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# TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
LIST OF APPENDICES .....	ii
ABSTRACT .....	1
INTRODUCTION.....	1
MANAGEMENT AREA OVERVIEW .....	3
Management Area Description.....	3
Fishery Resources.....	3
Established Management Plans and Policies .....	4
Sport Fishing Effort, Harvest, and Catch.....	4
Effort.....	5
Harvest.....	6
Catch.....	6
CHINOOK SALMON FISHERIES .....	9
Chignik River Chinook Salmon.....	10
Fishery Description.....	10
Research Activities and Recent Fishery Performance .....	11
Nelson River Chinook Salmon .....	13
Fishery Description.....	13
Research Activities and Recent Fishery Performance .....	13
Other Chinook Salmon Fisheries.....	14
COHO SALMON FISHERIES .....	15
Cold Bay Coho Salmon .....	15
Fishery Description.....	15
Research Activities and Recent Fishery Performance .....	15
Unalaska Bay Saltwater Coho Salmon .....	16
Fishery Description and Management Activities.....	16
Other Coho Salmon Fisheries.....	17
SOCKEYE SALMON FISHERIES .....	17
Unalaska Sockeye Salmon.....	18
Fishery Description and Research and Management Activities.....	18
Other Sockeye Salmon Fisheries .....	18
STEELHEAD–RAINBOW TROUT FISHERIES .....	19
GROUNDFISH FISHERIES.....	20
Halibut, Rockfish, Lingcod.....	20
Fishery Description.....	20
Management Activities and Recent Fishery Performance .....	21
Other Groundfish.....	22

## TABLE OF CONTENTS (Continued)

	<b>Page</b>
REFERENCES CITED .....	23
APPENDIX A: ALASKA PENINSULA–ALEUTIAN ISLANDS AREA CHINOOK SALMON WEIR COUNTS .....	25
APPENDIX B: CROSS-REFERENCED ALASKA BOARD OF FISHERIES INFORMATION.....	31

## LIST OF TABLES

<b>Table</b>		<b>Page</b>
1	Total angler-days of sport fishing effort expended in Alaska Peninsula–Aleutian Islands Area waters, 2012–2021.....	5
2	Statewide Harvest Survey estimates of number of fish harvested by anglers fishing Alaska Peninsula–Aleutian Islands Area fresh and salt waters combined, 2012–2021.....	7
3	Statewide Harvest Survey estimates of number of fish caught by anglers fishing Alaska Peninsula–Aleutian Islands Area fresh and salt waters combined, 2012–2021.....	8
4	Emergency orders issued in 2019–2022 for Alaska Peninsula–Aleutian Islands Area sport fisheries.....	9
5	Statewide Harvest Survey estimates of freshwater Chinook salmon harvest and release in the Alaska Peninsula–Aleutian Islands Area, 2012–2021.....	10
6	Statewide Harvest Survey estimates of freshwater coho salmon harvest and catch for Cold Bay and the Alaska Peninsula–Aleutian Islands Area, 2012–2021.....	16
7	Statewide Harvest Survey estimates of saltwater coho salmon harvest and catch for Unalaska Island and Alaska Peninsula–Aleutian Islands Area, 2012–2021.....	17
8	Statewide Harvest Survey estimates of freshwater sockeye salmon harvest and catch in Cold Bay and the Alaska Peninsula–Aleutian Islands Area, 2012–2021.....	19
9	Statewide Harvest Survey estimates of steelhead and rainbow trout catch in the Alaska Peninsula–Aleutian Islands Area, 2012–2021.....	20
10	Statewide Harvest Survey estimates of halibut, lingcod, and rockfish harvest from Unalaska Island and the Alaska Peninsula–Aleutian Islands Area, 2012–2021.....	21

## LIST OF FIGURES

<b>Figure</b>		<b>Page</b>
1	Map of the Alaska Peninsula–Aleutian Islands Area.....	2
2	Chignik River Chinook salmon escapement, 2012–2022.....	12
3	Nelson River Chinook salmon escapement, 2012–2022.....	14

## LIST OF APPENDICES

<b>Appendix</b>		<b>Page</b>
A1	Cumulative weir counts for Chignik River Chinook salmon, 2012–2021.....	26
A2	Cumulative weir counts for Nelson River Chinook salmon, 2012–2021.....	28
B1	Reference information specific to February 2023 Alaska Board of Fisheries proposals for Alaska Peninsula–Aleutian Islands Area sport fisheries.....	32

## ABSTRACT

This report provides a detailed summary of the sport fisheries occurring within the Alaska Peninsula–Aleutian Islands Management Area and includes a description of the management area, programs related to area management objectives, and an overview of sport catch, harvest, and effort. Included for each sport fishery are a description of the fishery, research activities, and recent fisheries performance. Escapement and harvest information are presented through 2022 for fisheries, when available.

**Keywords:** Kodiak Management Area, Kodiak Regulatory Area, Alaska Peninsula–Aleutian Islands Regulatory Area, Kodiak Road Zone, Kodiak Remote Zone, stocked lakes, stocking projects, escapement, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, sockeye salmon, *Oncorhynchus nerka*, steelhead, rainbow trout, *Oncorhynchus mykiss*, halibut, *Hippoglossus stenolepis*, rockfish, *Sebastes* spp., lingcod, *Ophiodon elongatus*, Alaska Board of Fisheries

## INTRODUCTION

This fisheries management report provides a summary of the sport fisheries occurring within the Alaska Peninsula–Aleutian Islands Management Area (APAIA; Figure 1), which is managed out of the Alaska Department of Fish and Game (ADF&G), Division of Sport Fish (SF) Kodiak office. This report is provided for the Alaska Board of Fisheries (BOF), Fish and Game Advisory Committees (ACs), the general public, and other interested parties. Included is a description of the management area, and overview of fishery resources and management plans and policies. Fisheries are described and organized by species, management areas, subunits, and specific drainages or fisheries locations. A historical overview and description, historical harvests and salmon escapements, research and management objectives, and recent fishery performance are discussed for the primary sport fisheries throughout the area.

The mission of SF is to protect and improve the state’s fishery resources by managing for sustainable yield of wild stocks of fish, providing diverse sport fishing opportunities, and providing information to assist the BOF in optimizing social and economic benefits from sport fisheries. The guiding document for SF continues to be the Strategic Plan,<sup>1</sup> which highlights key issues currently facing SF and acts as a guide for division leaders and managers in decision-making. To implement these goals, SF has in place a fisheries management process that includes an annual regional review of fisheries status and research needs, development of fisheries stock assessments, a formal operational planning process, use of biological and fishing effort data, and input from user groups to assess the need for and to develop management plans and regulatory proposals.

This fisheries management report presents harvest information for the APAIA fisheries through 2021. Fisheries data that do not rely on harvest estimates, including salmon weir and survey counts, are presented through 2022 to give the most recent information available. Estimates of escapement rely on harvest estimates so escapements for 2022 will be presented in future reports when the 2022 harvest information becomes available.

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<sup>1</sup> Division of Sport Fish Strategic Plan 2022–2027. Alaska Department of Fish and Game Division of Sport Fish. Available at [http://www.adfg.alaska.gov/static/fishing/PDFs/sport/Strategic\\_Plan.pdf](http://www.adfg.alaska.gov/static/fishing/PDFs/sport/Strategic_Plan.pdf).



Figure 1.—Map of the Alaska Peninsula–Aleutian Islands Area (APAIA).



# MANAGEMENT AREA OVERVIEW

## MANAGEMENT AREA DESCRIPTION

The APAIA includes all fresh and salt waters of Alaska on the south side of the Alaska Peninsula, including Pacific Ocean drainages west of the longitude of Cape Douglas, all waters on the north side of the Alaska Peninsula, including Bering Sea drainages south of the latitude of Cape Menshikof, and all fresh and salt waters within and surrounding the Aleutian Islands as well as the Pribilof Islands (Figure 1). This area also has a subunit called the Unalaska–Dutch Harbor Road Zone.

The community of Unalaska–Dutch Harbor is the largest community in the APAIA, and there are more than a dozen smaller villages. Except for the road-accessible fisheries located on Unalaska and near the community of Cold Bay on the Alaska Peninsula, virtually all significant sport fishing opportunities in the APAIA are remote and relatively difficult to access. Principal land managers include the United States Fish and Wildlife Service (USFWS), National Park Service (NPS), various Alaska Native corporations, and the State of Alaska.

Management and research operations for APAIA are administered through ADF&G SF for the Southcentral Region and are based in the Kodiak Area Office. During the report years 2012–2021, area staff members stationed in Kodiak included 3 permanent full-time Fishery Biologists, 1 Program Technician, several seasonal Fish and Wildlife Technicians, and high school interns. Additional support for the Kodiak office is provided through the regional headquarters office based in Anchorage. Programmatic functions of the Kodiak office include operating salmon counting weirs, collecting and analyzing biological samples, conducting angler creel and salmon escapement surveys, and implementing sport fisheries stocking projects.

## FISHERY RESOURCES

APAIA fishery resources include numerous pink (*Oncorhynchus gorbuscha*) and coho salmon (*O. kisutch*) runs that make up the majority of the freshwater fish resources in the area. Although fewer in number, there are also many sockeye (*O. nerka*) and Chinook salmon (*O. tshawytscha*) runs that are important for guided and unguided anglers. Chum salmon (*O. keta*) are one of the less exploited fish resources, although there are many chum salmon runs available to all users. In the APAIA, salmon runs are harvested primarily by the commercial fisheries, with sport and subsistence harvests composing just a small part of overall harvests, although they can be significant for individual salmon runs. APAIA salmon runs are characterized by low angler harvest and effort because most of the area is remote, and the population is sparse near accessible salmon streams.

Saltwater sport fish resources include saltwater salmon fisheries (e.g., Unalaska Bay area) but are primarily composed of harvests of halibut (*Hippoglossus stenolepis*), lingcod (*Ophiodon elongatus*), rockfish (*Sebastes* spp.), and pacific cod (*Gadus macrocephalus*). There are also small sport harvests of crab and other shellfish. Most of the APAIA groundfish and shellfish harvests are commercial, and very little is due to sport anglers and subsistence users.

APAIA subsistence fisheries are highly important to local residents, and subsistence users often switch between sport fishing regulations and subsistence fishing regulations to fulfil subsistence needs because the 2 fisheries allow different gear types, limits, and often occur in different locations. Many anglers and subsistence users in the APAIA are also participants and business

owners in the area's commercial fisheries, which is the primary economic activity within the APAIA. There are also a number of guided sport fisheries throughout the APAIA, primarily in freshwater areas, providing significant economic benefits to local communities, and guides are often the only means of accessing these fisheries for nonresidents (of the area) due to the remoteness and lack of local services within the APAIA.

## **ESTABLISHED MANAGEMENT PLANS AND POLICIES**

Codified regulations governing sport fisheries of the APAIA are established in Chapter 65, Title 5 of the Alaska Administrative Code. Regulatory provisions of the area not specified in Chapter 65 may be found in the Chapter 75 administrative code pertaining to statewide regulation of Alaska sport fisheries.

Fisheries regulations are developed within the established BOF process. Public input concerning regulation changes and fishery allocation issues is accommodated in this process through various means including submission of proposals, direct testimony to the BOF, and participation in local fish and game AC meetings. The ACs have been established throughout Alaska specifically to provide a conduit for public access to the BOF and to assist the BOF in addressing fisheries issues. SF serves as technical advisor at both AC and BOF meetings. In this way, the meetings provide for direct public interaction with ADF&G staff involved with fish resource issues of local concern. In the APAIA, there are 6 ACs: Chignik, King Cove, False Pass, Nelson Lagoon, Sand Point, and Unalaska–Dutch Harbor. The BOF meets on a 3-year cycle for specific geographical areas and fish resource groupings. Regulatory proposals concerning the APAIA were addressed previously in February 2019. No changes to APAIA sport fisheries were made during this BOF cycle. The next regularly scheduled BOF meeting for the APAIA was scheduled for 2022 but was subsequently delayed 1 year due to rescheduling of the BOF schedule during the COVID-19 pandemic.

To resolve allocation conflicts between or within user groups while instituting effective conservation measures, the BOF may institute fishery-specific management plans and policies to guide ADF&G. These plans are meant to assure sustained yield of fish resources in conjunction with the establishment of allocations based on management actions and guidelines; however, there are no management plans established for any APAIA sport fisheries at this time.

## **SPORT FISHING EFFORT, HARVEST, AND CATCH**

Since 1977, sport angler effort in the APAIA has been estimated using the Alaska Sport Fishing Survey (commonly referred to as the Statewide Harvest Survey [SWHS]), an annual questionnaire mailed to a stratified random sample of (resident or nonresident) households with at least 1 valid fishing license.<sup>2</sup> The SWHS estimates both guided and unguided sport fishing effort in “angler-days,” which is the total number of days spent fishing by all anglers, plus angler harvest and (since 1990) total catch by fishing location. Estimates of harvest and catch are also available by species, but the SWHS does not estimate effort by species. Survey results for each year are not available until the following year; hence, the results for 2022 will not be available until fall 2023, so this report only contains SWHS results through 2021.

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<sup>2</sup> Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Between 2006 and 2016, freshwater harvest, catch, and effort were also reported by guided anglers in logbooks administered through the ADF&G Freshwater Logbook Program. The ADF&G Saltwater Logbook Program is ongoing and provides harvest, catch, and effort for guided saltwater anglers. These sources are considered a census of guided effort due to mandatory reporting. However, historical logbook information for APAIA is sparse because there were rarely more than 3 guide businesses operating in a specific fishery, resulting in confidential data.

The APAIA is within the SWHS reporting Area R, which is the Naknek River drainage–Alaska Peninsula reporting area. Area R SWHS statistics pertinent to the APAIA include those from sport fisheries occurring within and around the Alaska Peninsula south of a line from Cape Douglas around the Alaska Peninsula to Cape Menchikof and including the Aleutian Islands (Figure 1).

## Effort

An average of 14,018 angler-days were expended in APAIA waters from 2012 to 2021 (Table 1), which is less than 1% of the average statewide total and about 1% of the average for the Southcentral Region<sup>3</sup> during the same period.<sup>4</sup> During this 10-year period, the APAIA peaked at 19,031 angler-days in 2018. In 2021, APAIA anglers accounted for 13,393 angler-days (Table 1).

Major APAIA fisheries occur in the vicinity of Cold Bay and in the Unalaska–Dutch Harbor Road Zone. Other relatively significant fisheries in the area consist of several drainages frequented by remote lodge operators based on the north side of the Alaska Peninsula such as the Nelson and Sandy Rivers and in the Chignik River drainage. Due to the remote location and corresponding high cost to access most fishing destinations within the APAIA, overall angler effort is modest compared to nearby management areas to the extent that during most years, estimates of effort are unavailable in most individual locations in the APAIA due to a lack of respondents to the SWHS.

Table 1.—Total angler-days of sport fishing effort expended in Alaska Peninsula–Aleutian Islands Area (APAIA) fresh waters, 2012–2021.

Year	Saltwater effort		Freshwater effort		Area total
	Angler-days	Percent of area	Angler-days	Percent of area	
2012	8,830	61%	5,674	39%	14,504
2013	5,004	48%	5,342	52%	10,346
2014	7,589	48%	8,088	52%	15,677
2015	7,742	53%	6,937	47%	14,679
2016	4,990	47%	5,549	53%	10,539
2017	2,316	24%	7,202	76%	9,518
2018	8,243	43%	10,788	57%	19,031
2019	5,698	31%	12,764	69%	18,462
2020	6,341	45%	7,688	55%	14,029
2021	5,689	42%	7,704	58%	13,393
Average 2012–2021	6,244	–	7,774	–	14,018

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

Note: The APAIA angler-days presented here do not include the Ugashik, Naknek, or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

<sup>3</sup> ADF&G, Division of Sport Fish, Southcentral Region (i.e., Region II) includes the following management areas: Anchorage Area, Bristol Bay, Kodiak–Aleutians, Lower Cook Inlet (Kenai), Northern Cook Inlet (Matanuska–Susitna), Prince William Sound Area, Seward–North Gulf Coast, and Upper Kenai Peninsula.

<sup>4</sup> Calculated from Table 1 and data obtained from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

## Harvest

From 2012 to 2021, an average of 12,045 fish were harvested by anglers fishing APAIA waters (Table 2). Coho salmon made up the largest portion of the average harvest at 32% of all species, sockeye salmon were the next most common at 14%, and halibut and rockfish were also very common at 11% of the average harvest each (calculated from Table 2). In 2021, a total of 6,659 fish were harvested by anglers in APAIA waters, and coho salmon and halibut accounted for 54% and 13% of the total harvest, respectively. Rockfish were next at 8% of the total harvest. Other species harvested in 2021 included Chinook salmon, pink salmon, chum salmon, lingcod, Pacific cod, black cod (*Anoplopoma fimbria*), and Dolly Varden (*Salvelinus malma*).

## Catch

SWHS estimates of total catch (number of fish harvested plus number released) by anglers fishing APAIA waters can be used to calculate release to harvest ratios. Although this ratio varies substantially by species, the overall average from 2012 to 2021 was 4 fish released for every 1 harvested (calculated from Tables 2 and 3). In 2021, catch was greatest for coho salmon (35% of total catch), with Chinook salmon (16%), Dolly Varden (10%), and sockeye salmon (9%) following. Species with the highest release to harvest ratios in 2021 were Chinook salmon (nearly all were released), and steelhead and rainbow trout (all were released). The 2021 release to harvest ratios for pink salmon, sockeye salmon, and Dolly Varden were 14, 10, and 9 caught for every 1 harvested, respectively. Steelhead and rainbow trout are typically the primary catch-and-release species targeted by anglers in the APAIA; however, Chinook salmon have recently become more popular as a catch-and-release species.

Table 2.—Statewide Harvest Survey (SWHS) estimates of number of fish harvested by anglers fishing Alaska Peninsula–Aleutian Islands Area (APAIA) fresh and salt waters combined, 2012–2021.

Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average 2012–2021
Salmon											
Pink	1,316	496	690	704	539	925	3,947	405	790	124	994
Coho	2,358	2,667	4,934	4,114	3,696	3,937	6,122	4,871	2,820	3,582	3,910
Sockeye	2,520	760	3,971	4,368	634	1,253	1,867	693	763	269	1,710
Chinook	399	618	316	551	533	764	1,005	584	65	22	486
Chum	21	63	106	17	152	161	44	228	0	198	99
Groundfish											
Halibut	3,545	1,842	1,001	778	1,657	409	1,055	1,623	775	847	1,353
Rockfish	2,236	1,115	1,444	2,086	1,023	339	1,970	1,929	1,093	510	1,375
Lingcod	136	199	588	120	42	0	40	320	50	123	162
Black cod	0	12	9	0	10	412	101	20	0	351	92
Pacific cod	3,747	1,308	595	1,065	845	686	1,104	1,165	471	310	1,130
Trout and char											
Dolly Varden	283	1,076	414	1,173	293	388	1,635	481	215	323	628
Rainbow trout	0	0	37	20	0	0	0	72	9	0	14
Steelhead	0	0	0	0	0	0	0	0	0	0	0
Other fish <sup>a</sup>	61	46	69	194	255	0	239	24	59	0	95
Total	16,622	10,202	14,174	15,190	9,679	9,274	19,129	12,415	7,110	6,659	12,045

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> Includes lake trout (*Salvelinus namaycush*), sharks, shellfish, and other unspecified fish species.

Table 3.—Statewide Harvest Survey (SWHS) estimates of number of fish caught by anglers fishing Alaska Peninsula–Aleutian Islands Area (APAIA) fresh and salt waters combined, 2012–2021.

Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average 2012–2021
Salmon											
Pink	6,724	2,734	4,318	7,593	2,448	5,674	8,183	6,173	2,640	1,807	4,829
Coho	10,569	6,432	17,648	21,899	17,938	13,084	21,555	25,614	7,165	10,895	15,280
Sockeye	3,275	1,184	5,743	5,827	1,144	2,595	3,309	2,648	1,086	2,855	2,967
Chinook	2,087	1,466	3,833	6,080	4,950	5,881	12,874	7,038	273	4,950	4,943
Chum	3,425	1,005	4,903	4,923	3,366	1,873	2,165	7,331	1,911	1,307	3,221
Groundfish and shellfish											
Halibut	5,666	2,325	1,434	1,046	2,606	574	1,744	3,268	1,403	1,210	2,128
Rockfish	6,465	1,553	2,796	6,457	4,759	558	4,171	3,839	1,747	1,196	3,354
Lingcod	205	216	893	551	557	0	60	396	101	149	313
Black cod	0	38	9	0	260	824	733	20	279	351	251
Pacific cod	6,745	2,546	2,921	2,495	5,116	971	1,554	2,316	1,455	795	2,691
Trout and char											
Dolly Varden	9,027	13,781	11,668	9,592	8,462	8,262	11,000	6,365	4,992	3,261	8,641
Rainbow trout	218	206	577	1,256	700	844	2,959	1,011	1,105	1,736	1,061
Steelhead	0	0	693	237	324	1,022	2,235	1,144	1,176	931	776
Other fish <sup>a</sup>	940	783	341	1,112	522	379	322	1,897	100	0	640
Total	55,346	34,269	57,777	69,068	53,152	42,541	72,864	69,060	25,433	31,443	51,095

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> Includes lake trout, sharks, shellfish, and other unspecified fish species.

## CHINOOK SALMON FISHERIES

APAIA Chinook salmon stocks include the Chignik, King Salmon, Meshik, Nelson, Sandy, and Cinder Rivers plus several other smaller drainages on the north side of the Alaska Peninsula. Exploitation rates by anglers on APAIA stocks are low to the extent that during most years, SWHS estimates of catch and harvest by drainage are unavailable. Although a variety of users harvest APAIA Chinook salmon from both fresh and salt waters, including commercial and subsistence fishers, the primary interest in utilizing these stocks has been from sport anglers.

The primary management objectives for APAIA Chinook salmon stocks are to achieve established escapement goals for the Nelson and Chignik Rivers. These runs are monitored annually for escapement using weir counts (Appendices A1 and A2), whereas spawning assessment of other stocks in the APAIA is limited to escapement index counts obtained from aerial surveys or partial counts at weirs. To ensure escapement goals are attained, sport harvests may be limited or increased by adjusting daily or seasonal bag limits, prohibiting bait, and reducing time and areas open to fishing via emergency order (EO). Stocks that consistently fall below escapement goal levels may be closed to sport fishing. In the last 10–15 years, like other Chinook salmon runs around the state (ADF&G Chinook Salmon Research Team 2013), counts of APAIA Chinook salmon runs have decreased, but unlike other areas, there have not been as many problems achieving escapement goals. However, the Chignik River in particular has seen very small runs, and EOs with closures and gear restrictions have been used regularly to meet escapement goal objectives in the last 6 years (Table 4).

Table 4.—Emergency orders (EO) issued during 2019–2022 for Alaska Peninsula–Aleutian Islands Area (APAIA) sport fisheries.

Year	EO	Effective	Description
2019			No EOs were issued for the APAIA in 2019.
2020	2-KS-4-38-20	18 July	Chignik River closed to fishing for Chinook salmon; gear restricted to only 1 unbaited artificial lure or fly.
2021	2-KS-4-41-21	14 July	Chignik River closed to fishing for Chinook salmon; gear restricted to only 1 unbaited artificial lure or fly.
2022	2-KS-4-50-22	13 July	Chignik River closed to fishing for Chinook salmon; gear restricted to only 1 unbaited artificial lure or fly.

Chinook salmon harvests in the APAIA are generally small, in part due to fishery restrictions and declining interest but also due to increased interest in catch-and-release fishing for Chinook salmon instead. Most harvest and effort for Chinook salmon occurs in the freshwaters of the APAIA, and marine harvests only make up a very small component of the overall Chinook salmon harvest. Freshwater harvest of Chinook salmon estimated through the SWHS averaged 348 fish for the APAIA from 2012 through 2021, and during this same period, an average of 4,266 Chinook salmon were caught (Table 5). In 2021, an estimated 4,928 Chinook salmon were caught but only 22 were estimated for harvest (Table 5).

Chignik River and Nelson River Chinook salmon weir counts typically peak in mid- or late July; however, the Nelson River run begins much earlier than the Chignik River run, typically with large numbers of fish entering the river by mid-June (Appendices A1 and A2). Because the Nelson River weir is located approximately 10 miles upstream from the mouth of the river, weir counts do not always reflect time of entry into the drainage for Chinook salmon. In general, the APAIA has a

Chinook salmon sport fishing season of 1 January through 25 July in regulation, although the Chignik River is an exception, where the season does not close until 9 August. An areawide bag limit of 2 Chinook salmon per day, 2 in possession, applies to the APAIA with an annual limit of 5 for fish caught in freshwater. There are 2 exceptions to this: Nelson River Chinook salmon are catch-and-release only by regulation, and Sandy River has a bag limit of 1 Chinook salmon per day, 2 in possession with an annual limit of 2.

Table 5.—Statewide Harvest Survey (SWHS) estimates of freshwater Chinook salmon harvest and release in the Alaska Peninsula–Aleutian Islands Area (APAIA), 2012–2021.

Year	Harvest	Release
2012	399	1,688
2013	588	833
2014	249	3,517
2015	379	4,930
2016	363	4,000
2017	549	5,027
2018	646	11,256
2019	266	6,380
2020	16	98
2021	22	4,928
Average 2012–2021	348	4,266

*Source:* Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> Does not include the Ugashik, Naknek or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

## CHIGNIK RIVER CHINOOK SALMON

### Fishery Description

The Chignik River drainage is located within the APAIA on the south side of the Alaska Peninsula, with the communities of Chignik Lagoon and Chignik Lake located on the drainage. The Chignik River extends approximately 2.5 miles (4 km) from Chignik Lake to Chignik Lagoon and is mainly accessible by boat from the 2 communities as well as nearby Chignik Bay village. The Chignik River has historically supported the largest APAIA Chinook salmon sport fishery. Chinook salmon normally return to the Chignik River between late June and mid-August, with peak immigration during mid to late July (Appendix A1). Anglers target Chinook salmon in the Chignik River and in Chignik Lagoon, and the sport harvest is mainly attributable to guided anglers, although there is a small amount of harvest from unguided anglers.

Due to a low level of angler effort, published catch and harvest estimates for Chignik River Chinook salmon are rarely available from the SWHS. Harvests of Chinook salmon from the Chignik River are small, like most Chinook salmon harvests in the APAIA, where harvests never exceed 300 fish in a single drainage annually according to previously available freshwater



logbooks.<sup>5</sup> In most years, estimated harvest is less than 100 Chinook salmon in any single APAIA drainage (based on SWHS), and Chignik Chinook salmon harvests are probably similar.

### **Research Activities and Recent Fishery Performance**

Chignik River Chinook salmon escapements have been monitored with a weir that was established in 1922 and operated by ADF&G since 1959. The weir is located just above the Chignik Lagoon and is primarily used to count returning sockeye salmon, although it also covers the entirety of the Chinook salmon run. Daily weir counts are extrapolated from timed counts using underwater video for the first 10 minutes of each hour the weir is in operation. Due to a lack of available harvest information, a proxy of harvest is used to estimate escapement to account for harvest of Chinook salmon above the weir. To account for upriver harvest, 100 fish are subtracted from the weir count to estimate escapement. This is based on historical harvests and observations by ADF&G staff on the river. This number is also used by managers in season for making decisions regarding potential emergency actions in the sport fishery.

From 2012 to 2021, escapement estimates averaged 1,442 fish; the lowest escapement on record was 661 fish in 2022, which did not achieve the BEG of 1,300–2,700 fish (Figure 2). Escapements have not achieved the BEG in 5 of the last 6 years (Figure 2). In response to these low runs, the sport fishery was closed in each of these years by EO to try to achieve the BEG (Table 4). Although the Chignik River Chinook salmon run had not generally followed the pronounced declining trends of other Gulf of Alaska Chinook salmon stocks earlier in this century (e.g., ADF&G Chinook Salmon Research Team 2013), more recently, it has followed a similar decline in the Chignik River sockeye salmon early run. Due to the chronic inability to meet the BEG despite harvest restrictions to all Chinook salmon fisheries in the drainage (Figure 2), Chignik River Chinook salmon will be recommended for designation as a stock of concern (SOC) at the 2023 BOF meeting.

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<sup>5</sup> ADF&G Freshwater logbook database 2006–2016 (URL not publicly available as some information is confidential. Contact Division of Sport Fish, Research and Technical Services for data requests.)

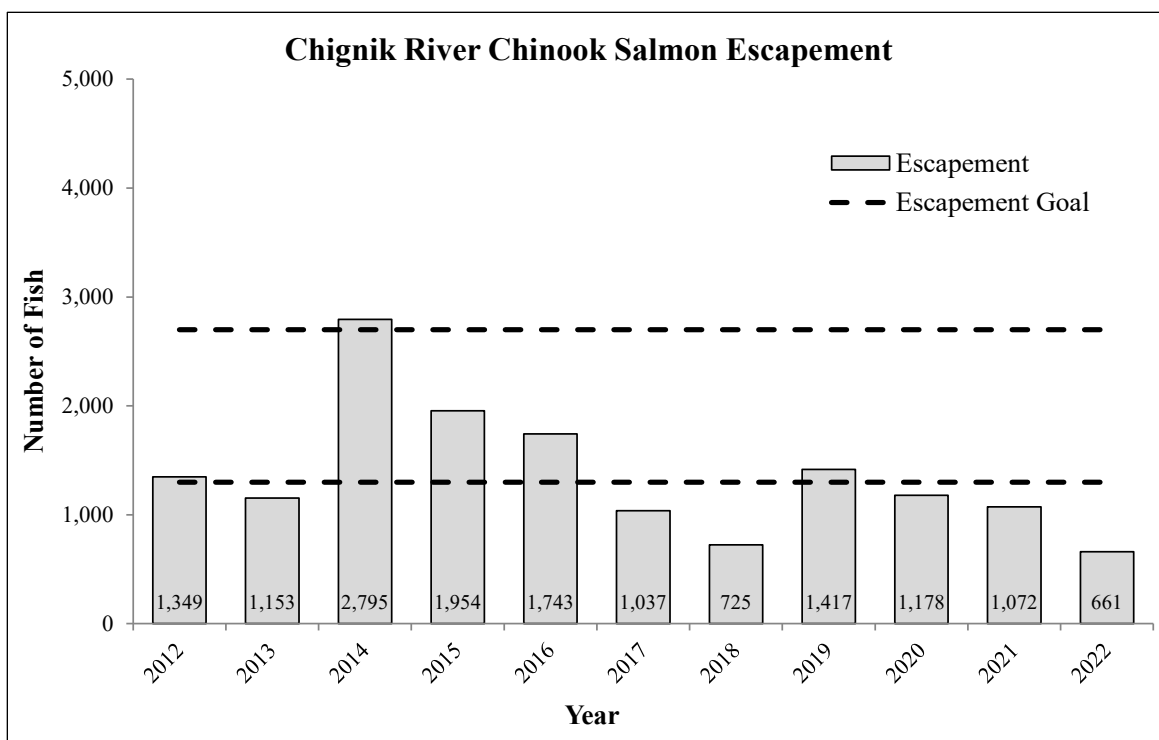


Figure 2.—Chignik River Chinook salmon escapement, 2012–2022.

Source: ADF&G Division of Commercial Fisheries, Kodiak, 2022.

Note: Escapement is estimated by subtracting the inseason proxy of sport harvest above the weir (100 fish) from the annual weir count.

## **NELSON RIVER CHINOOK SALMON**

### **Fishery Description**

The Nelson River is located on the north side of the Alaska Peninsula near the village of Nelson Lagoon. The Nelson River is mainly accessible by boat from Nelson Lagoon or airplane via one of the guide services in the area. It is the only Chinook salmon run on the north side of the Alaska Peninsula with an established escapement goal. Like other nearby drainages on the north side of the Alaska Peninsula, it is among the most remote rivers in Alaska and access is difficult. Anglers target Chinook salmon throughout the drainage, and most of the sport fishing effort is by guided anglers.

Since 2011, the Nelson River has been a catch-and-release only Chinook salmon fishery by regulation, and no sport harvest of Chinook salmon occurs in the river. Due to the low level of angler effort, published catch estimates are only occasionally available from the SWHS.

### **Research Activities and Recent Fishery Performance**

Nelson River Chinook salmon escapements are monitored through operation of a weir established in 1989 about 10 miles upriver from Nelson Lagoon. Some Chinook salmon spawning does occur below the weir, and in most years, a post-weir aerial survey estimate of these Chinook salmon is added to the weir counts to get a total estimated escapement.

From 2012 to 2021, escapements averaged 3,959 fish. In 2022, the estimated escapement of 3,785 fish was within the BEG of 2,400–4,400 (Figure 3). Escapements have not achieved the BEG on several occasions since 2012. Those failing to meet the lower bound include the record low escapement of 1,092 fish occurring in 2012, as well as escapements in 2013 and 2017. Escapements exceeding the upper bound have included the high of 11,853 fish in 2019 as well as those of 2016, 2018, and 2021. Because there is essentially no harvest of Chinook salmon in the Nelson River by anglers, inseason management occurs only rarely for this run.

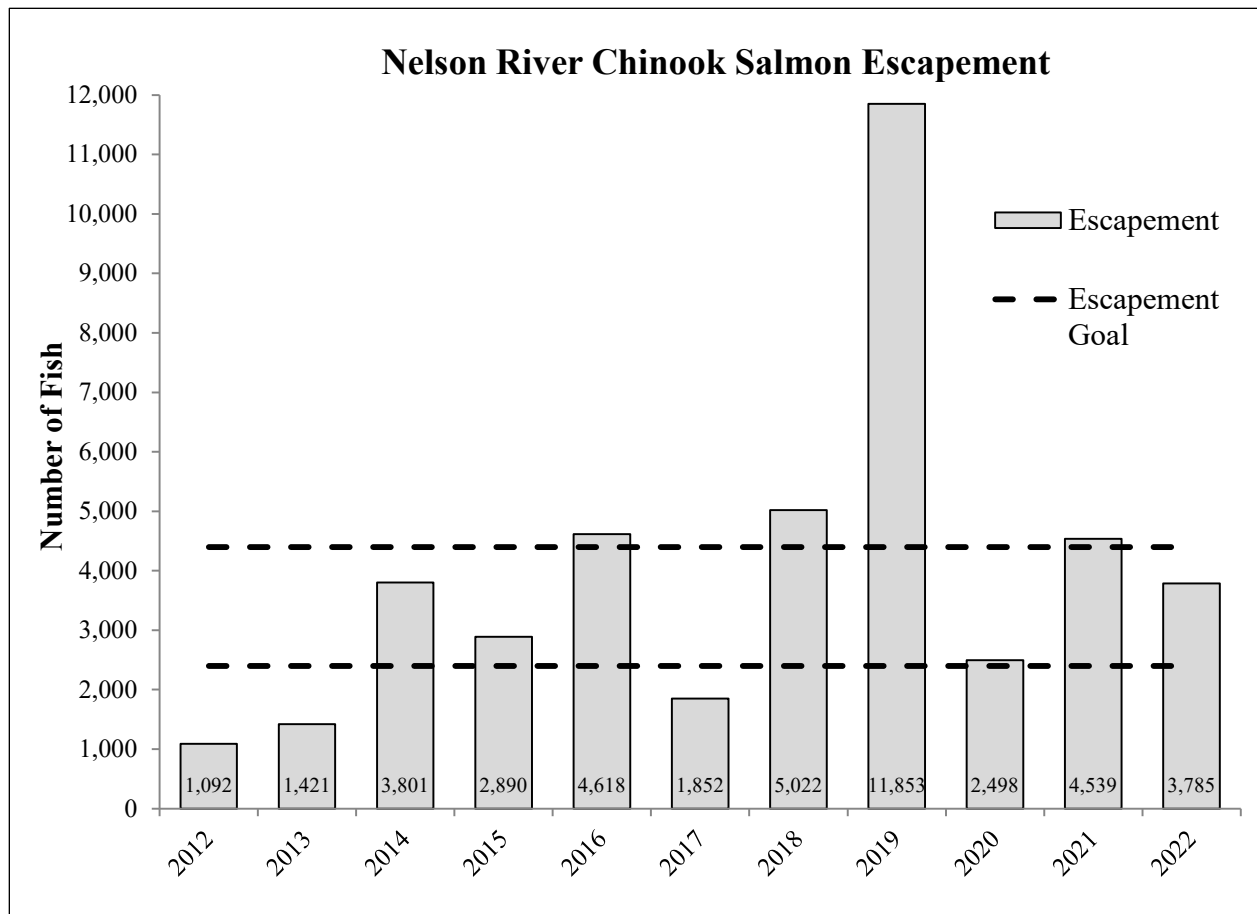


Figure 3.—Nelson River Chinook salmon escapement, 2012–2022.

Source: ADF&G Division of Commercial Fisheries, Kodiak, 2022.

## OTHER CHINOOK SALMON FISHERIES

Other relatively accessible drainages include the Bear River and King Salmon River near the seasonal community of Port Moller. Several lodges as well as unguided anglers based in Port Moller fish these drainages for Chinook salmon, although angler effort is still too low to generate SWHS estimates and little information is available regarding these fisheries. Although a weir is operated on the Bear River near the outlet of Bear Lake, it captures only a small portion of the run because most Chinook salmon spawn below Bear Lake. Aerial surveys only capture a portion of these runs as well because the surveys are focused on counting other species and, in many areas, the drainages are too turbid to see fish. In general, these are relatively small runs that have relatively low angler effort and harvest.

Other runs of Chinook salmon present in APAIA drainages include the Cinder, Sandy, and Meshik Rivers as well as numerous smaller rivers. The remote location and associated high cost of accessing these fisheries has largely limited angling effort to clients at a small number of remote lodges offering virtually exclusive services. Very few unguided anglers frequent any of these fisheries and low effort precludes reliable estimates for catch and harvest from the SWHS.

## **COHO SALMON FISHERIES**

There are numerous coho salmon runs in the APAIA with the greatest angler effort concentrated near population centers where the easiest and least expensive access to sport fisheries is available. These primarily include streams in the Unalaska–Dutch Harbor Road Zone and near Cold Bay. Other drainages in the APAIA support both guided and unguided effort aimed at coho salmon but harvests in these areas are generally small compared to run abundance, and estimates of catch and harvest by individual location are rarely available from the SWHS.

Inseason management for coho salmon stocks is rarely conducted in the APAIA due to a lack of inseason monitoring, and there are only 2 coho salmon escapement goals established for rivers in the area: the Nelson and Ilnik Rivers. Because of run timing and associated environmental factors, as well as budgetary constraints, almost no coho salmon runs are accounted for using weirs in the APAIA. A small number of coho salmon runs are monitored through foot and aerial surveys, although these often occur after the sport fisheries are done for the season. Peak coho salmon run timing occurs in most systems in mid- to late September, well after weir projects have finished for the season and after most aerial surveys have been conducted.

Harvests of coho salmon in the Unalaska–Dutch Harbor Road Zone and near Cold Bay can be significant relative to local run sizes; however, the fisheries are too small to generate estimates of harvest and effort from the SWHS due to low response rates in many years. Other coho salmon harvest and catch information for the APAIA is not available for the same reasons.

### **COLD BAY COHO SALMON**

#### **Fishery Description**

The community of Cold Bay offers access to several drainages via a small road system popular with both guided and unguided anglers. There is a large airport with frequent flights as well as lodges, bed and breakfasts, rental vehicles, and guided services that cater to anglers and hunters coming to the community. The primary drainages utilized by anglers targeting coho salmon that are accessible from the community of Cold Bay are Russel, Trout, and Frosty Creeks. Most effort occurs in September when coho salmon runs generally peak, and many anglers arrive to both fish coho salmon and hunt waterfowl.

Harvests of Cold Bay area coho salmon are captured in the SWHS in some years and are presented as an aggregate of all Cold Bay area drainages including Russel, Trout, and Frosty Creeks, although only 5 of the last 10 years have estimates available (Table 6). During this time, harvests ranged from 1,222 to 3,241 and averaged 2,120 coho salmon.

#### **Research Activities and Recent Fishery Performance**

Aerial surveys prior to 2008 captured coho salmon escapement in many years for Russel and Trout Creeks; however, since 2008, counts of coho salmon are mostly unavailable from these drainages because ADF&G staff usually left the Cold Bay area prior to when most coho salmon spawn. Aerial surveys of these drainages began again in 2022 via both airplane and drone, providing peak spawning survey counts of 3,500 coho salmon in Russel Creek and 400 coho salmon in Trout Creek (Tyler Lawson, Assistant Area Management Biologist, ADF&G Kodiak, personal communication).

Management of Cold Bay area coho salmon occurs via areawide sportfishing regulations that allow for a combined salmon, other than Chinook salmon, bag limit of 5 fish over 20 inches per day with 10 in possession. The bag limit can be any combination of coho, sockeye, pink, or chum salmon; and the limit for salmon under 20 inches is 10 per day. Management actions in the Cold Bay area are rarely instituted in season because inseason monitoring of coho salmon runs has only recently resumed.

Table 6.—Statewide Harvest Survey (SWHS) estimates of freshwater coho salmon harvest and catch for Cold Bay and the Alaska Peninsula–Aleutian Islands Area (APAIA), 2012–2021.

Year	Cold Bay <sup>a</sup>		Total APAIA <sup>b</sup>	
	Harvest	Catch	Harvest	Catch
2012	NA	NA	1,723	9,291
2013	NA	NA	1,950	5,299
2014	NA	NA	4,288	16,880
2015	1,924	2,740	3,250	20,916
2016	NA	NA	2,727	16,614
2017	2,198	5,112	3,673	12,417
2018	3,241	7,696	4,787	19,610
2019	2,015	4,036	4,407	22,444
2020	1,222	1,540	1,819	5,797
2021	NA	NA	2,958	9,743
Average				
2012–2021	2,120	4,225	3,158	13,901

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> SWHS estimates are not available (NA) for 2012–2014, 2016, and 2021.

<sup>b</sup> Does not include the Ugashik, Naknek or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

## UNALASKA BAY SALTWATER COHO SALMON

### Fishery Description and Management Activities

The APAIA has a small marine coho salmon fishery with most of the effort occurring in Unalaska Bay. Due to its proximity to the City of Unalaska, the fishery is primarily composed of unguided anglers. Occasional charter boat effort does occur in the area; however, there have never been more than 3 charter businesses operating so historical data collected by the Saltwater Logbook Program are confidential. Anglers target coho salmon by trolling throughout Unalaska Bay or by casting from shore near streams that flow into the bay.

Estimates of harvest of coho salmon from the SWHS in Unalaska Bay from 2012 to 2021 have ranged from 0 to 491 fish, with an average harvest of 188 fish during the same period (Table 7). In 2021, a harvest of 0 coho salmon was estimated for the Unalaska Island area.

Unalaska Bay has reduced salmon bag limits relative to the remainder of the APAIA. The Unalaska–Dutch Harbor Road Zone regulations limit the coho salmon bag limit to no more than 2 per day for waters inside of Unalaska Bay. This was enacted in recognition of the numerous

small coho salmon runs in the area, many of which are accessible via road from the relatively large population center in Unalaska.

Table 7.—Statewide Harvest Survey (SWHS) estimates of saltwater coho salmon harvest and catch for Unalaska Island and Alaska Peninsula–Aleutian Islands Area (APAIA), 2012–2021.

Year	Unalaska Island		APAIA <sup>a</sup>	
	Harvest	Catch	Harvest	Catch
2012	477	1,081	635	1,278
2013	78	152	717	1,133
2014	299	229	646	768
2015	141	141	864	983
2016	11	11	969	1,324
2017	100	286	264	667
2018	121	121	1,335	1,945
2019	161	190	464	3,170
2020	491	491	1,001	1,398
2021	0	58	624	1,152
Average				
2012–2021	188	276	752	1,382

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> Does not include the Ugashik, Naknek or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

## OTHER COHO SALMON FISHERIES

Other coho salmon fisheries in the APAIA are characterized by relatively low effort and exploitation rates throughout a number of very remote drainages. Guided anglers generally make up most of the effort due to the difficult access, although there are some exceptions near the smaller communities in the APAIA. Subsequently, due to low response rates in the SWHS, estimates of harvest and catch are only occasionally available for specific areas other than Cold Bay freshwaters and Unalaska Bay saltwater. Freshwater harvests of coho salmon in the APAIA averaged 3,158 fish from 2012 to 2021, and 2,958 coho salmon were harvested in 2021 (Table 6). Combined saltwater harvests for the APAIA averaged 752 coho salmon from 2012 to 2021, and the harvest in 2021 was 624 fish (Table 7).

## SOCKEYE SALMON FISHERIES

Although there are many individual APAIA sockeye salmon stocks of interest to anglers, most stocks are lightly exploited by anglers relative to the size of the runs; the only exceptions to this are in the Unalaska Bay area, where there are several road-accessible sockeye salmon runs, and to a lesser degree, the road accessible drainages near Cold Bay. Sockeye salmon bag limits in the APAIA fall under the general salmon, other than Chinook salmon, bag limit of 5 per day, with 10 in possession where there can be any combination of sockeye, coho, pink, and chum salmon.

## **UNALASKA SOCKEYE SALMON**

### **Fishery Description and Research and Management Activities**

Sockeye salmon runs near the City of Unalaska are generally accessible via the road system connected to the community. Sockeye salmon runs in the area are small but also lightly exploited by anglers because of significant restrictions on sport fishing in specific drainages as well as the Unalaska Bay area in general. Although sockeye salmon sport fisheries in the Unalaska–Dutch Harbor Road Zone are small, they are important to the local community, particularly to those who do not own boats or gillnets that would allow them to participate in subsistence fisheries in the area. The sockeye salmon bag limit in the Unalaska–Dutch Harbor Road Zone is 2 per day and includes all waters of Unalaska Bay, including drainages flowing into the bay.

Three Unalaska area drainages support sockeye salmon runs and corresponding sport fisheries: Unalaska Lake drainage (also called Iliuliuk River or Town Creek), Summer Bay Lake, and Morris Cove Lake. The Unalaska Lake drainage flows through the City of Unalaska and the entire drainage is closed to sport fishing for sockeye salmon in recognition of the small run size and potential for overharvest. Some harvest does occur on nearby Front Beach via snagging by anglers, although participation is too low in this fishery to generate estimates in the SWHS. Summer Bay Lake supports the largest sockeye salmon sport fishery in the Unalaska area, which occurs almost exclusively in the salt water from the beach in front of the drainage, and fish are harvested via snagging. The outlet stream for Summer Bay Lake is closed to all fishing from the lake outlet to the mouth of the creek and virtually no sport fishing effort occurs in Summer Bay Lake. Morris Cove Lake supports the smallest of the sockeye salmon sport fisheries in the Unalaska area and probably the smallest of the sockeye salmon runs. Effort for this drainage occurs primarily when runs are larger and is conducted through snagging from the beach. There is often a large beach berm in front of the drainage that makes fish passage difficult, and sockeye salmon can accumulate in the nearby salt water because of this. No special regulations apply to this drainage, other than the Unalaska–Dutch Harbor Road Zone salmon bag limits.

Management of sockeye salmon runs in the Unalaska area occurs through a reduced bag limit for sockeye salmon and the numerous special regulations pertaining to the drainages of Unalaska Bay. Prior to 2018, monitoring of Unalaska area sockeye salmon runs only occurred occasionally, with a handful of aerial and foot surveys and a weir briefly operated from 1998 to 2001 on the Summer Bay Lake drainage. However, since 2018, drone surveys of sockeye salmon at Unalaska Village, Summer Bay Lake, and Morris Cove Lake have been conducted annually (Fox and Whiteside 2020; Fox et al. 2021; Fox et al. 2022).

### **OTHER SOCKEYE SALMON FISHERIES**

Sport fishing effort for sockeye salmon in other areas of the APAIA is very low and only occasionally captured in the SWHS for estimates of harvest and effort. Notable sockeye salmon sport fisheries occur in the Cold Bay area, with estimates of sockeye salmon harvest available for 5 of the last 10 years. Estimates are available for 2014 and from 2017 to 2020 and have averaged 159 harvested sockeye salmon during these years. The most recent harvest estimate was 445 sockeye salmon in 2020 (Table 8). These estimates include the combined harvest for the area around the community of Cold Bay, with both guided and unguided effort focused on Mortenen’s Lagoon primarily in the past, but more recently focused on the Swan Lake run near Kinzarof Lagoon.



Numerous other drainages in the APAIA support small sockeye salmon sport fisheries, primarily by guided anglers. Nearly all of them are very remote, with difficult access. The lack of services throughout most of the APAIA precludes growth in sport fishing throughout the area. In 2021, the SWHS estimated a combined freshwater harvest of 145 sockeye salmon in the APAIA, and the 2012–2021 average harvest was 705 (Table 7).

Table 8.—Statewide Harvest Survey (SWHS) estimates of freshwater sockeye salmon harvest and catch in Cold Bay and the Alaska Peninsula–Aleutian Islands Area (APAIA), 2012–2021.

Year	Cold Bay <sup>a</sup>		Total APAIA <sup>b</sup>	
	Harvest	Catch	Harvest	Catch
2012	NA	NA	818	1,364
2013	NA	NA	179	468
2014	0	0	1,425	2,609
2015	NA	NA	1,138	2,583
2016	NA	NA	342	785
2017	26	66	926	1,959
2018	83	276	1,088	2,373
2019	239	239	496	2,451
2020	445	455	495	654
2021	NA	NA	145	1,619
Average				
2012–2021	159	207	705	1,687

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> SWHS estimates are not available (NA) for 2012, 2013, 2015, 2016, and 2021.

<sup>b</sup> Does not include the Ugashik, Naknek or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

## STEELHEAD–RAINBOW TROUT FISHERIES

Most angling effort on wild rainbow trout and steelhead populations within the APAIA target steelhead, the anadromous form of *O. mykiss*, although most streams in the APAIA support resident rainbow trout. Anglers that target other species also report incidental catches of resident rainbow trout. The Sandy River is the most popular stream for anglers targeting steelhead in the APAIA, and many anglers target the beginning of the run in September or combine waterfowl hunting and steelhead fishing in September and October. Steelhead runs in the APAIA generally peak in October, although very little is known about these runs. Other APAIA drainages supporting steelhead runs include the Nelson, Cinder, and King Salmon River drainages. Rainbow trout populations are found in nearly all the larger APAIA drainages but have been particularly noted in the Aniakchak and Sandy Rivers, and lakes in the northern reaches of the area near Bristol Bay.

Management of steelhead and rainbow trout sport fisheries relies on conservative regulations, and rainbow trout and steelhead share a common bag limit. Restrictions on harvest include year-round catch-and-release only fishing within the Sandy River drainage, and an annual limit of 2 fish over 20 inches in all other APAIA fresh waters. Where harvest is allowed, the daily bag limit for steelhead is 2, only 1 of which may be longer than 20 inches. Historical harvest statistics available

from the ADF&G freshwater logbook database<sup>6</sup> and the SWHS indicate that anglers rarely retain steelhead even when it is permissible. Angler reports and observations by ADF&G staff suggest that most of the targeted steelhead fishery comprises anglers seeking only to catch and release steelhead, usually using fly-fishing gear. SWHS estimates of rainbow trout catch have averaged 1,061 from 2012 to 2021; the 2021 catch estimate was 1,736 (Table 9). Estimates of steelhead catch have averaged 776 during this same period and were 931 in 2021 (Table 9).

Table 9.—Statewide Harvest Survey (SWHS) estimates of steelhead and rainbow trout catch in the Alaska Peninsula–Aleutian Islands Area (APAIA), 2012–2021.

Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average 2012–2021
Rainbow	218	206	577	1,256	700	844	2,959	1,011	1,105	1,736	1,061
Steelhead	0	0	693	237	324	1,022	2,235	1,144	1,176	931	776

*Source:* Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

*Note:* Does not include the Ugashik, Naknek, or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

## GROUND FISH FISHERIES

### HALIBUT, ROCKFISH, LINGCOD

#### Fishery Description

The groundfish species mostly commonly targeted by anglers in APAIA marine waters is halibut, but lingcod and rockfish are also target species. Angler effort primarily occurs between May and September when the weather is best. Although all 3 species are harvested in many locations in the APAIA, a majority of the harvest is taken from waters around Unalaska Island, particularly in Unalaska Bay. Most angler effort that is not within a short boat ride from the City of Unalaska can be attributed to guided anglers, whereas unguided effort in the more remote areas is generally limited to anglers in remote villages in the APAIA.

Halibut are harvested throughout the APAIA, whereas rockfish and lingcod are not frequently found on the north side of the Alaska Peninsula and therefore most of the harvest comes from the south side of the Alaska Peninsula and the Aleutian Islands. Harvest estimates are unavailable in most areas of the APAIA except Unalaska Island due to low response rates, and guided harvest information is confidential due to the low number of saltwater charter businesses in the area.

From 2012 to 2021, halibut harvests in the SWHS averaged 1,353 in the APAIA with 624 estimated from the Unalaska Island area (Table 10). In 2021, an estimated 847 halibut were harvested in the APAIA, with an estimate of 0 halibut harvested in the Unalaska Island area.

During this same period, the SWHS estimates of annual rockfish harvest averaged 1,375 for the APAIA, with an average of 665 coming from the Unalaska Island area (Table 10). In 2021, the estimated APAIA rockfish harvest was 510 fish, with an estimate of 0 rockfish harvested in the Unalaska Island area.

<sup>6</sup> ADF&G Freshwater logbook database 2006–2016 (URL not publicly available as some information is confidential. Contact Division of Sport Fish, Research and Technical Services for data requests.)

For lingcod, the 2012–2021 average harvest was 162 fish, with the average Unalaska Island harvest estimated at 69 (Table 10). In 2021, an estimated 123 lingcod were harvested in the APAIA, with an estimate of 0 for Unalaska Island.

Table 10.—Statewide Harvest Survey (SWHS) estimates of halibut, lingcod, and rockfish harvest from Unalaska Island and the Alaska Peninsula–Aleutian Islands Area (APAIA), 2012–2021.

Year	Halibut		Rockfish		Lingcod	
	Unalaska Island	APAIA <sup>a</sup>	Unalaska Island	APAIA <sup>a</sup>	Unalaska Island	APAIA <sup>a</sup>
2012	1,982	3,545	1,995	2,236	0	136
2013	399	1,842	186	1,115	18	199
2014	421	1,001	578	1,444	359	588
2015	157	778	334	2,086	0	120
2016	998	1,657	304	1,023	21	42
2017	280	409	143	339	0	0
2018	846	1,055	1,460	1,970	0	40
2019	712	1,623	885	1,929	244	320
2020	447	775	766	1,093	50	50
2021	0	847	0	510	0	123
Average						
2012–2021	624	1,353	665	1,375	69	162

Source: Statewide Harvest Survey (SWHS) estimates from the Alaska Sport Fishing Survey database [Intranet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2022). Available from: <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

<sup>a</sup> Does not include the Ugashik, Naknek, or Egegik drainage streams reported in the SWHS as Alaska Peninsula Drainages, or unspecified areas in the Alaska Peninsula or Aleutian Islands.

## Management Activities and Recent Fishery Performance

Halibut stocks throughout Alaska are managed by the federal government through an international treaty with Canada. Direct regulatory authority rests with the International Pacific Halibut Commission (IPHC) and by delegation from the commission to the North Pacific Fishery Management Council (NPFMC). All regulations adopted for the halibut sport fishery by the State of Alaska must reflect those previously established in federal law.

The APAIA is encompassed primarily by subareas 3B, 4A, and 4B designated by the IPHC. Within these subareas, sport fishing regulations for guided and unguided anglers are the same, with a daily bag limit of 2 halibut and a possession limit of 4. A small portion of the APAIA, along the Shelikof Strait, falls in Area 3A and has an annually changing set of regulations for guided anglers including size limits, annual limits, 1 or more days per week closed, restrictions on the number of trips charter boats may take daily, and a limited entry permit requirement. Unguided anglers in this area do not fall under this regulatory structure but have a bag limit of 2 fish per day and possession limit of 4.

Although rockfish harvest has been a point of concern in many other ADF&G management areas, harvest rates in the APAIA are low enough to be considered nominal relative to species abundance. Both pelagic and nonpelagic rockfish are harvested in APAIA waters and catches of pelagic species consist primarily of black (*S. melanops*) and dusky (*S. variabilis*) rockfish, whereas nonpelagic catches consist mainly of yelloweye rockfish (*S. ruberrimus*). Pelagic species typically make up the majority of the rockfish catch. Although a portion of the annual rockfish catch is taken

incidentally by anglers targeting halibut and salmon, there is also directed effort toward these species; however, effort in APAIA is very low for all groundfish species. Rockfish bag limits in the APAIA are 10 fish per day and can be any combination of species.

Lingcod harvests are small relative to the geographic area covered by the APAIA. Lingcod bag limits are 2 per day, but there is a season closure from January 1 through June 30 annually.

## **OTHER GROUND FISH**

Other groundfish species such as Pacific cod, kelp greenling (*Hexagrammos decagrammus*), and Atka mackerel (*Pleurogrammus monopterygius*) are harvested in APAIA waters; however, harvests are very small and mostly unaccounted for by SWHS estimates. There is increasing interest by anglers for other groundfish species besides rockfish and halibut, but it is unknown whether this will continue to be a trend like rockfish, or if anglers will focus on traditional species as targets and harvest other species opportunistically.

## REFERENCES CITED

- ADF&G Chinook Salmon Research Team. 2013. Chinook salmon stock assessment and research plan, 2013. Alaska Department of Fish and Game, Special Publication No. 13-01, Anchorage. <http://www.adfg.alaska.gov/FedAidPDFs/SP13-01.pdf>
- Fox, E. K. C., T. D. Lawson, and R. L. Renick. 2021. South Alaska Peninsula salmon annual management report, 2020, and the 2019 subsistence fisheries in the Alaska Peninsula, Aleutian Islands, and Atka-Amlia Islands Management Areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 4K21-12, Kodiak. <http://www.adfg.alaska.gov/FedAidPDFs/RIR.4K.2021.12.pdf>
- Fox, E. K. C., T. D. Lawson, and R. L. Renick. 2022. 2021 South Alaska Peninsula salmon annual management report and 2020 subsistence fisheries in the Alaska Peninsula, Aleutian Islands, and Atka-Amlia Islands management areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 4K22-01, Kodiak. <http://www.adfg.alaska.gov/FedAidPDFs/RIR.4K.2022.01.pdf>
- Fox, E. K. C., and C. J. Whiteside. 2020. South Alaska Peninsula salmon annual management report, 2019 and the 2018 subsistence fisheries in the Alaska Peninsula, Aleutian Islands, and Atka-Amlia Islands management areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 4K.2020.10, Kodiak. <http://www.adfg.alaska.gov/FedAidPDFs/RIR.4K.2020.10.pdf>



**APPENDIX A: ALASKA PENINSULA–ALEUTIAN ISLANDS  
AREA CHINOOK SALMON WEIR COUNTS**

Appendix A1.–Cumulative weir counts for Chignik River Chinook salmon, 2012–2021.

Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
8 Jun	0	0	0	0	0	6	0	0	0	0	0
9 Jun	0	0	0	0	0	6	6	0	0	0	0
10 Jun	0	0	0	0	0	6	12	0	0	0	0
11 Jun	0	0	0	0	0	6	18	0	0	0	0
12 Jun	0	0	0	0	0	6	18	0	0	0	0
13 Jun	0	0	0	0	0	6	18	0	0	0	0
14 Jun	0	0	0	0	0	6	18	0	0	0	0
15 Jun	0	0	0	0	0	6	18	0	0	0	0
16 Jun	0	12	12	24	12	6	18	0	0	0	0
17 Jun	0	12	36	42	12	6	18	0	0	0	0
18 Jun	0	12	42	60	18	6	18	12	0	0	0
19 Jun	0	12	60	60	18	6	18	12	0	0	0
20 Jun	0	18	66	78	18	6	18	24	0	0	0
21 Jun	0	24	72	84	30	6	18	24	12	0	0
22 Jun	6	30	90	84	66	6	18	30	18	0	0
23 Jun	12	36	103	84	90	6	48	42	18	0	0
24 Jun	12	36	127	96	108	6	66	48	24	0	0
25 Jun	12	36	165	114	144	12	78	54	30	0	0
26 Jun	18	60	195	126	186	12	79	54	42	0	6
27 Jun	18	60	267	146	198	36	97	54	48	0	6
28 Jun	18	84	291	212	228	55	109	60	48	0	12
29 Jun	18	90	339	212	276	67	121	72	55	6	12
30 Jun	30	90	405	260	306	85	127	84	61	12	12
1 Jul	48	90	465	284	372	127	127	108	68	18	12
2 Jul	55	120	561	326	450	157	139	156	80	19	19
3 Jul	68	120	633	375	498	199	157	193	98	19	43
4 Jul	86	133	723	400	576	235	163	265	134	31	61
5 Jul	94	171	875	505	636	277	170	307	194	37	79
6 Jul	118	195	1,067	621	750	303	176	349	194	55	80
7 Jul	156	219	1,199	759	855	306	184	439	242	98	128
8 Jul	181	243	1,283	831	933	309	202	489	266	122	170
9 Jul	211	263	1,435	904	1,017	327	215	531	290	159	206
10 Jul	241	299	1,554	952	1,095	352	229	639	326	207	218
11 Jul	298	347	1,722	1,000	1,143	394	261	747	339	243	248
12 Jul	352	413	1,789	1,144	1,198	430	315	813	381	285	260
13 Jul	478	503	1,879	1,216	1,246	478	345	885	411	318	278
14 Jul	532	546	1,934	1,294	1,300	538	358	945	459	348	290
15 Jul	634	612	1,970	1,338	1,348	587	418	999	513	396	332
16 Jul	652	649	1,994	1,380	1,390	629	466	1,059	567	414	392
17 Jul	736	709	2,114	1,410	1,438	653	509	1,083	615	439	428
18 Jul	838	727	2,190	1,417	1,450	672	545	1,113	657	469	470
19 Jul	911	781	2,312	1,448	1,504	678	605	1,119	693	535	482
20 Jul	929	835	2,397	1,460	1,516	702	641	1,155	783	559	500
21 Jul	969	854	2,475	1,467	1,536	732	653	1,209	813	631	518
22 Jul	1,017	890	2,493	1,473	1,560	769	659	1,245	826	721	536
23 Jul	1,053	927	2,552	1,534	1,578	799	672	1,257	857	787	554

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Appendix A1.–Page 2 of 2.

Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
24 Jul	1,065	957	2,609	1,576	1,608	823	678	1,293	863	883	560
25 Jul	1,113	987	2,628	1,601	1,626	847	690	1,323	911	937	578
26 Jul	1,133	1,005	2,630	1,661	1,632	901	708	1,342	929	979	596
27 Jul	1,151	1,035	2,672	1,685	1,650	931	721	1,348	977	991	608
28 Jul	1,200	1,053	2,686	1,740	1,668	931	739	1,384	1,001	1,027	626
29 Jul	1,236	1,065	2,716	1,758	1,668	937	757	1,408	1,043	1,057	639
30 Jul	1,261	1,101	2,722	1,764	1,698	949	763	1,420	1,049	1,064	670
31 Jul	1,261	1,119	2,735	1,788	1,716	973	775	1,427	1,062	1,076	676
1 Aug	1,273	1,155	2,742	1,814	1,740	985	781	1,463	1,069	1,076	676
2 Aug	1,309	1,162	2,755	1,844	1,752	1,009	782	1,487	1,099	1,094	682
3 Aug	1,309	1,162	2,761	1,856	1,752	1,009	788	1,493	1,117	1,100	688
4 Aug	1,321	1,174	2,777	1,886	1,777	1,009	788	1,493	1,129	1,112	700
5 Aug	1,333	1,174	2,791	1,904	1,777	1,015	794	1,493	1,147	1,118	700
6 Aug	1,346	1,180	2,791	1,929	1,783	1,027	794	1,493	1,171	1,118	700
7 Aug	1,352	1,180	2,799	1,941	1,795	1,027	794	1,493	1,201	1,124	712
8 Aug	1,364	1,186	2,799	1,971	1,795	1,045	794	1,493	1,207	1,124	724
9 Aug	1,376	1,192	2,808	1,983	1,795	1,045	794	1,493	1,219	1,124	736
10 Aug	1,382	1,216	2,820	2,007	1,801	1,051	806	1,499	1,225	1,124	736
11 Aug	1,394	1,223	2,838	2,019	1,825	1,057	818	1,505	1,237	1,142	736
12 Aug	1,400	1,223	2,844	2,019	1,831	1,069	825	1,505	1,237	1,154	742
13 Aug	1,400	1,223	2,850	2,024	1,837	1,069	825	1,511	1,237	1,154	748
14 Aug	1,412	1,229	2,862	2,024	1,837	1,081	825	1,511	1,243	1,154	748
15 Aug	1,412	1,235	2,881	2,030	1,843	1,093	825	1,517	1,249	1,160	748
16 Aug	1,418	1,235	2,881	2,036	1,843	1,111	825	1,517	1,249	1,172	748
17 Aug	1,424	1,235	2,887	2,042	1,843	1,111	825	1,517	1,255	1,172	748
18 Aug	1,424	1,235	2,887	2,054	1,843	1,117	825	1,517	1,267	1,172	748
19 Aug	1,424	1,241	2,887	2,054	1,843	1,118	825	1,517	1,278	1,172	754
20 Aug	1,424	1,247	2,887	2,054	1,843	1,130	825	1,517	1,278	1,172	754
21 Aug	1,430	1,247	2,887	2,054	1,843	1,130	825	1,517	1,278	1,172	754
22 Aug	1,430	1,247	2,887	2,054	1,843	1,130	825	1,517	1,278	1,172	754
23 Aug	1,443	1,247	2,887	2,054	1,843	1,130	825	1,517	1,278	1,172	760
24 Aug	1,449	1,247	2,889	2,054	1,843	1,130	825	1,517	1,278	1,172	760
25 Aug	1,449	1,247	2,889	2,054	1,843	1,131	825	1,517	1,278	1,172	760
26 Aug	1,449	1,247	2,889	2,054	1,843	1,137	825	1,517	1,278	1,172	760
27 Aug	1,449	1,247	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	760
28 Aug	1,449	1,247	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	760
29 Aug	1,449	1,247	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	761
30 Aug	1,449	1,247	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	761
31 Aug	1,449	1,247	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	761
1 Sep	1,449	1,247	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	761
Final	1,449	1,253	2,895	2,054	1,843	1,137	825	1,517	1,278	1,172	761

Source: ADF&G Division of Commercial Fisheries, Kodiak, 2022.

Note: The weir was installed by June 1 annually.

Appendix A2.–Cumulative weir counts for Nelson River Chinook salmon, 2012–2021.

Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 <sup>a</sup>
16 Jun	0	106	603	186	237	52	19	34	2	0	26
17 Jun	0	138	780	204	237	60	19	205	2	0	35
18 Jun	0	155	932	241	264	72	19	206	9	0	35
19 Jun	0	204	1,618	246	265	76	20	210	9	0	38
20 Jun	1	254	1,654	281	265	84	20	210	9	0	39
21 Jun	9	271	1,729	292	290	159	43	210	9	86	39
22 Jun	10	322	1,777	330	291	227	82	210	9	109	39
23 Jun	17	417	1,794	339	291	248	183	211	9	133	159
24 Jun	25	440	1,829	365	292	275	199	211	9	278	164
25 Jun	31	456	1,867	366	369	302	253	338	11	497	344
26 Jun	45	476	1,876	395	387	416	369	362	571	624	421
27 Jun	85	533	1,934	396	389	429	373	544	725	831	429
28 Jun	98	620	1,974	455	525	435	680	554	753	1329	448
29 Jun	115	681	1,997	628	556	436	782	554	759	1580	598
30 Jun	123	762	2,039	668	559	442	1,135	559	819	1730	602
1 Jul	146	831	2,075	779	575	454	2,275	598	929	1795	619
2 Jul	170	851	2,102	850	609	521	2,645	609	960	1827	651
3 Jul	211	872	2,120	945	612	710	3,660	688	1015	1985	667
4 Jul	243	929	2,162	1,189	622	744	4,076	877	1082	2202	811
5 Jul	344	943	2,216	1,679	634	766	4,275	998	1125	2276	1201
6 Jul	447	1,032	2,235	1,811	1,009	815	4,308	1,105	1,130	2,506	1,212
7 Jul	513	1,082	2,253	1,911	1,038	824	4,349	1,465	1,133	2,539	1,233
8 Jul	541	1,123	2,260	1,993	1,087	828	4,400	1,591	1,133	2,690	1,263
9 Jul	576	1,184	2,269	2,023	1,203	869	4,541	2,258	1,140	2,841	1,282
10 Jul	599	1,197	2,280	2,086	1,254	891	4,555	3,096	1,146	2,940	1,367
11 Jul	607	1,202	2,291	2,090	1,442	902	4,563	3,202	1,161	3,011	1,516
12 Jul	610	1,203	2,334	2,095	1,556	925	4,598	3,364	1,184	3,017	1,522
13 Jul	627	1,208	2,350	2,145	1,760	941	4,608	4,543	1,191	3,046	1,546
14 Jul	629	1,208	2,370	2,206	1,931	981	4,728	5,075	1,224	3,086	1,580
15 Jul	635	1,208	2,394	2,226	2,119	1,003	4,829	5,265	1,271	3,103	1,650
16 Jul	645	1,216	2,449	2,265	2,164	1,030	4,850	6,230	1,274	3,105	1,886
17 Jul	742	1,220	2,496	2,275	2,245	1,172	4,890	9,052	1,287	3,295	1,982
18 Jul	815	1,221	2,517	2,312	2,305	1,202	4,894	9,308	1,311	3,302	2,000
19 Jul	874	1,221	2,622	2,372	2,433	1,204	4,929	9,690	1,345	3,326	2,001
20 Jul	903	1,221	2,822	2,409	2,708	1,286	4,937	10,592	1,381	3,327	2,009
21 Jul	949	1,221	2,851	2,421	2,971	1,312	4,972	10,663	1,383	3,400	2,087
22 Jul	986	1,221	2,899	2,425	3,440	1,368	5,009	10,677	1,499	3,437	2,107
23 Jul	992	1,221	2,901	2,437	3,550	1,415	5,022	11,103	1,509	3,541	2,114
24 Jul	992	1,221	2,901	2,440	3,735	1,479	5,022	11,136	1,927	3,868	2,147
25 Jul	992	1,221	2,901	2,440	4,039	1,494	5,022	11,171	1,943	4,034	2,148
26 Jul	992	1,221	2,901	2,440	4,618	1,502	5,022	11,649	1,998	4,035	2,150
27 Jul	992	1,221	2,901	2,440	4,618	1,502	5,022	11,653	1,998	4,161	2,152
28 Jul	992	1,221	2,901	2,440	4,618	1,502	5,022	11,653	1,998	4,198	2,166

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Appendix A2.–Page 2 of 2.

Date	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 <sup>a</sup>
29 Jul	992	1,221	2,901	2,440	4,618	1,502	5,022	11,653	1,998	4,219	2,303
30 Jul	992	1,221	2,901	2,440	4,618	1,502	5,022	11,653	1,998	4,285	2,351
31 Jul	992	1,221	2,901	2,440	4,618	1,502	5,022	11,653	1,998	4,351	2,416
Final <sup>b</sup>	1,092	1,421	3,801	2,890	4,618	1,852	5,022	11,653	1,998	4,351	3,785

<sup>a</sup> The weir was kept in place until August 19th in 2022 due to late run timing. Post-weir aerial surveys were therefore not conducted.

<sup>b</sup> Includes post-weir aerial survey estimate of spawning Chinook salmon below the weir in 2012–2021.



## **APPENDIX B: CROSS-REFERENCED ALASKA BOARD OF FISHERIES INFORMATION**

Appendix B1.–Reference information specific to February 2023 Alaska Board of Fisheries proposals for Alaska Peninsula–Aleutian Islands Area (APAIA) sport fisheries.

Proposal	Proposal subject	Reference
99	Prohibit retention of Chinook salmon in King Salmon River and Ridgerunner Creek	Table 5 (page 10)
100	Prohibit retention of king salmon over 20 inches in the King Salmon and Milky Rivers and Ridgerunner Creek and reduce the bag limit for king salmon under 20 inches to 1 per day	Table 5 (page 10)
101	Prohibit retention of king salmon in the King Salmon River and Ridgerunner Creek	Table 5 (page 10)
102	Prohibit retention of king salmon in the King Salmon River and the tributaries of the Bear River drainage	Table 5 (page 10)
103	Reduce the sockeye and coho salmon bag limit for the Cold Bay area	Table 6 (page 16); Table 8 (page 19)
NA	Recommend Chignik River Chinook salmon for stock of concern	Figure 2 (page 12)