Fishery Management Report No. 24-01

Sport Fisheries in the Anchorage Management Area in 2022 to Inform the Alaska Board of Fisheries in 2024

by

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and

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January 2024

Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

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Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
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

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat or long
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	*e*
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	*E*
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	′
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	″
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

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by
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ABSTRACT

This report provides a detailed summary of the sport fisheries in the Anchorage Management Area (AMA) through 2022 that will be discussed at the 2024 Upper Cook Inlet Finfish Alaska Board of Fisheries (BOF) meeting. These sport fisheries include an enhanced Chinook salmon fishery on Ship Creek, salmon fisheries in Turnagain Arm and Eklutna River, and rainbow trout fisheries in the Anchorage Bowl. Included for each sport fishery are a description and historical overview; current management strategies; and recent fishery performance of effort, catch, and harvest. An appendix guiding the reader to information relevant to each BOF proposal is also included. Overall, sport fishing effort in the AMA has showed a steady decline since 2000, and effort in 2022 was the lowest on record. Recent harvest trends in AMA fisheries show declines in harvest of Chinook (*Oncorhynchus tshawytscha*), coho (*O. kisutch*), and pink (*O. gorbuscha*) salmon, as well as rainbow trout (*O. mykiss*). Conversely, chum (*O. keta*) and sockeye (*O. nerka*) salmon fisheries show low but stable harvest in recent trends. Many river-based fisheries in the AMA were impacted by rapid snowmelt in the early summer and heavy rain in the fall, which reduced opportunity and angler efficiency throughout much of 2022.

Keywords: Anchorage Management Area, Alaska Board of Fisheries, effort, harvest, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, sockeye salmon, *Oncorhynchus nerka*, rainbow trout, *Oncorhynchus mykiss*, fisheries management, sport fisheries, personal use

INTRODUCTION

This fisheries management report provides information regarding sport fisheries in the Anchorage Management Area (AMA) that will be discussed at the 2024 Upper Cook Inlet Finfish Alaska Board of Fisheries (BOF) meeting. These fisheries are managed by the Alaska Department of Fish and Game (ADF&G), Division of Sport Fish (SF) based out of the Anchorage office. This report covers the background and recent fishery performance of Ship Creek Chinook salmon (*Oncorhynchus tshawytscha*), various other AMA salmon (*Oncorhynchus* spp.) fisheries, and rainbow trout (*O. mykiss*) fisheries. Background information includes a fishery description, history, management and regulatory structure, and any additional fishery and stock monitoring that has occurred. Recent fisheries performance information includes effort, catch, and harvest in 2022 compared to a historical period (1999–2018) and the last reporting period (2019–2021). The recent performance also includes any management actions that occurred in 2022 and pertinent fishery or stock monitoring information. Appendix A1 contains a table guiding the reader to information relevant to each BOF proposal affecting the AMA.

The mission of SF is to protect and improve the state's fishery resources by managing for sustainable yield of wild stocks of sport fish, providing diverse sport fishing opportunities, and providing information to assist the BOF in optimizing social and economic benefits from sport fisheries. 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, and 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.

SF management and research activities are funded by ADF&G and Federal Aid in Fisheries Restoration funds. ADF&G funds are derived from the sale of state sport fishing licenses. Federal Aid funds are derived from federal taxes on fishing tackle and equipment established by the Federal Aid in Sport Fish Restoration Act (also referred to as the Dingell-Johnson Act or D-J Act). D-J funds are provided to the states at a match of up to 3-to-1 with state funds. Additional funding specified for providing, protecting, and managing access to fish and game is provided through a tax on boat gas and equipment established by the Wallop-Breaux (W-B) Act. Other peripheral

funding sources may include contracts with various government agencies and the private sector, or in a few cases, State of Alaska general funds.

This area management report provides information for the AMA and its fisheries for 2022 and is organized into primary sections, including a management area overview and major fisheries sections for fisheries addressed by the 2024 Upper Cook Inlet Finfish Alaska Board of Fisheries (BOF) meeting. The overview contains a description of the management area; a list of management plans and policies relevant to the BOF meeting; and a summary of effort, harvest, and catch. Each major fishery section includes a description and fisheries performance and management actions taken during the 2022 reporting period.

MANAGEMENT AREA OVERVIEW

MANAGEMENT AREA DESCRIPTION

The AMA consists of all waters flowing into eastside Knik Arm and the north side of Turnagain Arm from the Eklutna River drainage in the north to Ingram Creek in the south (Figure 1). The AMA includes the brackish waters on the south side of Turnagain Arm and the northeast of Knik Arm and includes part of the Chugach Mountain Range. Even though the AMA is coastal and includes Turnagain Arm, most fishing effort and opportunities are in freshwater (see Sport *Fishing Effort, Harvest, and Catch* section). The waters in Turnagain Arm are turbid and have extreme daily tidal fluctuations, making it difficult for anglers to catch fish and difficult for boats to navigate. Most streams, except Ingram Creek, are fed from high mountain lakes, snowmelt, or glaciers in the Chugach Mountain Range.

Local communities within the area include Anchorage, Eagle River, Chugiak, Birchwood, Peters Creek, Eklutna, Indian, Bird, Girdwood, Portage, and the Joint Base Elmendorf-Richardson (JBER). Of Alaska's 733,391 residents,[1] about 40% or 291,247 people reside in the AMA. Anchorage is commonly referred to as the hub for the rest of the state and has the Ted Stevens International Airport acting as the gateway to connect travelers to smaller in-state flights or quickly access Alaska's primary highways. Even though there are 3 lakes dedicated as float-plane lakes and numerous local small-plane runways, most anglers access the AMA sport fisheries by road.

AMA land managers include private individuals, the Municipality of Anchorage (MOA), Alaska Railroad Corporation (ARRC), Alaska Department of Natural Resources (DNR), U.S. Forest Service (USFS), U.S. Bureau of Land Management (BLM), U.S. Department of Defense (DOD), and Alaska Native organizations. Management and research functions for AMA sport fisheries are conducted by ADF&G SF staff from the Southcentral Sport Fish Regional office, located in Anchorage.

AREAWIDE OVERVIEW

In this report, only streams that have relevance to the 2024 UCI Board of Fisheries meeting will be highlighted. All watersheds in the AMA eventually flow into the 2 arms of Cook Inlet (Knik Arm and Turnagain Arm), and a majority of AMA streams support anadromous fish, and many support resident species.

[1] 2020 U. S. Census Bureau Population Estimate data. https://data.census.gov/profile/Alaska?g=040XX00US02. Accessed January 2024.

KNIK ARM STREAMS

Knik Arm streams are those that flow into Knik Arm from Fish Creek, near Point Woronzof located at the edge of the Ted Stevens International Airport north to the Eklutna River, including Chester Creek, Eagle River, Ship Creek, Sixmile Creek, and Peters Creek (Figure 1).

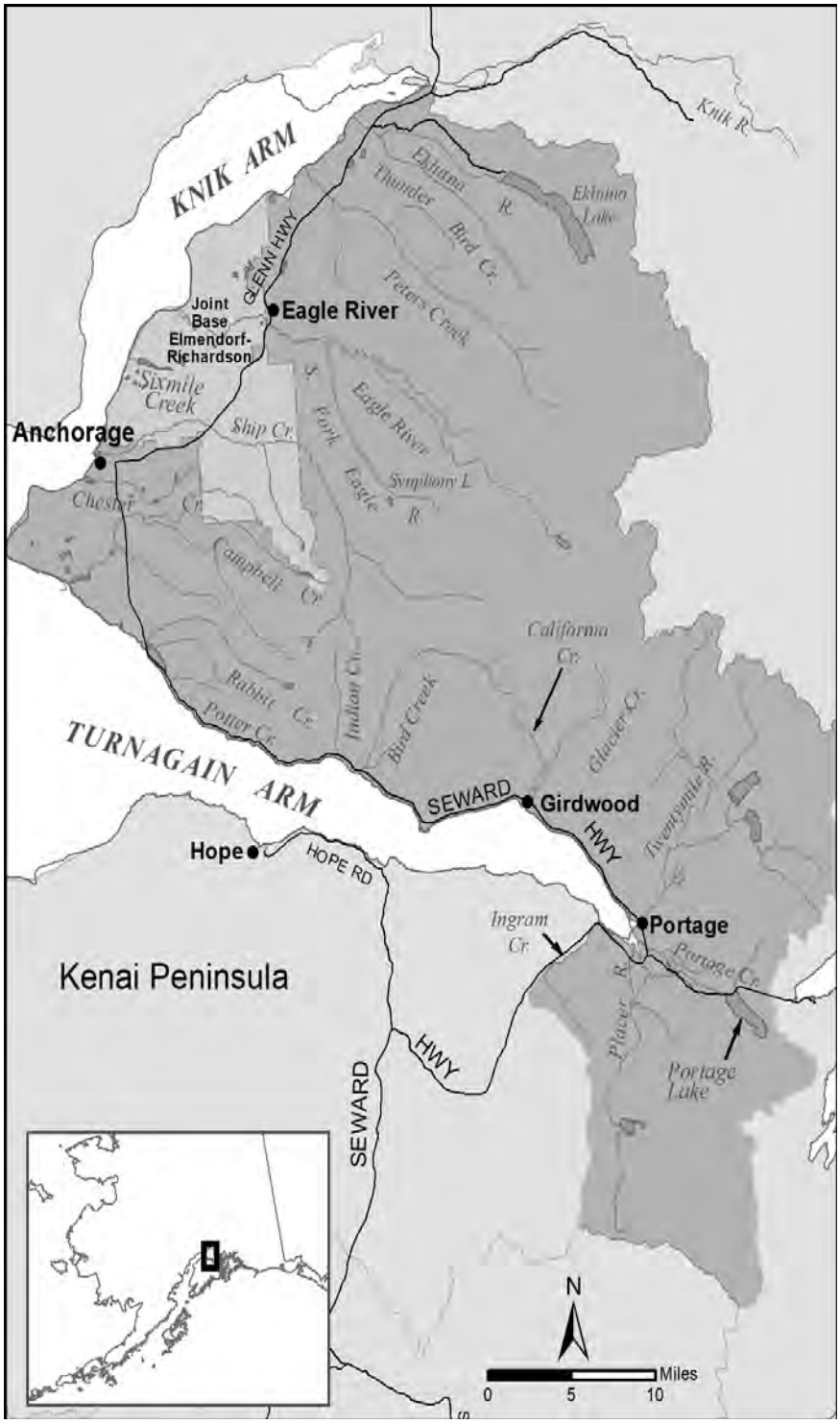

Figure 1.–Map of the Anchorage Management Area.

Chester Creek

Chester Creek, also known as Chanshtnu, or "Grass Creek" (Kari et al. 2003), travels approximately 16 miles from the Chugach Mountains and flows into Knik Arm of Cook Inlet. Some of the headwaters of Chester Creek are on DOD property. The mainstem of Chester Creek is fed by a tributary from Reflection Lake as well as tributaries formed from rain and snowmelt from the mountains. After the waters of Reflection Lake and a mountain tributary combine near Lee Street, they then flow into University Lake, also known as "APU Lake" or Behm Lake near the Alaska Pacific University (APU) campus. After exiting University Lake, Chester Creek flows through or on the edge of many neighborhoods for approximately 5 miles until it enters Chester Lagoon. Chester Lagoon is a human-made lagoon separated into 2 sections (Westchester Lagoon and Chester Lagoon) by the Walter J. Hickel Parkway. The water flows out of Westchester Lagoon for approximately one-tenth of a mile to the mud flats of Knik Arm.

Coho (*O. kisutch*), pink (*O. gorbuscha*), and sockeye salmon (*O. nerka*), rainbow trout, and Dolly Varden (*Salvelinus malma*)[2] are present at times in Chester Creek and its tributaries. It is also believed that Chinook salmon, chum salmon (*O. keta*), and steelhead (anadromous *O. mykiss*) are also present in Chester Creek, but in very low numbers and they are not well documented. Rainbow trout are also stocked into sections of Chester Creek. To protect wild rainbow trout and give them an opportunity to spawn, the entire Chester Creek drainage is closed to sport fishing April 15 through June 14. This drainage is closed to salmon fishing.

Eklutna River

Eklutna River is located 17 miles northeast of Anchorage and is the northern boundary to the AMA. Eklutna River is approximately 22 miles long and has as its origin the Eklutna Glacier as well as rain runoff and snowmelt from the Chugach Mountains. Eklutna River was first dammed in the 1920s to provide power for the growing area. The dam was replaced after the 1964 earthquake. The dam on Eklutna Lake separates and limits flow into Eklutna River. According to the Anadromous Waters Catalog, Eklutna River contains all 5 species of Pacific salmon (Chinook, chum, coho, pink, and sockeye salmon), and Dolly Varden are also present.[3] Eklutna Lake was stocked with rainbow trout in the early 1990s.[4]

Ship Creek

Ship Creek is located north of downtown Anchorage at the Port of Anchorage. The source of this creek is Ship Lake as well as rain runoff and snowmelt from the Chugach Mountains. This drainage is approximately 27 miles long and flows into Knik Arm of Cook Inlet. The majority of Ship Creek flows through U.S. Department of Defense (DOD) property on JBER. Most fishing occurs in the lower three-quarter-mile section before entering Cook Inlet. Prior to the official designation of Anchorage in 1915, several indigenous names existed for the creek. Ship Creek was also called Dgheyaytnu, translated to "Stickleback Creek," and Dgheyay Leht, which is "Where Stickleback Run" (Kari et al. 2003).

Four dams were constructed in the lower 11 miles of the creek during the 1940s and 1950s for power generation and as a water source for both the MOA and the military bases (Elmendorf and

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[2] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.
[3] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed December 2023.
[4] ADF&G Alaska Lakes Database [ALDAT] http://www.adfg.alaska.gov/index.cfm?adfg=fishingsportstockinghatcheries.lakesdatabase. Accessed November 2023.

Fort Richardson, currently combined). These dams reduced Ship Creek wild salmon runs (Bosch 2010). All 5 species of Pacific salmon (Chinook, chum, coho, pink, and sockeye salmon), as well as Dolly Varden and rainbow trout have been observed in Ship Creek.[5] Hatcheries run by ADF&G SF have been stocking Chinook salmon, coho salmon, and rainbow trout (only in 1969) into Ship Creek since 1966. The hatchery facility currently used to stock fish into Ship Creek and currently located on Ship Creek is the William Jack Hernandez Sport Fish Hatchery (WJHSF Hatchery).

In the fall of 2005, ADF&G received funding from U.S. Fish and Wildlife Service (USFWS) for a study evaluating the feasibility of restoring fish passage to Ship Creek upstream of the Elmendorf and Fort Richardson dams. The report was completed in February 2007 and lists alternative actions for each dam site ranging from "do nothing" to "total removal." Each alternative was described in terms of impacts and pros and cons for issues such as effectiveness of restoring fish passage, effects to water tables, sediment, creek shoreline stability, and costs. The report also identified issues outside the scope of this initial study (such as social issues) and issues that may require further study. This report was presented to the DOD as the landowner, and to stakeholder agencies, organizations, and the public to help choose a course of action that would achieve the goal of restoring fish passage on Ship Creek. DOD stated concerns about allowing fish passage upstream of the WJHSF Hatchery, citing BASH (bird air strike hazard), safety issues related to new housing built along the banks of Ship Creek, and potential groundwater issues.

TURNAGAIN ARM STREAMS

Streams that flow into Turnagain Arm include those streams from Campbell Creek, south and east of Point Woronzof located at the edge of the Ted Stevens International Airport, around the arm and south to Ingram Creek. They include Bird Creek, California Creek, Glacier Creek, Indian Creek, Rabbit Creek, Placer River, Portage River, and Twenty Mile River (Figure 1). These drainages are prone to flash floods due to the steep nature of the Chugach Mountain Range.

Bird Creek

Bird Creek is southeast of Anchorage, approximately 25 miles from downtown Anchorage. This is a popular stream for coho salmon anglers. Bird Creek is fed by high, small, mountain lakes as well as rain and snowmelt. Salmon can only travel up Bird Creek approximately 1.5 miles before reaching an unpassable waterfall. Prior to the falls, there is 1 tributary, Penguin Creek, that is about 0.5 miles from the mouth of Bird Creek. The lower section of Bird Creek that is open to salmon fishing is a popular sport fishery for salmon other than Chinook salmon. All 5 species of Pacific salmon (Chinook, chum, coho, pink, and sockeye salmon) as well as Dolly Varden are present in Bird Creek.[6] The WJHSF Hatchery stocks coho salmon into Bird Creek. The entire Bird Creek drainage is closed to fishing January 1 through July 13.

California and Glacier Creeks

California and Glacier Creeks are located in Girdwood, Alaska. The community of Girdwood is located approximately 41 miles southeast from downtown Anchorage and near the end of Turnagain Arm. California and Glacier Creeks combine 0.36 miles from Turnagain Arm of Cook Inlet. The lower sections of these streams are popular fisheries for locals in Girdwood. Both creeks are fed from rain, snowmelt, and small lakes in the Chugach Mountains. All 5 species of Pacific

[5] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.
[6] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.

salmon (Chinook, chum, coho, pink, and sockeye salmon), as well as Dolly Varden, are present in California and Glacier Creeks.[7]

Campbell Creek

Campbell Creek travels approximately 21 miles from the Chugach Mountains and flows into Turnagain Arm of Cook Inlet. Campbell Creek was named after Sir Joseph Campbell, who was an explorer in Alaska in the late 1700s.[8] Campbell Creek has also historically been known as Qin Cheghi (Kari et al. 2003). Qin Cheghi, or "Crying Ridge," refers to Tanaina Peak to the east in the Chugach Mountains and the ridge along the north side of upper Campbell Creek (Kari et al. 2003). North Fork Campbell Creek and South Fork Campbell Creek are both fed by small mountain lakes, rain, and snowmelt. The North Fork and South Fork Campbell Creeks combine near Piper Street to form the mainstem Campbell Creek, which flows through many Anchorage neighborhoods. From the junction near Piper Street, Campbell Creek flows approximately 7.5 miles into the artificial Campbell Lake. It exits Campbell Lake and flows about one-quarter mile to the mud flats of Turnagain Arm. Four species of Pacific salmon (Chinook, coho, pink, and sockeye salmon), as well as Dolly Varden and rainbow trout, are present in Campbell Creek at times.[9] It is also believed that chum salmon and steelhead (anadromous rainbow trout) are present in Campbell Creek but in very low numbers, and they are not well documented. Steelhead were stocked in Campbell Creek (Bosch 2010), but stocking was discontinued due to poor returns. Rainbow trout and coho salmon are stocked annually into sections of Campbell Creek. Campbell Creek, the largest free-flowing stream in the Anchorage metropolitan area, supports a small wild Chinook salmon run. To protect the wild spawning rainbow trout, the entire drainage is closed to fishing April 15 through June 14.

The upper reach of Campbell Creek is composed of 2 tributaries, the North and South Forks, which drain from the Chugach Mountains east of Anchorage. Both forks flow through canyons in their upper reaches that are impassable to upstream fish migration. Downstream of the canyons, these tributary streams flow approximately 10 miles through the largely undeveloped forests and wetlands of Chugach State Park and Far North Bicentennial Park before converging near Piper Street. Campbell Creek flows through MOA greenbelt and private property from the confluence of the forks downstream to Cook Inlet. The greatest effects from urbanization have occurred in this reach of Campbell Creek.

MOA has made an effort to obtain and preserve the riparian habitat of Campbell Creek from Lake Otis Parkway downstream to Campbell Lake and to improve water quality. In 1981, the BLM transferred title to the 4,000-acre Campbell Tract (Bicentennial Park) to the MOA. This area makes up the primary spawning and rearing habitat for salmon.

Ingram Creek

Ingram Creek is the southernmost stream in the AMA. Its headwaters are in Turnagain Pass in the Kenai Peninsula Mountain Range. Its water source is rain and snowmelt. According to the ADF&G

[7] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.
[8] Anchorage Park Foundation. https://anchorageparkfoundation.org/footer/completed-projects/campbell-park/. Accessed November 2023.
[9] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.

Anadromous Waters Catalog, chum, coho, and pink salmon are present.[10] Dolly Varden are also present in Ingram Creek. Ingram Creek was stocked in the late 1980s with coho and pink salmon.[11]

Placer River

The Placer River is a glacial river located approximately 52 miles southeast of Anchorage at the head of Turnagain Arm of Cook Inlet. The sources of the water feeding the Placer River are rain, snowmelt, and glaciers (Bartlett, Skookum, and Spencer Glaciers). The Placer River is constantly changing channels and it is difficult for jet boats to navigate because of the shallowness. According to the ADF&G Anadromous Waters Catalog, coho and chum salmon are present. Dolly Varden and sockeye salmon have also been documented in Placer River.

Portage Creek

Portage River is approximately 45 miles southeast of Anchorage and is located at the head of Turnagain Arm. Portage River is fed primarily by Portage Lake and Placer Creek, which flows out of Bear Valley on the north side of Portage Lake, which is glacial. Chum, coho, pink, and sockeye salmon have been documented in the Portage drainage.[12]

Twentymile River

Twentymile River is located approximately 47 miles southeast of Anchorage at the head of Turnagain Arm. Twentymile River divides into South Fork, Twentymile, North Fork, and Glacier Rivers. Glacier River is fed from Carmen Lake and Twentymile Glacier. The sources of water feeding the Twentymile drainage, including Glacier River and Carmen Creek, are rain, Carmen Lake, snowmelt, and Twentymile Glacier. The lower sections of the Twentymile River drainage are often traveled by jet boats, but airboats are often used to reach the upper section. According to the ADF&G Anadromous Waters Catalog, Chinook, coho, chum, and sockeye salmon are present.[13] Dolly Varden and eulachon (*Thaleichthys pacificus*) have also been documented in Placer River. Although pink salmon are not formally documented in the ADF&G Anadromous Waters Catalog, sport fish staff have documented spawning pink salmon in the Twentymile River during routine regulatory marker checks (T. Cubbage and D. Arthur, Fisheries Biologists, ADF&G, Anchorage, 2023, unpublished data). It is suspected rainbow trout and steelhead may also be present, but these have not been documented.

AMA Fishery Resources

All 5 species of Pacific salmon are found in the AMA: Chinook (called king salmon in regulatory language), chum, coho, pink, and sockeye salmon. In addition, resident and stocked species in the AMA include Arctic char (*Salvelinus alpinus*), grayling (*Thymallus arcticus*), Dolly Varden, lake trout (*Salvelinus namaycush*), and rainbow trout. There are also unconfirmed reports of steelhead and confirmed reports of invasive species such as northern pike (*Esox lucius*), Alaska blackfish (*Dallia pectoralis*), and domestic goldfish (Family Cyprinidae). Data from the ADF&G Statewide Harvest Survey (SWHS) used in this report groups Dolly Varden and Arctic char as one fish although they are two separate species, and both are found in the AMA. Eulachon runs are present

[10] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.
[11] ADF&G (Alaska Department of Fish and Game). 2020. Coded wire tag lab: hatchery release report. Mark, Tag and Age Lab. https://mtalab.adfg.alaska.gov/CWT/reports/hatcheryrelease.aspx (Accessed November 2023; requires free account to view data.
[12] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.
[13] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.

in the AMA and are utilized in a popular personal use fishery. Even though the AMA is coastal and includes Turnagain Arm, most fishing effort and opportunities are in fresh water.

ESTABLISHED MANAGEMENT PLANS AND POLICIES RELEVANT TO THE UPPER COOK INLET FINFISH BOF MEETING

Regulations governing the sport fisheries of AMA are found in Alaska statute and administrative codes (AAC). AMA freshwater sport regulations are found in 5 AAC 59.000 (Anchorage Bowl Drainages Area), sport regulations for the adjacent salt waters are found in 5 AAC 58.000, and Statewide sport provisions and definitions are found in 5 AAC 75.000. Personal use fishery regulations are found in 5 AAC 77.000 and Educational Fisheries are found in 5 AAC 93.200.

Management plans and policies that specifically affect AMA sport fisheries under consideration by the BOF for the 2024 Upper Cook Inlet finfish meeting are as follows: ADF&G Statewide Stocking Plan, *Policy for the management of sustainable salmon fisheries* (5 AAC 39.222), *Special management areas for rainbow trout in the Anchorage Bowl Drainages Area* (5 AAC 59.185), *Special management and liberal harvest opportunities for trout* (5 AAC 75.210), and *Upper Cook Inlet Personal Use Salmon Fishery Management Plan* (5 AAC 77.540) (Appendix B1).

SPORT FISHING EFFORT, HARVEST, AND CATCH

STATEWIDE HARVEST SURVEY

Since 1977, sport angler effort and harvest in the AMA have been estimated using the ADF&G Alaska Sport Fishing Survey (commonly known as the Statewide Harvest Survey, or SWHS; Mills 1979–1980, 1981a, 1981b, 1982–1991, 1992a, 1992b, 1993, 1994; Howe et al. 1995, 1996).[14] The SWHS is a mail survey that is used to estimate annual sport fishing effort and harvest. Final estimates are available during the early fall of the following year. The survey is designed to estimate effort in angler-days and the number of fish caught and harvested by location. Although harvest and catch are estimated for individual species, the SWHS is not designed to estimate directed effort towards individual species.

The SWHS has been modified over time to add additional stratifications to the estimates and to incorporate changes to the regulatory structure. Starting in 1986, the survey was modified to produce estimates by nonguided and charter anglers. Beginning in 1990, the survey was modified to also estimate catch (number of fish released plus number of fish harvested) by location. Since 1993, angler residency data have been available. The SWHS has also been modified several times to facilitate producing Chinook salmon catch and harvest estimates for saltwater fisheries.

The precision of the SWHS estimates is related to the number of household respondents who reported participating in those fisheries. For any given fishery, SWHS estimates based on fewer than 12 household respondents are not used. Estimates based on 12 or more, but less than 30 household respondents can be useful for detecting relative trends. Estimates based on 30 or more respondents generally represent fishing effort, catch, and harvest levels (Mills and Howe 1992).

[14] Hereafter, "SWHS" will refer to these references for 1977–1995 data and to the Alaska Sport Fishing Survey database [Internet] Anchorage, AK for data 1996–present: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

In this report, data from the SWHS are generally divided into 2 periods: (1) a historical 20-year period from 1999 through 2018 with annual data and averages, and (2) the previous reporting period, 2019–2021 (D. Arthur, Fishery Biologist, ADF&G, Anchorage, unpublished data). These historical and previous reporting period averages provide context for the effort, catch, and harvest estimates and trends up to 2022.

SPORT FISH GUIDE LICENSING AND CHARTER LOGBOOK PROGRAM

Beginning in 1995, ADF&G required sport fishing guide businesses and guides to register before fishing in Alaska. Since 1998, SF has operated a program to register and license both sport fishing guides and sport fishing guide businesses and to collect information on sport fishing participation, effort, and harvest by saltwater and freshwater charter clients (Sigurdsson and Powers 2009). In 1998, the BOF adopted statewide sport fishing guide regulations (5 AAC 75.075) that required all sport fishing guides and businesses to register annually with ADF&G. At this time, the BOF also adopted statewide regulations that required logbooks for saltwater charter vessels. The logbooks collected information on charter activity (location, effort, and harvest) necessary to the BOF for allocation and management decisions specific to Chinook salmon, rockfish (*Sebastes* spp.), and lingcod (*Ophiodon elongatus*), and for the North Pacific Fishery Management Council (NPFMC) for allocation of Pacific halibut (*Hippoglossus stenolepis*).

In 2004, the Alaska Legislature adopted House Bill 452, which established licensing requirements for sport fishing guide business owners and sport fishing guides on a statewide basis (effective 2005). This legislation also required logbook reporting for all freshwater guiding businesses in addition to the existing saltwater reporting requirements. The logbook data provide location of fishing effort, level of participation, and number of species kept and released by clients. This information is used for the regulation, development, and management of fisheries and has been published annually since 2009 (data since 2006; see Sigurdsson and Powers 2009–2014). From 2002 through 2005, for both technical and policy-based reasons, the Charter Logbook program did not required reporting of Pacific halibut catch and harvest (Sigurdsson and Powers 2009). Since 2006, the Charter Logbook data have been consistently reported and these data are used in this report. Charter Logbook data can also provide both spatial and temporal distribution of the charter sport fishing effort because guides are required to record a daily trip log including a statistical area code for the primary area fished; however, these data are not reported here.

The freshwater sport fishing Charter Logbook program ended following the 2018 fishing season. This action was a result of ADF&G's budget reduction process; no estimates from this program are presented here. The saltwater Charter Logbook program was continued because ADF&G agreed to provide these data for Southeast Alaska Chinook salmon treaty obligations and federal (National Oceanic and Atmospheric Administration Fisheries) halibut management actions.

AREA EFFORT AND HARVEST OVERVIEW

The AMA historically accounts for on average (1999–2018) 4% of the total statewide and 6% of the total Southcentral region sport fishing effort (Table 1). Freshwater sport fisheries dominate the AMA owing to minimal fishing opportunities in the turbid and heavily tidal salt waters of the adjacent Turnagain and Knik Arms. Since 1999, nearly all (98% on average) of the AMA sport fishing effort has occurred in AMA fresh waters (Table 2), and a majority (59% on average) of the annual freshwater effort was spent on streams (as opposed to lakes; calculated from Table 2 for 1999–2018).

Sport fishing effort in the AMA during the previous reporting period (2019–2021 average: 59,265 angler-days) has steadily declined from a peak effort in 2000 (167,499 angler-days). Regardless of this decline in effort, the average proportion of effort spent on streams during 1999–2018 (58%) was like that of recent years (2019–2021: 55%; Table 2).

Chinook and coho salmon harvest (combined) composed more than three-quarters of the AMA harvest of all anadromous salmon species, which is the case for both the historical (1999–2018) and previous fishery performance periods (2019–2021; calculated from Table 3). This large proportion of the harvest is a product of a stocking program for Chinook and coho salmon for multiple streams throughout the AMA. The other salmon species are typically caught incidentally while targeting Chinook or coho salmon and have composed less than 25% of the anadromous salmon harvest since 1999. In part, the lower proportion of the harvest made up by chum, pink, and sockeye salmon is due to the undesirability of some of these species (1999–2018 average: 89%, 88%, and 65% released, respectively) and limited opportunities, particularly for sockeye salmon.

Table 1.–Number of angler-days expended in the Anchorage Management Area compared to Southcentral and statewide, 1999–2022.

			AMA		
Year	Statewide effort	Southcentral effort	Effort	Percent of statewide	Percent of Southcentral
1999	2,499,152	1,659,966	146,789	6	9
2000	2,627,805	1,844,824	167,499	6	9
2001	2,261,941	1,560,562	135,359	6	9
2002	2,259,091	1,569,513	111,694	5	7
2003	2,219,398	1,535,501	104,004	5	7
2004	2,473,961	1,709,671	101,943	4	6
2005	2,463,929	1,712,610	101,041	4	6
2006	2,297,961	1,605,852	103,800	5	6
2007	2,543,674	1,799,352	91,881	4	5
2008	2,315,601	1,622,920	111,121	5	7
2009	2,216,445	1,522,345	79,743	4	5
2010	2,000,167	1,371,470	61,704	3	4
2011	1,919,313	1,326,950	48,187	3	4
2012	1,885,692	1,252,263	45,407	2	4
2013	2,202,957	1,488,383	64,037	3	4
2014	2,309,853	1,571,650	79,306	3	5
2015	2,212,331	1,470,381	74,631	3	5
2016	1,982,300	1,314,668	51,927	3	4
2017	2,006,244	1,312,586	53,730	3	4
2018	1,878,009	1,245,253	58,644	3	5
2019	2,075,431	1,378,500	56,667	3	4
2020	1,566,516	1,124,785	59,225	4	5
2021	1,978,718	1,337,679	61,874	3	5
2022	1,827,809	1,204,944	42,516	2	4
Average					
1999–2018	2,228,791	1,524,836	89,622	4	6
2019–2021	1,873,555	1,280,321	59,255	3	5

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

Table 2.–Saltwater, lake, and stream sport fishing effort (angler-days) in the Anchorage Management Area (AMA), 1999–2022.

	Saltwater		Freshwater						
			Lake		Stream		Total freshwater		AMA
Year	Effort	Percent	Effort	Percent	Effort	Percent	Effort	Percent	Total effort
1999	2,916	2	66,312	45	77,561	53	143,873	98	146,789
2000	2,197	1	69,607	42	95,695	57	165,302	99	167,499
2001	2,277	2	47,384	35	85,698	63	133,082	98	135,359
2002	3,493	3	40,201	36	68,000	61	108,201	97	111,694
2003	3,243	3	40,552	39	60,209	58	100,761	97	104,004
2004	1,251	1	47,539	47	53,153	52	100,692	99	101,943
2005	2,670	3	36,833	36	61,538	61	98,371	97	101,041
2006	1,540	1	35,741	34	66,519	64	102,260	99	103,800
2007	5,542	6	28,833	31	57,506	63	86,339	94	91,881
2008	2,977	3	35,984	32	72,160	65	108,144	97	111,121
2009	2,616	3	27,910	35	49,217	62	77,127	97	79,743
2010	1,675	3	24,152	39	35,877	58	60,029	97	61,704
2011	2,230	5	16,793	35	29,164	61	45,957	95	48,187
2012	702	2	22,265	49	22,440	49	44,705	98	45,407
2013	1,085	2	32,095	50	30,857	48	62,952	98	64,037
2014	2,123	3	39,333	50	37,850	48	77,183	97	79,306
2015	921	1	30,738	41	42,972	58	73,710	99	74,631
2016	1,670	3	18,121	35	32,136	62	50,257	97	51,927
2017	461	1	19,285	36	33,984	63	53,269	99	53,730
2018	854	1	25,714	44	32,076	55	57,790	99	58,644
2019	1,895	3	18,386	32	36,386	64	54,772	97	56,667
2020	1,377	2	28,726	48	29,152	49	57,878	98	59,255
2021	890	1	28,292	46	32,692	53	60,984	99	61,874
2022	999	2	18,064	42	23,453	55	41,517	98	42,516
Average									
1999–2018	2,122	2	35,270	40	52,231	58	87,500	98	89,622
2019–2021	1,387	2	25,135	42	32,743	55	57,878	98	59,265

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

Table 3.–Sport fish catch and harvest (Harv), and percentage of catch released (% R) of anadromous salmon in the Anchorage Management Area, 1999–2022.

	Chinook salmon			Chum salmon			Coho salmon			Pink salmon			Sockeye salmon			Total	
Year	Catch	Harv	% R	Catch	Harv	% R	Catch	Harv	% R	Catch	Harv	% R	Catch	Harv	% R	Catch	Harv
1999	15,118	5,462	64	2,304	129	94	17,834	12,266	31	5,462	721	87	1,507	542	64	42,225	19,120
2000	11,848	4,752	60	3,936	340	91	46,888	28,191	40	38,236	3,123	92	1,182	537	55	102,090	36,943
2001	11,843	4,452	62	4,631	470	90	63,865	40,693	36	12,988	783	94	2,292	894	61	95,619	47,292
2002	7,070	2,421	66	6,540	472	93	41,219	26,260	36	11,651	1,168	90	694	330	52	67,174	30,651
2003	9,480	3,678	61	4,121	313	92	20,762	13,375	36	9,461	1,600	83	1,791	943	47	45,615	19,909
2004	7,713	3,160	59	2,185	306	86	25,474	13,447	47	7,897	1,272	84	1,012	286	72	44,281	18,471
2005	9,202	4,329	53	2,376	234	90	25,937	15,063	42	10,739	677	94	997	551	45	49,251	20,854
2006	6,857	3,165	54	4,427	242	95	35,854	19,863	45	23,926	2,345	90	341	91	73	71,405	25,706
2007	6,142	3,106	49	2,968	97	97	17,806	10,692	40	34,318	3,278	90	595	172	71	61,829	17,345
2008	5,464	2,647	52	6,033	283	95	26,124	17,996	31	30,004	2,032	93	1,719	223	87	69,344	23,181
2009	2,655	1,027	61	5,945	386	94	17,736	10,805	39	62,996	6,426	90	663	192	71	89,995	18,836
2010	2,141	1,130	47	3,852	335	91	5,983	4,466	25	14,625	2,578	82	618	193	69	27,219	8,702
2011	1,322	616	53	4,350	397	91	10,327	7,405	28	15,241	893	94	535	244	54	31,775	9,555
2012	334	113	66	1,749	137	92	6,535	4,187	36	8,587	1,488	83	220	64	71	17,425	5,989
2013	1,304	824	37	3,511	2,053	42	7,641	6,190	19	9,568	2,447	74	172	28	84	22,196	11,542
2014	1,382	882	36	3,737	541	86	13,939	9,430	32	12,941	1,473	89	656	288	56	32,655	12,614
2015	3,077	1,820	41	1,742	194	89	19,218	15,099	21	19,236	2,382	88	342	266	22	43,615	19,761
2016	2,826	1,999	29	1,759	226	87	6,198	5,069	18	5,271	631	88	423	16	96	16,477	7,941
2017	1,473	656	55	3,391	509	85	17,500	13,049	25	23,062	2,331	90	992	145	85	46,418	16,690
2018	567	470	17	1,747	157	91	14,887	12,058	19	8,769	1,055	88	451	193	57	26,421	13,933
2019	1,814	1,012	44	3,009	263	91	13,380	11,010	18	23,945	3,249	86	495	161	67	42,643	15,695
2020	945	574	39	1,792	451	75	9,349	7,527	19	14,709	2,336	84	309	218	29	27,104	11,106
2021	2,518	1,601	36	1,019	86	92	15,744	12,708	19	22,447	2,507	89	385	259	33	42,113	17,161
2022	902	497	45	1,950	294	85	9,344	7,764	17	7,259	1,014	86	496	206	58	19,951	9,775
Average																	
1999–2018	5,391	2,335	51	3,565	391	89	22,086	14,280	32	18,249	1,935	88	860	310	65	50,151	19,252
2019–2021	1,759	1,062	40	1,940	267	86	12,824	10,415	19	20,367	2,697	86	396	213	43	37,287	14,654

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

AREA FISHERIES 2022 PERFORMANCE

The total angler effort in the AMA in 2022 was estimated to be the lowest in over 20 years and the second lowest since effort was first estimated by the SWHS. In 2022, AMA sport fisheries effort (angler-days) was 42,516, which represents a 28% decline from the previous fishery performance period (2019–2021) average of 59,255 angler-days (Table 1). Angler effort in 2022 on lakes (18,064 angler-days) and streams (23,453 angler-days) both declined equally from the previous period average (28%; Table 2). In 2022, overall sport fishing effort in AMA sport fisheries has declined to 2% of the total sport fishing effort in Alaska (Table 1).

The total catch (19,951 fish) of anadromous salmon in the AMA in 2022 was approximately half of the average catch (37,287 fish) from the recent fishery performance period (2019–2021; Table 3); total harvest (9,755 fish) was two-thirds of the average harvest (14,654 fish) from 2019–2021 (Table 3). Although these represent declines from the recent and historical averages, the 2022 catch and harvest of all anadromous salmon species is above the historical low in 2012 (17,425 fish caught and 5,989 fish harvested; Table 3). The below average catch and harvest of anadromous salmon in 2022 is a result of many factors including declines in angler effort, low returns of certain salmon species, and high water observed in several AMA streams. In 2022, Chinook and coho salmon (combined) made up 85% of the harvest of all anadromous salmon species (calculated from Table 3).

CHINOOK SALMON FISHERIES

CHINOOK SALMON FISHERY DESCRIPTION

Chinook salmon are found in creeks and rivers across the AMA including Bird Creek, California Creek (a tributary of Glacier Creek in Girdwood), Campbell Creek, Carmen River (a tributary of Glacier River in Twentymile River drainage), Eagle River, Eklutna River, Fire Creek, Glacier Creek, Indian River, Peters Creek, Portage Creek, Rabbit Creek, Ship Creek, and Twentymile River. Most of these streams support annual Chinook salmon returns of less than 100 fish each (Bosch 2010). As a result, all AMA freshwaters are closed to sport fishing for Chinook salmon except Ship Creek, four 3-day weekends on Eagle River, and a youth-only fishery on Campbell Creek. The largest Chinook salmon sport fishery is hatchery produced and occurs on Ship Creek. Chinook salmon harvest is minimal from the limited Eagle River fishery and youth-only fishery on Campbell Creek. ADF&G performs survey counts of Chinook salmon returning to sections of Ship, Rabbit, Bird, and Penguin Creeks, as well as the south fork of Eagle River and Meadow Creek (tributary of Eagle River; Appendices C1–C5).

Ship Creek

The Ship Creek sport fishery is centrally located in the heart of downtown Anchorage, providing a unique opportunity for anglers in an urban setting. Ship Creek was open to Chinook salmon sport fishing from 1957 through 1959 but was closed from 1960 through 1969. Chinook salmon fishing was allowed during selected periods in Ship Creek downstream of the Chugach Power Plant Dam from 1970 through 1972. From 1973 through 1986, the creek was closed to Chinook salmon sport fishing due in part to low Chinook salmon abundance throughout northern Cook Inlet. Beginning in 1987, as returns increased from annual stocking efforts, the lower portion of Ship Creek downstream of the Chugach Power Plant Dam was reopened to Chinook salmon sport fishing 2 days per week for 5 consecutive weeks in June and July. The season was expanded to 7 days per

week, January 1 through July 13, 1990. Nighttime closures from 11:00 PM to 6:00 AM were issued by emergency order to help address enforcement issues and passed into regulation in 2001 (May 15–July 13 only). The fishery now occurs during late May through early July in the lower 1 mile of Ship Creek, downstream of the Chugach Power Plant Dam (Figure 2). Fishing is also closed within 100 ft of the Chugach Power Plant Dam. The shoreline of the area open to Chinook salmon fishing is owned and managed by ARRC and the MOA. The Ship Creek Chinook Salmon Derby, which was first held in 1993, has become an annual event currently sponsored to benefit Alaska nonprofit organizations.

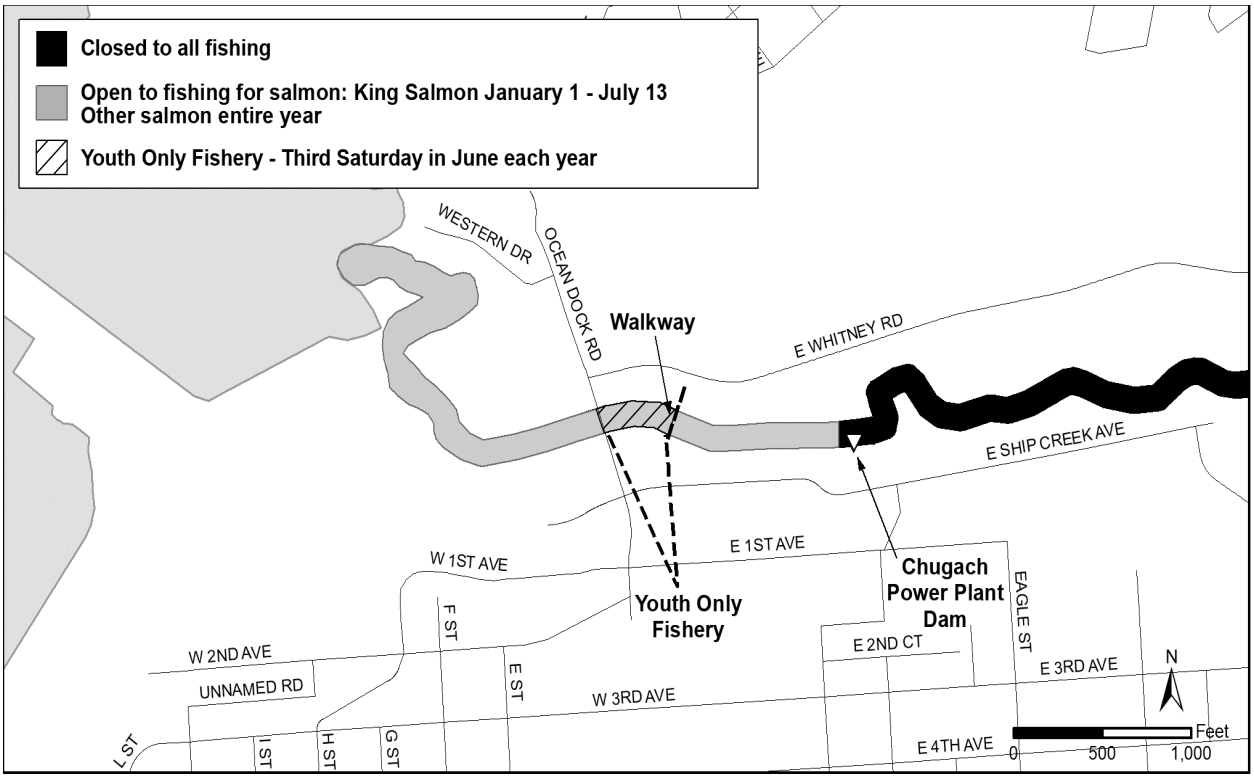

Figure 2.–Map of Ship Creek in the Anchorage Management Area.

The current sport fishing bag and possession limits for Chinook salmon in those waters of Ship Creek open to salmon fishing are 1 per day, 1 in possession for Chinook salmon 20 inches or greater; and 10 per day, 10 in possession for Chinook salmon less than 20 inches. After taking a Chinook salmon 20 inches or longer, a person may not fish for any species that same day in waters open to Chinook salmon sport fishing. Chinook salmon 20 inches or longer harvested in Ship Creek must be immediately recorded on the back of the angler's sport fishing license or harvest record card in ink or electronically in the ADF&G mobile application and counted towards the annual limit of 5 Chinook salmon from the salt or fresh waters of Cook Inlet north of Bluff Point.

In 2017, a youth-only Chinook salmon fishery was adopted by the BOF on Ship Creek from the C Street bridge to the Bridge Restaurant on the third Saturday in June. When it was originally adopted, the youth-only fishery took place from 6:00 AM to 6:00 PM, but at the following board cycle (2020), the fishery was extended until 11:00 PM (Appendix D1).

Turnagain Arm Streams

Although all streams in Turnagain Arm are closed to fishing and retention of Chinook salmon, additional regulations have been adopted by the BOF to protect the small returns of Chinook salmon throughout Turnagain Arm streams. For example, the Twentymile River drainage is closed to all sport fishing above markers that are located 10 miles upstream of the Seward Highway on Twentymile River and at the confluence of the Glacier and Carmen Rivers; this was implemented due to reports of anglers illegally targeting Chinook salmon during spawning. Additionally, in 2011, the BOF closed the Bird Creek drainage from January 1 to July 13 to protect the small run of Chinook salmon returns to Bird and Penguin Creeks (Appendix D4). No directed sport fishery for Chinook salmon has occurred on Turnagain Arm streams in over 30 years.

CHINOOK SALMON STOCKING PROGRAM

Currently, the only anadromous Chinook salmon stocking in the AMA occurs in Ship Creek. Attempts to enhance Ship Creek salmon runs occurred from 1966 through 1980 when Chinook salmon of Alaska and Oregon origin were stocked (Miller 1990; Stratton and Cyr 1995). During this period, eggs obtained from these stocks were incubated at Fire Lake Hatchery. The fry were reared to smolt in the Fort Richardson Hatchery before release. These releases were generally unsuccessful because consistent numbers of returning adults could not be established. A more successful hatchery enhancement program was established in 1987 using smolt releases from the Elmendorf Hatchery and Ship Creek Chinook salmon broodstock as the source. The current Chinook salmon run is the result of an annual release of smolt raised at the WJHSF Hatchery. Chinook salmon stocking numbers were increased at Ship Creek from approximately 360,000 smolt in 2019 to nearly 600,000 smolt in 2020. From 2020 through 2022, an average of 590,288 Chinook salmon smolt were released into Ship Creek annually (Appendix E1).

CHINOOK SALMON FISHERIES MANAGEMENT OBJECTIVES

In most streams in the AMA, Chinook salmon runs are too small to allow a harvestable surplus. The management goal and objectives are to maintain historical Chinook salmon escapement levels, continue natural production, and provide viewing opportunities. Campbell Creek is the only creek that has a sustainable escapement goal (SEG) threshold in the AMA.

Ship Creek

This fishery began to develop in 1987, with fishing open for 2 days each week (Appendix D1) to allow stocked Chinook salmon returns to build to harvestable levels. The fishery was expanded to 7 days per week in 1991, resulting in a catch of over 1,600 Chinook salmon and a harvest of over 1,100 Chinook salmon during that year (Bosch 2010). The 3 management objectives for the Ship Creek Chinook salmon fishery are as follows: (1) to maintain or increase current angler effort through smolt stocking, (2) to generate at least 35,000 angler-days of annual sport fishing opportunity directed at stocked Chinook and coho salmon in Ship Creek, and (3) to produce a return to Ship Creek of 6,000 to 9,000 adult Chinook salmon to assure 750 adult salmon are available (having passed above the Chugach Power Plant Dam) for natural spawning, fish viewing, and meeting hatchery egg-take needs.

ADF&G uses inseason information from weekly foot surveys and hatchery raceway counts to ensure that broodstock and other inriver needs are met, and has issued emergency orders to either liberalize the Ship Creek Chinook salmon fishery when surplus fish are available or restrict the

fishery when needs are not expected to be met. During the 2017 and 2021 seasons, the Chinook salmon season closure date was extended to July 31, and bag limits were increased by emergency order to allow additional harvest because it was anticipated that the WJHSF Hatchery had adequate fish to meet the broodstock goals and other inriver needs. By emergency order, the sport fishery has been closed prior to July 14 in 2 of the last 10 years to achieve broodstock goals and meet the inriver needs of Ship Creek (2014 and 2018; Table 4).

Turnagain Arm Streams

There are no Chinook salmon fisheries on any Turnagain Arm streams and as a result, there are no formal management objectives for Chinook salmon for these drainages. Within the sustained yield principle, SF goals seek to optimize social and economic benefits, and where possible, expand opportunity to participate in diverse fisheries on these stocks. However, all Turnagain Arm Chinook salmon runs are too small to sustain any level of harvest and managing the scale of any fishery would be difficult owing to the accessibility of these drainages to a large population center.

CHINOOK SALMON FISHERY 2022 PERFORMANCE

In 2022, the Chinook salmon harvest (497 fish) for the entire AMA was well below the historical (1999–2018) and previous reporting period (2019–2021) averages. (Table 5). It was the third lowest harvest on record since 1999 based on SWHS estimates (Table 5). Chinook salmon harvest within the AMA is largely driven by Ship Creek, with nearly all harvest (84–100%; calculated from Table 5) occurring in Ship Creek. In 2022, 86% of the AMA Chinook salmon harvest occurred at Ship Creek. Typically, a small percentage (1% since 1999) of the harvest comes from Eagle River; however, in 2022, the SWHS estimated zero Chinook salmon were harvested from Eagle River. The remaining 14% (or 68 fish) of the AMA Chinook salmon harvested in 2022 came from "other freshwater," which is most likely from the Campbell Creek youth-only fishery.

Ship Creek

Anglers caught 528 Chinook salmon at Ship Creek in 2022, and of those, 429 fish were harvested (Table 5). Similar to the overall AMA estimates, Ship Creek catch and harvest were the third lowest since 2002; only the poor returns in 2012 and 2018 yielded less Chinook salmon catch and harvest on Ship Creek. The low catch and harvest in 2022 were not a product of poor returns, but rather high water that reduced angler efficiency. Following a heavy snowpack in 2021 and warm temperatures in the spring of 2022, the discharge measurements at Ship Creek were above average or record-breaking from mid-May to mid-July, when most of the fishery occurs.[15] ADF&G staff were only able to conduct partial stream surveys on Ship Creek until July 14, after the fishery had closed. A total of 1,380 Chinook salmon were counted between the WJHSF hatchery and the Chugach Power Plant Dam, and the broodstock goal and other inriver needs were achieved (Appendix C1). No emergency action was taken on Ship Creek in 2022 (Table 4).

[15] USGS water data; https://waterdata.usgs.gov/monitoring-location/15276000. Accessed December 2023.

Table 4.–Emergency orders issued for the Ship Creek Chinook salmon fishery between 2014 and 2022.

Year	Effective dates	Emergency order number	Regulatory change
2014	July 7–July 31	2-KS-2-34-14	Closed sport fishing for all species on all of Ship Creek for the remainder of the Chinook salmon season to protect Chinook salmon.
2015	No action		
2016	No action		
2017	July 11–July 31	2-KS-2-26-17	Increased the bag and possession limit from 1 to 2 for Chinook salmon in Ship Creek and extended the sport fishing season for Chinook salmon on Ship Creek through July 31, 2017.
2018	June 29–July 13	2-KS-2-26-18	Closed sport fishing for all species on all of Ship Creek for the remainder of the Chinook salmon season to protect Chinook salmon.
2019	No action		
2020	No action		
2021	July 14–July 31	2-KS-2-44-21	Increased the bag and possession limit from 1 to 2 for Chinook salmon in Ship Creek and extended the sport fishing season for Chinook salmon on Ship Creek through July 31, 2021.
2022	No action		
2023	No action		

Table 5.–Chinook salmon sport fish catch and harvest, Anchorage Management Area, 1999–2022.

	Eagle River		Ship Creek		Salt water		Other freshwater		Area total	
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1999	48	22	14,275	5,204	201	167	594	69	15,118	5,462
2000	132	109	11,090	4,593	60	20	566	30	11,848	4,752
2001	132	58	10,656	4,286	262	108	793	0	11,843	4,452
2002	162	34	5,967	2,287	164	94	777	6	7,070	2,421
2003	76	25	8,667	3,588	78	52	659	13	9,480	3,678
2004	51	24	6,840	2,790	104	58	718	288	7,713	3,160
2005	25	25	7,578	4,081	183	108	1,416	115	9,202	4,329
2006	251	60	5,464	3,060	32	32	1,057	13	6,804	3,165
2007	125	47	4,888	2,615	695	366	434	78	6,142	3,106
2008	46	0	4,279	2,540	92	92	1,047	15	5,464	2,647
2009	0	0	1,869	884	209	143	577	0	2,655	1,027
2010	0	0	1,918	1,095	0	0	223	35	2,141	1,130
2011	17	0	1,171	600	16	16	118	0	1,322	616
2012	0	0	154	113	0	0	180	0	334	113
2013	0	0	1,265	824	0	0	39	0	1,304	824
2014	0	0	1,245	882	0	0	137	0	1,382	882
2015	0	0	3,002	1,761	16	16	59	43	3,077	1,820
2016	17	17	2,540	1,922	96	20	173	40	2,826	1,999
2017	0	0	910	635	0	0	563	21	1,473	656
2018	20	20	451	411	0	0	96	39	567	470
2019	0	0	1,412	1,333	0	0	402	36	1,814	1,369
2020	0	0	1,207	879	0	0	62	0	1,269	879
2021	216	0	2,210	1,601	0	0	92	0	2,518	1,601
2022	48	0	582	429	0	0	272	68	902	497
Average										
1999–2018	55	22	4,711	2,209	110	65	511	40	5,388	2,335
2019–2021	72	0	1,610	1,271	0	0	185	12	1,867	1,283

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

CHUM SALMON FISHERIES

CHUM SALMON FISHERY DESCRIPTION

Chum salmon do not return in significant numbers to AMA streams, and effort toward chum salmon in the AMA has historically been low. However, anglers have begun targeting chum salmon more frequently in the AMA with the advent of ADF&G's *Five Salmon Family Challenge* in 2014 (Ryan Ragan, Sport Fish Program Coordinator, ADF&G, Anchorage, personal communication). Anglers targeting coho salmon catch most of the chum salmon due to overlap in run timing. Since 1999, 88% of chum salmon caught by sport anglers in the AMA have been released on average (calculated from Table 6). The majority of the catch and harvest of chum salmon in the AMA are from Bird Creek. Chum salmon are also harvested in California, Glacier, Indian, Peters, and Ship Creeks, and Eagle, Eklutna, Placer, and Twentymile Rivers. Although chum salmon harvests have remained relatively low, catches peaked in 2002 with 6,540 fish and have since declined (Table 6). Chum salmon are counted or their presence is noted during Chinook and coho salmon escapement surveys, although no directed chum salmon counts are conducted by ADF&G staff (Appendices C1–C5). ADF&G does not currently monitor chum salmon escapements.

In those freshwaters of the AMA open to fishing for salmon, the bag and possession limits for salmon (other than Chinook salmon) 16 inches or longer is 3 per day and 3 in possession, only 2 of which may be coho salmon. The limits for salmon (other than Chinook salmon) under 16 inches are 10 per day, 10 in possession. In salt water, the limits for salmon, (other than Chinook salmon) are 6 per day, 6 in possession. Only 3 per day, 3 in possession may be coho salmon. SWHS estimates of annual chum salmon catch and harvest in the AMA between 1999 and 2018 averaged 3,565 and 391 chum salmon, respectively (Table 6).

Placer River

In the Placer River drainage (including Skookum and Lower Explorer Creeks), sport fishing effort and the catch of chum salmon is minimal. Placer River does not typically receive an adequate number of responses from the SWHS to generate species-specific catch and harvest estimates. Any responses for Placer River each year are be reported under the "other streams" category. Chum salmon have been documented in lower Placer River and Skookum Creek.[16] In 2003, aerial surveys were conducted in the Placer River drainage and produced a peak count of 112 chum salmon, all of which were counted in Skookum Creek. Consistent and annual information on run size and timing for chum salmon in the Placer River drainage is unavailable due to no formal assessment projects.

Twentymile River

Chum salmon are incidentally caught by anglers in the popular Twentymile River drainage coho salmon fishery. Chum salmon catch in the Twentymile River drainage has ranged from low of zero fish (2005) to a high of 1,400 fish (2002). Chum salmon are present in the mainstem of Twentymile River as well as the Glacier and Carmen Rivers.[17] Like the Placer River, information on run size and timing for chum salmon is unavailable.

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[16] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.
[17] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.

Table 6.–Chum salmon sport fish catch and harvest, Anchorage Management Area, 1999–2022.

	Bird Creek		Ship Creek		Twentymile R.		Other streams		Saltwater		Area total	
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1999	1,156	99	354	16	81	14	244	0	469	0	2,304	129
2000	2,549	158	853	73	48	0	389	73	97	36	3,936	340
2001	1,489	87	1,347	218	357	35	1,270	130	168	0	4,631	470
2002	3,056	406	807	66	1,400	0	1,238	0	39	0	6,540	472
2003	1,857	155	1,014	67	357	25	349	66	544	0	4,121	313
2004	1,233	117	516	44	103	70	305	75	28	0	2,185	306
2005	1,548	116	338	100	0	0	420	18	70	0	2,376	234
2006	2,952	203	677	26	253	0	545	13	0	0	4,427	242
2007	2,027	61	425	22	102	0	295	0	119	14	2,968	97
2008	2,505	239	351	0	926	0	2,236	29	15	15	6,033	283
2009	4,205	316	517	40	69	11	1,154	19	0	0	5,945	386
2010	1,345	148	288	57	903	32	1,316	98	0	0	3,852	335
2011	1,006	111	827	0	22	0	2,265	286	230	0	4,350	397
2012	894	98	140	0	342	0	373	39	0	0	1,749	137
2013	1,366	449	1,885	1,512	58	0	202	92	0	0	3,511	2,053
2014	2,166	309	491	199	0	0	1,067	20	13	13	3,737	541
2015	925	97	331	97	19	0	467	0	0	0	1,742	194
2016	567	168	364	29	45	0	768	29	15	0	1,759	226
2017	1,414	189	493	59	123	18	1,361	243	0	0	3,391	509
2018	1,364	84	197	58	59	0	127	15	0	0	1,747	157
2019	2,140	68	248	111	93	44	528	40	0	0	3,009	263
2020	334	50	805	327	251	0	381	74	21	0	1,792	451
2021	387	67	614	3	16	16	2	0	0	0	1,019	86
2022	586	108	413	0	229	161	722	25	0	0	1,950	294
Average												
1999–2018	1,781	181	611	134	263	10	820	62	90	4	3,565	391
2019–2021	954	62	556	147	120	20	304	38	7	0	1,940	267

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

CHUM SALMON FISHERIES MANAGEMENT OBJECTIVES

There are no formal management objectives for chum salmon in the AMA. ADF&G has a constitutional mandate to manage on the principle of sustained yield. Within the sustained yield principle, SF goals seek to optimize social and economic benefits, and where possible, expand opportunity to participate in diverse fisheries on these stocks.

CHUM SALMON STOCKING PROGRAM

There is currently no chum salmon stocking program in the AMA.

CHUM SALMON FISHERY 2022 PERFORMANCE

In 2022, the annual chum salmon catch (1,950 fish) in the AMA was very similar to the recent 2019–2021 average of 1,940 fish (Table 6). This may indicate a stabilization in chum salmon catch from a decline that began in 2010. About 85% of the chum salmon caught in the AMA were released in 2022.

Twentymile River

The chum salmon catch from Twentymile River drainage (229 fish) was above the previous reporting period average (2019–2021) but below the historical average (1999–2018; Table 6). The harvest of 161 chum salmon in 2022 was the largest harvest for the Twentymile River drainage in over 20 years. In 2022, anglers retained over 70% of the chum salmon caught in Twentymile River, which is well above the retention rate for the remainder of the AMA.

Other Turnagain Arm Streams (including Placer River)

The SWHS estimated catch of 722 chum salmon for the "other streams" category in 2022 was the largest catch compared to other locations in the AMA (Table 6), accounting for over 37% of the chum salmon catch in the AMA. Although no single stream within this category received adequate responses from the SWHS in 2022 to produce reliable estimates of catch or harvest, Turnagain Arm streams (excluding Twentymile River) as conglomerate did receive over 12 responses and contributed to 97% of the chum salmon catch from "other streams." Of the chum salmon caught in "other streams," approximately 97% were released in 2022 (calculated from Table 6).

COHO SALMON FISHERIES

COHO SALMON FISHERY DESCRIPTION

Coho salmon fisheries in the AMA range from centrally located urban opportunities for anglers at Ship and Campbell Creeks to remote, boat-accessible angling opportunities at Twentymile and Placer Rivers in Turnagain Arm. The largest coho salmon sport fisheries in the AMA include the 3 hatchery enhanced streams (Bird, Campbell, and Ship Creeks) and the wild run returning to Twentymile River. Other drainages support smaller runs of wild coho salmon including the Placer River and Glacier Creek. Ship and Bird Creeks contribute significantly to the overall AMA average catch and harvest of coho salmon (between 60% and 70% on average; Table 7). The average catch of coho salmon in the AMA between 1999 and 2018 was 22,085 fish, and on average 14,280 (74%) were harvested (Table 7). Once coho salmon leave fresh water as smolt, they spend one winter in the ocean prior to returning to their natal streams (Sandercock 1991). Coho salmon return to AMA

streams from mid-July through mid-October. Hatchery-stocked stream runs peak in mid-August, whereas wild Turnagain Arm runs peak in early September.

In the fresh waters open to fishing for coho salmon, bag and possession limits for salmon other than Chinook salmon, 16 inches or greater in length, is 3 per day and 3 in possession, only 2 of which may be coho salmon, except in hatchery stocked streams. In stocked streams like Bird, Campbell, and Ship Creeks, the bag and possession limits for salmon other than Chinook salmon, are 3 per day and 3 in possession, of which all 3 can be coho salmon. Beginning in 2011, a coho salmon, 16 inches or longer that is removed from fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish.

ADF&G performs survey counts of coho salmon returning to sections of Ship, Rabbit, Bird, and Penguin Creeks (Appendices C1 and C3–C5). ADF&G conducted aerial surveys of selected Turnagain Arm streams (Placer River, Portage Creek, and Twentymile River drainages) from 1994 to 2006 (excluding 2001) to index coho salmon escapements in these systems. Due to small runs and suboptimal conditions for aerial surveys, the yearly escapement estimates vary widely. Surveys were not conducted from 2006 to 2010 due to staffing and survey conditions, and were eventually discontinued after 2010 (Bosch 2010).

Eklutna River

Coho salmon adults and juveniles have been documented in the Eklutna River drainage.[18] ADF&G does not currently have any assessment projects or surveys in the Eklutna River drainage. However, surveys conducted by other entities have documented adult coho salmon present and spawning in the Eklutna River drainage, although in low numbers. Thermal markings were detected in coho salmon otoliths from carcasses provided to ADF&G in 2021 and 2022, which is most likely from the hatchery releases at the nearby Eklutna Tailrace because they share water source (Knik Arm drainage; D. Arthur and C. Block, 2022, unpublished data).

Sport fishing catch and harvest estimates of coho salmon in the Eklutna River drainage are not available due to minimal effort and few responses on the SWHS, which are reported in the "other freshwater" category. Furthermore, anglers may confuse the Eklutna River with the Eklutna Tailrace on the SWHS, which makes it difficult to interpret any catch and harvest that may be reported from the Eklutna River.

Twentymile River

The Twentymile River drainage supports the largest and most popular recreational wild coho salmon fishery in Turnagain Arm. Only about the first 10 miles of the Twentymile River are open to fishing after July 13. Glacier River is only open to its confluence with Carmen River. The upper reaches of Twentymile, Glacier, and Carmen Rivers are closed by regulation to sport fishing after July 13 and are always closed to salmon fishing. These rivers are heavily influenced by the summertime glacial runoff, and fishing typically takes place in or near freshwater sloughs that feed these streams. The historical average (1999–2018) catch in the Twentymile River drainage was 2,590 coho salmon and 1,698 (65%) on average were harvested (Table 7).

[18] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed December 2023.

Table 7.–Coho salmon sport fish catch and harvest, Anchorage Management Area, 1999–2022.

	Bird Creek		Campbell Creek		Ship Creek		Twentymile River		Saltwater		Other freshwater		Area total	
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1999	6,284	4,611	1,880	1,341	7,064	4,649	1,457	1,051	170	158	979	456	17,834	12,266
2000	15,799	10,741	1,873	555	20,890	11,858	5,025	3,094	591	288	2,710	1,655	46,888	28,191
2001	11,563	8,449	2,748	813	39,615	26,419	5,724	2,742	732	463	3,483	1,807	63,865	40,693
2002	1,504	1,053	2,998	1,144	24,699	16,751	4,101	2,672	1,012	587	6,905	4,053	41,219	26,260
2003	1,117	776	2,873	1,457	8,831	6,094	3,039	2,116	867	441	4,035	2,491	20,762	13,375
2004	1,064	611	3,468	1,056	10,543	6,110	5,048	3,012	336	143	5,015	2,515	25,474	13,447
2005	5,331	3,281	4,552	1,989	10,922	6,830	1,632	1,334	473	473	3,027	1,156	25,937	15,063
2006	9,530	5,889	3,622	1,767	14,881	8,079	2,299	1,739	316	220	5,172	2,169	35,820	19,863
2007	7,461	3,287	1,051	758	5,845	3,934	998	719	993	915	1,458	1,079	17,806	10,692
2008	3,817	3,030	2,164	1,155	8,755	6,735	7,336	4,116	0	0	4,052	2,960	26,124	17,996
2009	6,020	3,296	577	364	4,014	2,974	2,052	1,329	284	207	4,789	2,635	17,736	10,805
2010	1,381	974	392	249	1,038	743	1,358	1,214	44	15	1,770	1,271	5,983	4,466
2011	2,024	1,324	784	502	3,748	2,443	1,281	1,087	55	55	2,435	1,994	10,327	7,405
2012	1,120	722	425	306	2,289	1,312	939	639	305	46	1,457	1,162	6,535	4,187
2013	1,251	980	168	136	3,733	3,264	1,304	895	0	0	1,185	915	7,641	6,190
2014	3,936	2,751	2,409	1,303	4,235	2,949	1,116	784	198	198	2,045	1,445	13,939	9,430
2015	4,712	4,097	2,993	1,908	9,309	7,232	685	503	125	104	1,394	1,255	19,218	15,099
2016	1,511	1,210	150	150	1,878	1,601	1,260	1,181	258	193	1,141	734	6,198	5,069
2017	2,764	1,836	1,521	1,312	6,897	6,011	2,349	1,249	0	0	3,969	2,641	17,500	13,049
2018	3,502	2,904	1,650	1,051	4,494	3,856	2,805	2,474	0	0	2,436	1,773	14,887	12,058
2019	2,735	1,959	917	651	5,959	4,946	2,449	2,393	59	59	1,261	1,002	13,380	11,010
2020	2,542	2,333	154	84	3,341	2,568	2,451	1,991	0	0	861	551	9,349	7,527
2021	3,220	2,812	689	560	7,240	6,518	2,419	1,763	107	107	2,069	948	15,744	12,708
2022	2,581	2,445	551	415	3,302	3,142	521	521	0	0	2,389	1,241	9,344	7,764
Average														
1999–2018	4,585	3,091	1,915	966	9,684	6,492	2,590	1,698	338	225	2,973	1,808	22,085	14,280
2019–2021	2,832	2,368	587	432	5,513	4,677	2,440	2,049	55	55	1,397	834	12,824	10,415

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

Other Turnagain Arm Streams (including Placer River)

In the Placer River drainage, and Skookum and Lower Explorer Creeks, sport fishing effort is minimal. Spawning areas in Lower Explorer and Skookum Creeks are closed to sport fishing by regulation after July 13. Coho salmon are also harvested in California, Glacier, Ingram, Peterson, and Placer Creeks and several Portage Valley streams. Anecdotal reports indicate a growing fishery on Portage Creek downstream of the Seward Highway. Effort has varied from year to year, so discerning between Turnagain Arm streams (excluding Twentymile River) and "other streams" on the SWHS for catch and harvest can be difficult.

COHO SALMON FISHERIES MANAGEMENT OBJECTIVES

The BOF has no established management plans or objectives for AMA coho salmon. The management objective and goal for wild stocks of coho salmon in systems considered too small to support a harvestable surplus is to maintain historical escapement levels, continue natural production, and provide viewing opportunities. Angler opportunity would only be provided in those streams when a harvestable surplus is expected; however, escapement goals have not been set for these streams, and identifying a harvestable surplus is difficult without inseason assessment projects, which ADF&G has no current plans to implement. In recent years, angler participation and harvest of wild stocks has remained high in many systems and should be monitored to ensure sustainability.

COHO SALMON STOCKING PROGRAM

Stocking of coho salmon into anadromous streams in the Anchorage Management Area is referred to as the *Urban Coho Salmon Stocking Program*. The primary purpose of this program is to maintain or increase coho salmon sport fishing opportunities in Anchorage on a sustainable basis by alleviating pressure on natural runs with hatchery fish. Approximately 440,000 smolt are stocked in Bird, Campbell, and Ship Creeks (combined) annually. Coho salmon returning to Ship Creek are used for broodstock, although their origin is most likely from Little Susitna River coho salmon.[19]

Bird Creek is the only Turnagain Arm fishery that is enhanced with salmon stockings. Historically, Bird Creek produced few coho salmon, leaving no genetic concerns with stocking, and no attempts were made to collect wild Bird Creek coho salmon for broodstock. Thus, Little Susitna River coho salmon broodstock (now collected at WJHSF Hatchery site on Ship Creek) have been and are currently used for Bird Creek stocking. Smolt were first successfully released in 1992 and returned as adults to the Bird Creek fishery in 1993. Coho salmon smolt releases were suspended from 2001 through 2003 while the Bird Creek parking area was under construction. Since 2004, approximately 125,000 coho salmon smolt have been stocked annually at Bird Creek (Appendix E1).

COHO SALMON FISHERY 2022 PERFORMANCE

In 2022, the 4 main producers of coho salmon (Bird, Campbell, and Ship Creeks, and Twentymile River) in the AMA all yielded catches below their respective averages during the previous performance period (2019–2021). However, "other freshwaters" produced a catch above the

[19] ADF&G (Alaska Department of Fish and Game). 2020. Coded wire tag lab: hatchery release report. Mark, Tag and Age Lab. https://mtalab.adfg.alaska.gov/CWT/reports/hatcheryrelease.aspx (Accessed November 2023; requires free account to view data).

previous performance period catches. Beginning in late July, heavy rainfall resulted in high water for most drainages in the AMA. This may have influenced anglers to seek other more stable drainages, such as Portage Creek, for coho salmon opportunities and resulted in increased catch at "other freshwater" drainages. As an example, Portage Creek has a large lake and multiple artificial ponds that buffer the drainage from floods. In 2022, the annual coho salmon catch was 9,344 fish across the AMA, which resulted in a harvest of 7,764 coho salmon (Table 7). Both catch and harvest in 2022 were below the historical average, which is part of a long-term downward trend since a peak in 2001.

Eklutna River

An insufficient number of responses for Eklutna River were received for the 2022 SWHS to produce reliable estimates of coho salmon catch or harvest. Due to the lack of effort and access to sport fishing on the Eklutna River, there are rarely enough responses to determine catch and harvest of any species in this drainage.

Twentymile River

Twentymile River drainage is a large catchment area bounded by steep mountains. This causes Twentymile River to be susceptible to sudden high water events. Above average rainfall and snow melt resulted in high discharge throughout the Twentymile River drainage in 2022, pushing silty water from the Twentymile and Glacier Rivers into many of the clearwater sloughs and tributaries of Twentymile River where the sport fishing effort for coho salmon is focused. As a result, the catch and harvest of coho salmon in the Twentymile River drainage was the lowest on record with 521 fish caught and harvested (Table 7). Furthermore, construction along the Seward Highway near the Twentymile River Bridge may have deterred effort in 2022.

Other Turnagain Arm Streams (including Placer River)

In 2022, the "other streams" category produced greater catch (2,389 fish) and harvest (1,241 fish) of coho salmon than the recent 2019–2021 average (Table 7). This accounted for over 26% of the coho salmon catch in the AMA, the highest percentage since 2008. While no single stream within this category received adequate responses from the SWHS in 2022 to produce reliable estimates of catch or harvest, Turnagain Arm streams (excluding Twentymile River) as a group did receive over 12 responses. Turnagain Arm streams contributed 77% (1,863 fish) of the coho salmon catch from "other streams" in the AMA. When conditions are poor or returns are low on other popular streams, AMA anglers expend more effort on less popular streams in the AMA, particularly those in Turnagain Arm.

PINK SALMON FISHERIES

PINK SALMON FISHERY DESCRIPTION

Pink salmon return annually to AMA streams in July and August. Historically, even-year (returning) pink salmon returned in larger numbers, but every year since 2004, the odd-numbered year has observed a higher catch than the previous even-numbered year. In some cases, the pink salmon catches in the odd-numbered years were 300% greater than the following even-numbered year (calculated from Table 8). For example, 5,271 pink salmon were caught in 2016 followed by a catch of 23,062 pink salmon in 2017 (Table 8). The historical average (1999–2018) catch was 18,248 pink salmon and 1,935 were harvested (Table 8). Pink salmon are the most common salmon

species caught in the AMA. In the recent reporting period, pink salmon composed approximately 55% of the total salmon caught in the AMA (Table 3).

The majority of pink salmon caught in AMA streams are released (about 88% on average since 1999; calculated from Table 8). Bird Creek supports the largest pink salmon sport fishery in the AMA with an average (2019–2021) catch and harvest of 10,479 and 1,243 pink salmon, respectively (Table 8). Over the recent performance period (2019–2021), Bird Creek accounted for 51% of the pink salmon catch, followed by Ship Creek (29%) and "other freshwater" (18%; calculated from Table 8). Reported harvests from California, Fish, Glacier, Indian, Ingram, and Peters Creeks, and Eagle, Eklutna, and Placer Rivers are included in "other freshwater" in Table 8.

In those freshwaters of the AMA open to fishing for salmon, the bag and possession limits for salmon (other than Chinook salmon) 16 inches or longer is 3 per day and 3 in possession, only 2 of which may be coho salmon; however, all 3 may be pink salmon.

Placer River

In the Placer River drainage (including Skookum and Lower Explorer Creeks), directed sport fishing effort and the catch of pink salmon is minimal. According to the Anadromous Waters Catalog, pink salmon have been documented in lower Placer River as well as Skookum and Explorer Creeks. Placer River does not receive adequate number of responses from the SWHS to generate species-specific catch and harvest estimates. Any responses for Placer River from year to year will be reported under "other streams."

Twentymile River

Pink salmon are incidentally caught by anglers in the popular Twentymile River drainage coho salmon fishery. Pink salmon are not documented in Twentymile River in the ADF&G Anadromous Waters Catalog; however, catch has been reported on the SWHS every year since 1990 except 2021. Pink salmon catch in the Twentymile River drainage has ranged from a low of zero fish in 2021 to a high of 2,190 fish in 2017. Nearly all pink salmon caught in the Twentymile River drainages are released (92% released on average since 1999; calculated from Table 8).

PINK SALMON FISHERIES MANAGEMENT OBJECTIVES

There are no formal management objectives for pink salmon in the AMA. ADF&G has a constitutional mandate to manage on the principle of sustained yield. Within the sustained yield principle, SF goals seek to optimize social and economic benefits, and where possible, expand opportunity to participate in diverse fisheries on these stocks.

Table 8.–Pink salmon sport fish catch and harvest, Anchorage Management Area, 1999–2022.

	Bird Creek		Ship Creek		Twentymile R.		Saltwater		Other freshwater		Area total	
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1999	3,913	507	789	80	80	0	185	40	495	94	5,462	721
2000	20,055	1,335	6,841	853	297	10	963	348	10,080	577	38,236	3,123
2001	7,662	333	2,815	190	234	23	321	64	1,956	173	12,988	783
2002	5,931	758	2,724	155	709	29	53	7	2,234	219	11,651	1,168
2003	6,152	1,033	1,055	291	109	0	997	150	1,148	126	9,461	1,600
2004	2,677	751	1,668	61	163	16	884	81	2,505	363	7,897	1,272
2005	8,624	433	839	108	93	46	85	24	1,098	66	10,739	677
2006	16,182	1,574	1,755	288	384	0	108	0	5,482	483	23,911	2,345
2007	25,861	1,717	3,559	405	299	88	1,287	743	3,312	325	34,318	3,278
2008	16,205	1,088	1,492	191	2,043	63	140	140	10,124	550	30,004	2,032
2009	37,299	3,812	7,620	785	185	0	159	74	17,733	1,755	62,996	6,426
2010	6,956	1,433	914	377	450	27	80	14	6,225	727	14,625	2,578
2011	5,366	339	5,268	21	292	56	85	85	4,230	392	15,241	893
2012	2,834	508	1,387	92	432	134	0	0	3,934	754	8,587	1,488
2013	3,657	672	4,085	1,734	60	0	0	0	1,766	41	9,568	2,447
2014	9,314	944	1,532	99	287	0	73	73	1,735	357	12,941	1,473
2015	14,047	1,435	1,932	378	58	0	0	0	3,199	569	19,236	2,382
2016	2,693	375	1,577	116	36	0	21	21	944	119	5,271	631
2017	10,840	955	4,325	358	2,190	19	73	0	5,634	999	23,062	2,331
2018	5,529	631	1,228	182	567	31	16	16	1,429	195	8,769	1,055
2019	12,901	1,286	4,742	1,275	1,055	0	108	48	5,139	640	23,945	3,249
2020	7,452	1,225	3,020	635	332	9	0	0	3,905	467	14,709	2,336
2021	11,083	1,218	9,657	455	0	0	62	0	1,645	834	22,447	2,507
2022	2,799	550	2,494	281	309	0	0	0	1,657	183	7,259	1,014
Average												
1999–2018	10,590	1,032	2,670	338	448	27	277	94	4,263	444	18,248	1,935
2019–2021	10,479	1,243	5,806	788	462	3	57	16	3,563	647	20,367	2,697

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

PINK SALMON STOCKING PROGRAM

There are currently no pink salmon stocking programs in the AMA.

PINK SALMON FISHERY 2022 PERFORMANCE

In 2022, the pink salmon catch of 7,259 fish across the AMA was below the historical average of 18,248 fish (1999–2018) and the recent reporting period average (2019–2021) of 20,367 fish (Table 8). This follows recent observations across the AMA of weaker pink salmon returns on even-numbered year (i.e., 2022).

Twentymile River

The pink salmon catch from Twentymile River drainage (309 fish) was below both the historical (1999–2018) and previous performance period (2019–2021) averages (Table 8). According to the SWHS, all of the pink salmon caught at Twentymile River in 2022 were released. Twentymile River drainage continues to be one of lowest producers of pink salmon catch and harvest among the high-effort AMA streams. In 2022, Twentymile River only produced 4% of the total pink salmon catch in the AMA.

Other Turnagain Arm Streams (including Placer River)

Estimated catch and harvest for the "other freshwater" category in 2022 was 1,657 and 183 pink salmon, respectively (Table 8). This category accounted for about 23% of the pink salmon catch in the AMA. Although no single stream within this category produced adequate responses on the SWHS to produce reliable estimates of catch or harvest, Turnagain Arm streams (excluding Twentymile River) as group did receive over 12 responses and contributed 72% of the pink salmon catch from "other freshwater." Of the pink salmon caught in "other streams," approximately 89% were released in 2022.

SOCKEYE SALMON FISHERIES

SOCKEYE SALMON FISHERY DESCRIPTION

There are minimal sport fishing opportunities for sockeye salmon in the AMA. The primary AMA streams that support sockeye salmon runs are Campbell and Sixmile Creeks, and Twentymile River. Of these 3 streams, only Twentymile River is open to fishing for sockeye salmon. Campbell Creek is closed to sockeye salmon sport fishing, and Sixmile Creek is closed to all fishing. However, a small saltwater fishery occurs in the intertidal area of Sixmile Creek, below the high-tide mark near the creek mouth. The intertidal site, marked with a steel cable across the stream and ADF&G markers, has decreased in popularity since the 2000s but still probably contributes to most of the AMA saltwater sockeye salmon harvest. Occasionally, catches of sockeye salmon are reported in Bird and Ship Creeks while anglers are targeting coho salmon, but the size of this run is believed to be small based on foot surveys counts (Appendix C1).

The most significant sockeye salmon fisheries are reported in "other freshwater" streams (likely Portage Valley streams), which have accounted for 62% of the sockeye salmon catch on average in the AMA since 1999 (calculated from Table 9). Sockeye salmon returning to Portage Creek primarily spawn in the artificially created channel in Williwaw Creek where a viewing platform and information kiosk were installed and are maintained by USFS. Other AMA streams that

support small sockeye salmon runs include Eagle River (including Otter Creek), Eklutna River, Fire Creek, and Rabbit Creek.

In those freshwaters of the AMA open to fishing for salmon, the bag and possession limits for salmon (other than Chinook salmon) 16 inches or longer is 3 per day and 3 in possession, only 2 of which may be coho salmon. The limits for salmon (other than Chinook salmon) under 16 inches are 10 per day, 10 in possession. In salt water, the limits for salmon (other than Chinook salmon) are 6 per day, 6 in possession.

Eklutna River

Sockeye salmon rearing has been documented in the Eklutna River drainage.[20] ADF&G does not currently have any assessment projects or surveys in the Eklutna River drainage. However, surveys conducted by other entities have documented adult sockeye salmon in the Eklutna River drainage, although in low numbers. A landlocked population of sockeye salmon, also known as kokanee, are present in Eklutna Lake. Sport fishing catch and harvest estimates of sockeye salmon in the Eklutna River drainage are not available due to minimal effort and responses on the SWHS. Any responses for Eklutna River from year to year will be reported under "other streams."

Placer River

Sockeye salmon returning to Placer River mostly spawn in Luebner Lake. Minimal information is available on sockeye salmon run size in the Placer River drainage. However, peak counts of 15 sockeye salmon in Skookum Creek and 79 sockeye salmon in Luebner Lake were observed during coho salmon aerial surveys in 2003 (M. Miller and D. Bosch, ADF&G SF staff, 2004, unpublished data). Additionally, a total of 260 sockeye salmon were counted in the Placer River drainage in 1997 on the same aerial survey project (B. Stratton and P. Cyr, ADF&G SF staff, 1998, unpublished data). Sport fishing effort directed at sockeye salmon in the Placer River drainage is minimal and most catch is by anglers targeting coho salmon. The banks of Placer River are heavily vegetated with alders, which can make fishing for sockeye salmon challenging.

Twentymile River

Carmen Lake and its inlet tributaries are the primary sockeye salmon spawning areas in the Twentymile River drainage, but mainstem spawning has been documented (Stratton et al. 1994). Sockeye salmon are caught incidentally by anglers targeting coho salmon, and targeting sockeye salmon can be difficult due to a lack of gravel bars or banks on the Twentymile River mainstem. Sockeye salmon harvest in the Twentymile River drainage peaked at 676 fish in 2017, but in multiple years (2011, 2013, and 2019), no catch and harvest of sockeye salmon were reported (Table 9).

SOCKEYE SALMON FISHERIES MANAGEMENT OBJECTIVES

There are no formal management objectives for sockeye salmon in the AMA. ADF&G has a constitutional mandate to manage on the principle of sustained yield. Within the sustained yield principle, SF goals seek to optimize social and economic benefits, and where possible, expand opportunity to participate in diverse fisheries on these stocks.

[20] ADF&G Anadromous Waters Catalog. https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.home. Accessed November 2023.

Table 9.–Sockeye salmon sport fish catch and harvest, Anchorage Management Area, 1999–2022.

	Bird Creek		Twentymile River		Saltwater		Other freshwater		Area total	
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1999	78	56	42	10	782	248	605	228	1,507	542
2000	678	446	42	0	59	38	403	53	1,182	537
2001	316	263	176	97	830	271	970	263	2,292	894
2002	0	0	288	95	91	77	315	158	694	330
2003	0	0	84	36	346	299	1,361	608	1,791	943
2004	0	0	291	88	328	110	393	88	1,012	286
2005	0	0	139	106	445	445	413	0	997	551
2006	0	0	22	11	11	11	297	58	330	80
2007	0	0	172	81	60	60	363	31	595	172
2008	0	0	275	0	150	136	1,294	87	1,719	223
2009	0	0	156	48	48	0	459	144	663	192
2010	0	0	180	32	209	110	229	51	618	193
2011	0	0	0	0	215	215	320	29	535	244
2012	0	0	66	33	0	0	154	31	220	64
2013	0	0	0	0	0	0	172	28	172	28
2014	0	0	155	0	20	20	481	268	656	288
2015	0	0	83	83	0	0	259	183	342	266
2016	0	0	35	0	17	0	371	16	423	16
2017	0	0	676	0	0	0	316	145	992	145
2018	0	0	20	20	0	0	431	173	451	193
2019	0	0	0	0	184	37	311	124	495	161
2020	0	0	45	0	0	0	264	218	309	218
2021	0	0	259	259	0	0	126	0	385	259
2022	0	0	0	0	0	0	496	206	496	206
Average										
1999–2018	54	38	145	37	181	102	480	132	860	309
2019–2021	0	0	101	86	61	12	234	114	396	213

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

SOCKEYE SALMON STOCKING PROGRAM

There is currently no sockeye salmon stocking program in the AMA.

SOCKEYE SALMON FISHERY 2022 PERFORMANCE

In 2022, the catch of sockeye salmon in the AMA was 496 fish, of which, 206 fish (42%) were harvested (Table 9). The 2022 catch was greater than the recent reporting period average (2019–2021), but less than 60% of the historical average (1999–2018: 860 fish). All sockeye salmon catch and harvest in 2022 came from "other freshwater," of which a majority is probably from Portage Valley streams.

Eklutna River

An insufficient number of responses for Eklutna River were received for the 2022 SWHS to produce reliable estimates of sockeye salmon catch or harvest. Due to the lack of effort and access to sport fishing on the Eklutna River, there are rarely enough responses to determine catch and harvest of any species in the drainage.

Placer River

An insufficient number of responses for Placer River were received for the 2022 SWHS to produce reliable estimates of sockeye salmon catch or harvest. Due to the lack of effort on the Placer River, there are rarely enough responses to determine catch and harvest of any species in the drainage.

Twentymile River

No catch or harvest of sockeye salmon was reported for Twentymile River drainage in 2022 (Table 9). Twentymile River continues to be a highly variable yet low producer of sockeye salmon for sport anglers.

RAINBOW TROUT FISHERIES

RAINBOW TROUT FISHERY DESCRIPTION

Several AMA streams support populations of resident rainbow trout. Rainbow trout have been reported in Bird, Campbell, Chester, Ingram, and Ship Creeks, and Placer and Twentymile Rivers. Although steelhead are not indigenous to the AMA, there has been angling interest from the public and unsubstantiated reports of steelhead trout catches. In the past, unsuccessful stocking attempts were made to establish an anadromous rainbow trout (steelhead) population in the AMA, primarily on Campbell Creek (Bosch 2010). To provide both stream and lake sport fishing opportunities for rainbow trout, ADF&G currently stocks rainbow trout in 2 creeks and 35 lakes within the AMA. Dolly Varden are also caught in most stream-based rainbow trout fisheries due to similarities in angling techniques that target both (Appendix F1).

Campbell Creek

Campbell Creek is highly accessible with paved trail access beginning at Dimond Boulevard and continuing all the way to its forks, which can be accessed via Campbell Airstrip Road. As a result, Campbell Creek drainage supports the largest rainbow trout fishery among streams in the AMA. On average, Campbell Creek has supported the highest catch estimates of any AMA stream over the last 20 years (1999–2018) with over 2,000 rainbow trout caught annually with approximately 136 fish (7%) harvested on average (Table 10). However, over the last 20 years, there has also

been a steady decline in rainbow trout catch on Campbell Creek from a peak of 14,952 fish in 2001 to a low of 153 fish caught in 2021.

At the fall 1986 meetings, the BOF created a trophy rainbow trout area in the upper reaches of Campbell Creek (Appendix D3). Fishing in both the north and south forks (above Piper Street) was restricted to single hook, artificial lure only, and the retention of rainbow trout was prohibited. The north and south forks of Campbell Creek are currently managed as trophy areas for rainbow trout, and reports of rainbow trout greater than 20 inches in length caught above the Campbell Airstrip Road have been recorded. Bag and possession limits for rainbow trout in stocked waters of the AMA are 5 per day, 5 in possession, only 1 fish 20 inches or more in length, and apply to all open waters downstream of the Campbell Creek forks. Harvested rainbow trout 20 inches or more in length must be immediately recorded on the back of the sport fishing license or harvest record card in ink or electronically in the ADF&G mobile application, and the Cook Inlet seasonal limit for rainbow trout 20 inches or more in length is 2 fish. In 2011, the BOF adopted a spawning closure from April 15 to June 14 to protect rainbow trout during spawning (Appendix D4).

Chester Creek

Like Campbell Creek, a highly utilized trail system parallels the Chester Creek drainage from near its headwaters to its terminus at Knik Arm. Chester Creek receives less fishing pressure for rainbow trout than Campbell Creek, in part because of its lower stocking numbers and smaller size relative to Campbell Creek, and in general, it receives less attention because it is entirely closed to salmon fishing. However, angler reports indicate that Chester Creek is indeed utilized by anglers throughout the creek, and sport fishing effort is expended on University and Reflection Lakes as well as Westchester Lagoon for rainbow trout. Angler accounts include rainbow trout in excess of 20 inches in length and catches of steelhead in the Chester Creek drainage. In most years, estimating catch and harvest for the Chester Creek drainage is not possible due to insufficient responses on the SWHS.

The bag and possession limits for rainbow trout for the Chester Creek drainage are 5 per day, 5 in possession, only 1 fish 20 inches or more in length. Rainbow trout 20 inches or more in length must be immediately recorded on the back of the sport fishing license or harvest record card in ink or electronically in the ADF&G mobile application, and the Cook Inlet seasonal limit for rainbow trout 20 inches or more in length of 2 fish applies. In 2011, the BOF adopted a spawning closure in the Chester Creek drainage from April 15 to June 14 to protect rainbow trout during spawning.

RAINBOW TROUT FISHERIES MANAGEMENT OBJECTIVES

There are no formal management objectives for steelhead or rainbow trout in the AMA. ADF&G has a constitutional mandate to manage on the principle of sustained yield. Within the sustained yield principle, SF goals seek to optimize social and economic benefits and, where possible, expand opportunity to participate in diverse fisheries on these stocks. No stream surveys or assessments are conducted to specifically enumerate rainbow trout in any AMA stream.

Table 10.–Rainbow trout sport fish catch and harvest, Anchorage Management Area, 1999–2022.

	Streams								Lakes		Area total	
	Campbell Creek		Ship Creek		Other creeks		Stream total					
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Total catch	Total harvest	Catch	Harvest
1999	2,874	711	94	47	1,362	144	4,330	902	158,680	27,874	163,010	28,776
2000	4,766	216	1,106	85	1,891	61	8,380	384	153,431	35,203	161,811	35,587
2001	14,952	369	1,094	0	2,053	332	18,099	701	91,521	20,610	109,620	21,311
2002	2,950	418	1,245	0	807	61	5,002	479	86,742	21,999	91,744	22,478
2003	3,177	257	2,359	0	3,480	483	9,016	740	53,203	17,782	62,219	18,522
2004	2,032	117	937	0	673	161	3,642	278	77,479	22,998	81,121	23,276
2005	1,455	99	1,312	0	1,034	463	3,801	562	52,067	13,314	55,868	13,876
2006	720	24	334	0	713	500	1,767	524	35,417	7,321	37,184	7,845
2007	888	11	231	0	2,325	82	3,444	93	26,167	5,212	29,611	5,305
2008	740	0	215	0	1,455	142	2,410	142	41,236	8,295	43,646	8,437
2009	310	0	105	0	314	10	729	10	31,391	5,706	32,120	5,716
2010	495	0	73	0	461	57	1,029	57	25,155	3,320	26,184	3,377
2011	920	0	239	0	2,035	40	3,194	40	12,767	2,071	15,961	2,111
2012	318	0	58	17	254	103	630	120	27,719	5,705	28,349	5,825
2013	646	140	691	82	1,034	17	2,371	239	45,864	9,008	48,235	9,247
2014	559	0	112	28	1,213	304	1,884	332	36,063	5,981	37,947	6,313
2015	1,636	82	466	156	78	17	2,180	255	63,772	15,554	65,952	15,809
2016	300	12	48	48	1,185	32	1,533	92	34,701	6,009	36,234	6,101
2017	770	257	82	18	129	110	981	385	23,729	6,566	24,710	6,951
2018	409	14	67	0	186	0	662	14	43,059	5,541	43,721	5,555
2019	605	0	0	0	0	0	605	0	15,382	2,539	15,987	2,539
2020	181	75	151	25	541	113	873	213	31,661	4,479	32,534	4,692
2021	153	42	63	42	582	0	798	84	41,054	15,519	41,852	15,603
2022	364	0	0	0	517	212	881	212	25,359	2,961	26,240	3,173
Average												
1999–2018	2,046	136	543	24	1,134	156	3,754	317	56,008	12,303	59,762	12,621
2019–2021	313	39	71	22	374	38	759	99	29,366	7,512	30,124	7,611

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.

RAINBOW TROUT STOCKING PROGRAM

Campbell Creek

Rainbow trout were first stocked in Campbell Creek in 1983. From 1983 to 1997, approximately 6,108 diploid (2N) rainbow trout were stocked annually. Due to concerns of stocked rainbow trout interacting with wild rainbow trout, only sterile (triploid [3N]) rainbow trout have been stocked since 1999. Recently (2019–2021), an average of 2,396 rainbow trout with a mean length of 10 inches and weight of 180 grams have been released into Campbell Creek near the Dowling Road bridge, annually. Typically, rainbow trout stockings occur in mid-June to provide opportunity following the spawning closure (fishery opens June 15) and ahead of the Chinook salmon youth-only fishery in late June.

Chester Creek

Stocking of diploid rainbow trout in the Chester Creek drainage began in 1971 and continued through 1998, when stockings were switched to sterile (triploid) fish. Each May or June, approximately 1,000 triploid rainbow trout are stocked into Chester Creek near Gambell Street, about halfway between Chester Lagoon and University Lake. Anecdotal information indicates that stocked rainbow trout that are not harvested overwinter in multiple lakes and lagoons within in the Chester Creek drainage.

RAINBOW TROUT FISHERY 2022 PERFORMANCE

Campbell Creek

In 2022, the annual rainbow trout catch (364 fish) on Campbell Creek was below the historical (1999–2018) average and slightly above the previous reporting period (2019–2021) average (Table 10). All the rainbow trout caught on Campbell Creek were released in 2022. This is not uncommon, as many anglers practice catch-and-release in the rainbow trout fishery on Campbell Creek.

Chester Creek

An insufficient number of responses for Chester Creek were received for the 2022 SWHS to produce reliable estimates of rainbow trout salmon catch or harvest. The SWHS may not be robust enough to capture the effort by the small number of anglers that fish Chester Creek for rainbow trout.

EDUCATIONAL FISHERIES

FISHERY DESCRIPTION

The first educational fishery, the 1989 Kenaitze Tribal fishery (on the Kenai Peninsula), originated as a Federal Court-ordered subsistence fishery resulting from extensive legislation and litigation related to both state and federal interpretation of subsistence. Prior to the 1993 fishing season, the Alaska Superior Court, in negotiations with ADF&G and the Kenaitze Tribe, ordered ADF&G to issue educational fishing permits. The Native Village of Eklutna was one of the first issued educational fishing permits for the 1994 season. These educational fisheries, originally ordered as interim fisheries until the court cases were decided, have been applied for and renewed by ADF&G annually. Permits are issued annually and must be renewed each year. After application or request for renewal, ADF&G issues an educational permit that outlines the general conditions, exceptions,

and restrictions, including harvest limits by area and species. Standards, general conditions, and requirements of an educational fishery program were established by the BOF and are administered under Chapter 93 of the Alaska Administrative Code (5 AAC 93.200–235). Permit holders must submit a postseason summary to ADF&G as indicated in the specifications. A failure to meet specifications will result in nonrenewal of a permit.

The Native Village of Eklutna has the only educational fishery permit in the AMA, and the permit allows for fishing in 3 locations: (1) the waters of Knik Arm adjacent to the village and within the slough located approximately 1 mile northeast of the village; (2) Eklutna River, downstream of the Glenn Highway; and (3) the waters along the western shore of Knik Arm between the regulatory marker on the north shore of Goose Bay and Fish Creek, extending no more than 1 mile offshore from mean high water. However, the educational fishery shall not take place in the tidal channel of Fish Creek at any stage of the tide or in Fish Creek. The first 2 locations, near the Village of Eklutna, are within the AMA, and the third location is within the North Cook Inlet Management Area (NCIMA).

The Eklutna Native Village educational fishery harvested an average of 346 salmon annually from 1999 to 2018 (Table 11), and most of the harvest was sockeye and coho salmon (80% on average; calculated from Table 11). The highest reported harvest in this educational fishery of 733 fish was in 2004. Prior to 2009, retention of Chinook salmon was allowed, and peak Chinook salmon harvest was 72 fish in 2005. Occasionally, catch and harvest of eulachon and other unknown fish are reported in the Eklutna educational fishery. In most years, except 2008, 2011, and 2016, a majority of the harvest (1999–2018 average: 64%) occurred at the site near the Village of Eklutna, within the AMA.

Fishery Management and Objectives

The objective of this fishery is to provide an opportunity for the Village of Eklutna to perform a systematic program for educating people concerning historical, contemporary, or experimental methods for locating, harvesting, handling, or processing fishery resources.

Educational Fishery 2022 Performance

A total of 250 salmon were harvested under the Eklutna Native Village educational fishery permit in 2022, and there was no harvest of nonsalmon or unknown species reported. The majority of the harvest (69%) occurred at the Fish Creek (Goose) site (NCIMA) rather than the Eklutna Village site in the AMA (calculated from Table 11). Of the 77 salmon harvested in the AMA under the educational permit, 92% or 71 fish (combined) were coho or sockeye salmon. It was the second lowest harvest at the Eklutna Village site since site-specific harvest data were reported for the educational fishery (Table 11). The Eklutna Native Village cited bank erosion and trail washout for the low harvest at the Eklutna site in 2022.

Table 11.–Native Village of Eklutna educational fishery harvest by site for 1999–2022.

	Eklutna Village (AMA) - Knik River harvest							Fish Creek Site (NCIMA) - Knik River							Total Eklutna tribal harvest						
	Salmon						Total	Salmon						Total	Salmon						Total
Year	Ck	Co	So	Pk	Cm	Other	fish	Ck	Co	So	Pk	Cm	Other	fish	Ck	Co	So	Pk	Cm	Other	fish
1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	25	80	3	20	0	139
2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	85	76	21	51	0	250
2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	95	52	56	34	0	295
2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	156	220	40	76	0	550
2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	69	49	160	14	21	0	313
2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	297	311	4	71	0	733
2005	11	210	128	2	25	0	376	61	32	38	6	4	0	141	72	242	166	8	29	0	517
2006	2	148	41	6	4	0	201	41	51	18	5	3	0	118	43	199	59	11	7	0	319
2007[a]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2008	16	177	19	3	0	9[b]	215	8	200	23	0	17	0	248	24	377	42	3	17	9[b]	472
2009	0	196	124	18	18	0	356	0	25	11	2	5	0	43	0	221	135	20	23	0	399
2010	0	75	144	5	0	0	224	0	30	25	0	3	0	58	0	105	169	5	3	0	282
2011	0	51	44	1	12	0	108	0	184	271	31	35	0	521	0	235	315	32	47	0	629
2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	242	218	10	63	0	533
2013	0	40	109	0	10	0	159	0	12	15	2	8	0	37	0	52	124	2	18	0	196
2014	0	41	193	11	18	0	263	0	7	55	2	6	0	70	0	48	248	13	24	0	333
2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	15	43	1	21	0	80
2016	0	48	26	6	12	0	92	0	38	68	4	4	0	114	0	86	94	10	16	0	206
2017	0	9	84	9	11	0	113	0	15	44	0	20	0	79	0	24	128	9	31	0	192
2018	0	48	77	0	11	6[c]	136	0	0	0	0	0	0	0	0	48	77	0	11	6[c]	142
2019	0	39	22	6[d]	9	0	72	0	33	27	0	7	0	67	0	72	49	6	16	0	143
2020	0	118	83	12	13	0	226	0	76	41	0	0	0	117	0	194	124	12	13	0	343
2021	0	47	77	1	12	0	137	0	10	80	5	5	0	100	0	57	157	6	17	0	237
2022	0	37	34	4	2	2	77	0	40	112	18	3	0	173	0	77	146	22	5	0	250
Average[e]																					
1999–2018	3	95	90	6	11	–	204	10	54	52	5	10	–	130	21	137	143	14	31	–	346
2018–2021	0	68	61	7	11	–	145	0	40	49	2	4	–	95	0	108	110	8	15	–	241

Note: Ck is Chinook salmon, Co is coho salmon, So is sockeye salmon, Pk is pink salmon, Cm is chum salmon. ND means data not reported. An en dash means value cannot be calculated due to limitations of the data. Only total harvest is reported for some years.

[a] Permit issued but harvest data are not on file.

[b] Eulachon.

[c] Unknown.

[d] Includes 4 pink salmon harvested in Eklutna River by spear.

[e] Average calculated with years available.

REFERENCES CITED

Bosch, D. 2010. Area management report for the recreational fisheries of Anchorage, 2009 and 2010. Alaska Department of Fish and Game, Fishery Management Report No. 10-53, Anchorage. http://www.adfg.alaska.gov/FedAidpdfs/Fmr10-53.pdf.

Howe, A. L., G. Fidler, A. E. Bingham, and M. J. Mills. 1996. Harvest, catch, and participation in Alaska sport fisheries during 1995. Alaska Department of Fish and Game, Fishery Data Series No. 96-32, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds96-32.pdf.

Howe, A. L., G. Fidler, and M. J. Mills. 1995. Harvest, catch, and participation in Alaska sport fisheries during 1994. Alaska Department of Fish and Game, Fishery Data Series No. 95-24, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds95-24.pdf.

Kari, J., J. A. Fall, and S. Pete, principal contributor. 2003. Shem Pete's Alaska, The Territory of the Upper Cook Inlet Dena'ina, 2nd edition. University of Alaska Press, Fairbanks

Miller, J. 1990. Stocking records, 1990. Alaska Department of Fish and Game, Division of Fisheries Rehabilitation, Enhancement, and Development (FRED), Anchorage.

Mills, M. J. 1979. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1978–1979, Project F-9-11(20)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-11(20)SW-I-A.pdf.

Mills, M. J. 1980. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1979–1980, Project F-9-12(21) SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-12(21)SW-I-A.pdf.

Mills, M. J. 1981a. Alaska statewide sport fish harvest studies. 1979 data. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1980–1981, Project F-9-13(22a)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-13(22a)SW-I-A.pdf.

Mills, M. J. 1981b. Alaska statewide sport fish harvest studies. 1980 data. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1980–1981, Project F-9-13(22b)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-13(22b)SW-I-A.pdf.

Mills, M. J. 1982. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1981–1982, Project F-9-14(23)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-14(23)SW-I-A.pdf.

Mills, M. J. 1983. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1982–1983, Project F-9-15(24)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-15(24)SW-I-A.pdf.

Mills, M. J. 1984. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1983–1984, Project F-9-16(25)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-16(25)SW-I-A.pdf.

Mills, M. J. 1985. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1984–1985, Project F-9-17(26)SW-I-A, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-9-17(26)SW-I-A.pdf.

Mills, M. J. 1986. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1985–1986, Project F-10-1(27)RT-2, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/FREDf-10-1(27)RT-2.pdf.

Mills, M. J. 1987. Alaska statewide sport fisheries harvest report, 1986. Alaska Department of Fish and Game, Fishery Data Series No. 2, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/fds-002.pdf.

Mills, M. J. 1988. Alaska statewide sport fisheries harvest report, 1987. Alaska Department of Fish and Game, Fishery Data Series No. 52, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/fds-052.pdf.

REFERENCES CITED (Continued)

Mills, M. J. 1989. Alaska statewide sport fisheries harvest report, 1988. Alaska Department of Fish and Game, Fishery Data Series No. 122, Juneau. http://www.adfg.alaska.gov/FedAidPDFs/fds-122.pdf.

Mills, M. J. 1990. Harvest and participation in Alaska sport fisheries during 1989. Alaska Department of Fish and Game, Fishery Data Series No. 90-44, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds90-44.pdf.

Mills, M. J. 1991. Harvest, catch, and participation in Alaska sport fisheries during 1990. Alaska Department of Fish and Game, Fishery Data Series No. 91-58, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds91-58.pdf.

Mills, M. J. 1992a. Alaska sport fishing in the aftermath of the Exxon Valdez oil spill. Alaska Department of Fish and Game, Special Publication No. 92-05, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/sp92-05.pdf.

Mills, M. J. 1992b. Harvest, catch, and participation in Alaska sport fisheries during 1991. Alaska Department of Fish and Game, Fishery Data Series No. 92-40, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds92-40.pdf.

Mills, M. J. 1993. Harvest, catch, and participation in Alaska sport fisheries during 1992. Alaska Department of Fish and Game, Fishery Data Series No. 93-42, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds93-42.pdf.

Mills, M. J. 1994. Harvest, catch, and participation in Alaska sport fisheries during 1993. Alaska Department of Fish and Game, Fishery Data Series No. 94-28, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fds94-28.pdf.

Mills, M. J., and A. L. Howe. 1992. An evaluation of estimates of sport fish harvest from the Alaska statewide mail survey. Alaska Department of Fish and Game, Special Publication No. 92-02, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/sp92-02.pdf.

Sandercock, F. K. 1991. Life history of coho salmon (*Oncorhynchus kisutch*). Pages 397–445 [*In*] Groot, C. and L. Margolis, editors. Pacific salmon life histories. . University of British Columbia Press, Vancouver, Canada.

Sigurdsson, D., and B. Powers. 2009. Participation, effort, and harvest in the sport fish business/guide licensing and logbook reporting programs, 2006–2008. Alaska Department of Fish and Game, Special Publication No. 09-11, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/SP09-11.pdf.

Sigurdsson, D., and B. Powers. 2010. Participation, effort, and harvest in the sport fish business/guide licensing and logbook programs, 2009. Alaska Department of Fish and Game, Fishery Data Series No. 10-65, Anchorage. http://www.adfg.alaska.gov/FedAidpdfs/Fds10-65.pdf.

Sigurdsson, D., and B. Powers. 2011. Participation, effort, and harvest in the sport fish business/guide licensing and logbook programs, 2010. Alaska Department of Fish and Game, Fishery Data Series No. 11-31, Anchorage. http://www.sf.adfg.alaska.gov/FedAidpdfs/FDS11-31.pdf.

Sigurdsson, D., and B. Powers. 2012. Participation, effort, and harvest in the sport fish business/guide licensing and logbook programs, 2011. Alaska Department of Fish and Game, Fishery Data Series No. 12-27, Anchorage. http://www.adfg.alaska.gov/FedAidpdfs/FDS12-27.pdf.

Sigurdsson, D., and B. Powers. 2013. Participation, effort, and harvest in the sport fish business/guide licensing and logbook programs, 2012. Alaska Department of Fish and Game, Fishery Data Series No. 13-37, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/FDS13-37.pdf.

Sigurdsson, D., and B. Powers. 2014. Participation, effort, and harvest in the sport fish business/guide licensing and logbook programs, 2013. Alaska Department of Fish and Game, Fishery Data Series No. 14-23, Anchorage. http://www.adfg.alaska.gov/FedAidpdfs/FDS14-23.pdf.

Stratton, B., and P. Cyr. 1995. Annual management report for the recreational fisheries in the Anchorage area, 1994. Alaska Department of Fish and Game, Fishery Management Report No. 95-05, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fmr95-05.pdf.

Stratton, B., A. Hoffmann, and P. Cyr. 1994. Annual management report for the Anchorage area 1993. Alaska Department of Fish and Game, Fishery Management Report No. 94-08, Anchorage. http://www.adfg.alaska.gov/FedAidPDFs/fmr94-08.pdf.

APPENDIX A: CROSS REFERENCED BOARD OF FISHERIES INFORMATION

Appendix A1.–Cross reference of tables and figures specific to the 2024 Upper Cook Inlet Finfish Alaska Board of Fisheries meeting proposals.

Proposal number	Species	Stock	Background and recent performance pages	Tables	Figures	Appendices
250	Chinook salmon	Ship Creek	Pages 13–18	3, 4, 5	2	C1, E1
251	Coho and sockeye salmon	Eklutna River	Pages 22–25	3, 6, 7, 9, 11		
252	Coho salmon	Turnagain Arm	Pages 21–25	3, 7		
253	Rainbow trout	Campbell Creek	Pages 31–34	10		B1, F1
254	Rainbow trout	Chester Creek	Pages 31–34	10		B1, E2, F1
255	Other salmon species	Twentymile and Placer Rivers	Pages 28–31	3, 6, 7, 8, 9		B1

APPENDIX B: ANCHORAGE MANAGEMENT PLANS AND RELATED POLICIES

5 AAC 59.185 Special management area for rainbow trout in the Anchorage Bowl Drainages Areas

(a) Unless otherwise specified in 5 AAC 59.120 and 5 AAC 59.122 or by an emergency order issued under AS 16.05.060, only one unbaited, single-hook, artificial lure may be used in the special management areas for rainbow trout described in (b) of this section.

(b) Rainbow trout catch-and-release special management areas are those waters managed to maintain historical size and age distributions. The rainbow trout catch-and-release special management area in the Anchorage Bowl Drainages Area is in that portion of Campbell Creek upstream from the forks at Piper Street.

5 AAC 75.210 Special management areas and liberal harvest opportunities for trout

(a) The Board of Fisheries (board) may consider proposed regulatory changes dealing with

(1) special management areas for bodies of water that would diversify sport fishing opportunity, such as catch-and-release, fly-fishing only, or trophy designation, for populations of wild trout;

(2) liberalization of harvest opportunities for trout in bodies of water.

(b) When the board considers proposed regulatory changes for a special management area under (a) of this section, the board will consider the changes in accordance with the following criteria:

(1) stock status: the body of water must contain trout populations that are naturally reproducing and possess some unique characteristic; the trout populations must have retained historical size and age composition, and numbers of trout or the area must have retained the habitat attributes necessary to allow these population characteristics to return to historic proportions if regulations dealing with establishment of a body of water as a special management area are adopted;

(2) history of special management: a body of water that the public perceives as having provided "quality" trout fishing in the past is preferred over a water that does not have a history of "quality" trout fishing;

(3) proximity to a community: to avoid conflict with traditional consumptive use patterns by local residents, a body of water is preferred if it is not located near enough to a permanent community to be commonly used or visited by local residents, unless the regulations dealing with establishment of the body of water as a special management area are requested or supported by the community;

(4) legal access: a body of water with more than 50 percent of its banks or shores publicly owned, or a navigable designation, is preferred;

(5) conflict with freshwater net fisheries: a body of water that is seasonally or spatially segregated from subsistence, personal use, and commercial net fisheries is preferred;

-continued-

(6) abundance and size of the trout population: a body of water with unusually high numbers of trout, with uniquely large trout, or documented as having trout that have been entered in the department's program giving public recognition to anglers who take fish that meet minimum weight or length standards within a given species, identified in department publications as its "trophy fish program," is preferred;

(7) clear geographical boundaries: a body of water with clearly distinguishable legal regulatory boundaries is preferred;

(8) relative economic importance of the wild trout fishery: a body of water with high economic value to the state is preferred;

(9) geographical distribution of special management waters: this criterion considers the proximity of a body of water to other special management waters and the availability of alternative locations not designated for special management; and

(10) research, educational, or unique considerations: a body of water may be designated for special management for research or educational reasons.

(c) The board may provide harvest opportunities for trout more liberal than the standards provided for in 5 AAC 75.220 if the department has sufficient biological information to ensure that a more liberal harvest will not jeopardize the objectives of optimal sustained yield for a particular body of water.

(Eff. 4/23/98, Register 146; am 11/19/2003, Register 168)

Effective 11/19/2003, Register 168, the substance of 5 AAC 75.210 was relocated from 5 AAC 75.013. The history note for 5 AAC 75.210 carries forward the history of 5 AAC 75.013.

Authority: AS 16.05.251

5 AAC 77.540. Upper Cook Inlet Personal Use Salmon Fishery Management Plan

(a) Salmon may be taken for personal use under this section only under a personal use permit issued under 5 AAC 77.015 and 5 AAC 77.525; in addition to the requirements under 5 AAC 77.015, a person

(1) shall, before a permit may be issued, show the person's resident sport fish license, or proof, satisfactory to the department, that the person is exempt from licensing under AS 16.05.400; the person's sport fish license number shall be recorded on the permit;

(2) shall record all fish harvested on the permit immediately upon harvesting the fish; for the purpose of this paragraph, "immediately" means before concealing the salmon from plain view or transporting the salmon from the

(A) shoreline or streambank adjacent to waters open to personal use fishing where the salmon were removed from the water when fishing from shore; or

(B) waters open to personal use fishing when fishing from a boat;

(3) shall return the permit to the department by the date specified on the permit.

-continued-

(b) Salmon may be taken with a set gillnet in the Central District as follows:

(1) from June 15 through June 24;

(2) fishing periods will be daily from 6:00 a.m. to 11:00 p.m.;

(3) repealed 6/22/2002;

(4) salmon may be taken only from ADF&G regulatory markers located at the mouth of the Kasilof River to ADF&G commercial fishing regulatory markers located approximately one mile from the mouth on either side of the Kasilof River; fishing is prohibited beyond one mile from the mean high tide mark and is also prohibited within the flowing waters or over the streambed or channel of the Kasilof River at any stage of the tide;

(5) salmon may be taken only by set gillnets as follows:

(A) a set gillnet may not exceed 10 fathoms in length, six inches in mesh size, and 45 meshes in depth;

(B) no part of a set gillnet may be operated within 100 feet of another set gillnet;

(C) a person may not operate more than one set gillnet; the permit holder shall attend the set gillnet at all times when it is being used to take fish;

(D) only one set gillnet may be operated per household;

(6) the annual limit is as specified in 5 AAC 77.525.

(c) Salmon may be taken by dip net in the Kenai and Kasilof Rivers as follows:

(1) in the Kenai River, as follows:

(A) from July 10 through July 31, seven days per week, from 6:00 a.m. to 11:00 p.m.; the commissioner may extend, by emergency order, the personal use fishery to 24 hours per day if the department determines that the abundance of the Kenai River late-run sockeye salmon is greater than 2,300,000 fish;

(B) the annual limit is as specified in 5 AAC 77.525, except that only one king salmon 20 inches or greater in length, and no more than 10 king salmon less than 20 inches in length, may be retained per household; king salmon less than 20 inches in length may be retained under this subparagraph notwithstanding 5 AAC 21.359(e)(2);

(C) from a boat, in the area from an ADF&G regulatory marker located near the Kenai city dock upstream to the downstream side of the Warren Ames Bridge, except that salmon may not be taken from a boat powered by a two-stroke motor other than a motor manufactured as a direct fuel injection motor;

-continued-

(D) from shore:

(i) from ADF&G regulatory markers located on the Cook Inlet beaches outside the terminus of the river upstream to a line at the mouth of the Kenai River from No Name Creek on the north shore to an ADF & G regulatory marker on the south shore; and

(ii) from the south shore only, from the upstream side of the Kenai Landing dock upstream to the downstream side of the Warren Ames Bridge;

(2) in the Kasilof River, as follows:

(A) from June 25 through August 7, 24 hours per day;

(B) the annual limit is as specified in 5 AAC 77.525, except that king salmon may not be retained and any king salmon caught must be released immediately and returned to the water unharmed;

(C) from a line between ADF&G regulatory markers outside the terminus of the river on the north shore beach at 60° 23.25′ N. lat., 151° 17.98′ W. long., and on the south shore beach at 60° 23.27′ N. lat., 151° 18.64′ W. long., upstream for a distance of one mile.

(d) Salmon may be taken by dip net in Fish Creek only as follows:

(1) the commissioner may open, by emergency order, the personal use dip net fishery in Fish Creek from July 15 through July 31, if the department projects that the escapement of sockeye salmon into Fish Creek will be more than 35,000 fish; fishing periods will be daily from 6:00 a.m. to 11:00 p.m.;

(2) the annual limit is as specified in 5 AAC 77.525, except that no king salmon may be retained and any king salmon caught must be returned to the water unharmed;

(3) from a boat or shore, in those waters upstream from ADF&G regulatory markers located on both sides of the terminus of Fish Creek, to ADF&G regulatory markers located approximately one-quarter mile upstream from Knik-Goose Bay Road.

(e) Repealed 6/22/2002.

(f) A person may retain flounder incidentally caught when fishing for salmon in the Cook Inlet Area under this section. A person may retain up to 10 flounder under this subsection per year and must record those flounder retained by the person on that person’s permit specified in (a) of this section.

(g) In the Beluga River, salmon may be taken by dip net only as follows:

-continued-

(1) salmon, other than king salmon, may be taken only by a person 60 years of age or older; a person authorized to take salmon under this subsection may not authorize a proxy to take or attempt to take salmon on behalf of that person under 5 AAC 77.016 and AS 16.05.405;

(2) from July 10 through August 31, the fishery is open 24 hours per day from an ADF&G regulatory marker located approximately one-quarter mile upstream of the Beluga River Bridge, downstream to an ADF&G regulatory marker located approximately one mile below the bridge;

(3) the annual limit is as specified in 5 AAC 77.525, except that within the total annual limit one king salmon may be retained per household;

(4) the commissioner will close, by emergency order, the fishery when 500 salmon, other than king salmon, have been harvested;

(5) a permit holder for this fishery shall report weekly to the department as specified in the permit.

(h) Salmon may be taken by dip net in the Susitna River, only as follows:

(1) from July 10 through July 31, Wednesday 6:00 a.m. to 11:00 p.m., Saturday 6:00 a.m. to 11:00 p.m.; the department may alter the time, or area of, or close the fishery, based on salmon abundance; the commissioner may, by emergency order, extend the personal use fishery through August 31 if the department projects that both sockeye and coho abundance will be above the upper end of all Susitna River escapement goals for sockeye and coho salmon;

(2) between ADF&G regulatory markers located approximately one mile downstream from Susitna Station downstream to ADF&G regulatory markers located near the northern tip of Bell Island/Alexander Creek cutoff;

(3) the annual limit, as specified in 5 AAC 77.525, except that no king salmon may be retained, and any king salmon caught must not be removed from the water and must be returned to the water immediately; a northern pike caught may not be released back into the water alive as specified in 5 AAC 61.110(a)(8);

(4) a permit holder for this fishery shall report to the department as specified in permit conditions.

(Eff. 6/7/95, Register 135; am 9/29/95, Register 135; am 5/31/96, Register 138; am 6/21/97, Register 142; am 5/8/98, Register 146; am 6/13/99, Register 150; am 6/22/2002, Register 162; am 6/11/2005, Register 174; am 6/4/2008, Register 186; am 6/12/2011, Register 198; am 5/18/2014, Register 210, July 2014; am 6/8/2017,Register 222, July 2017; am 9/19/2019, Register 231, August 2019; am 6/21/2020, Register 234, July 2020)

Authority: AS 16.05.060

APPENDIX C: ESCAPEMENT ESTIMATES

Appendix C1.–Ship Creek salmon escapement estimates, Anchorage Management Area, 1999–2022.

	Chinook salmon				Coho salmon			
Year	Adults collected at hatchery	Used for egg take	Survey	Estimated escapement[a]	Adults collected at hatchery	Used for egg take	Survey	Estimated escapement[a]
1999	328	[b]	516	844	[c]	434	585	1,019[d]
2000	341	[b]	323	664	348	305	815	1,163
2001	258	[b]	541	799	619	514	968	1,587
2002	467	336	1,492	1,959	727	378	4,225	4,952
2003	535	232	2,198	2,733	323	295	1,143	1,466
2004	468	352	1,606	2,074	953	514	1,262	2,215
2005	343	215	1,485	1,828	575	533	466	1,041
2006	458	294	1,431	1,889	757	583	1,431	2,188
2007	371	256	1,475	1,846	459	432	254	713
2008	468	252	833	1,301	820	508	891	1,711
2009	379	366	916	1,295	777	648	1,066	1,843
2010	30	30	368	398	562	446	189	751
2011	408	290	896	1,304	1,201	828	1,186	2,387
2012	569	321	227	796	1,208	534	836	2,044[e]
2013	571	342	468	1,039	954	665	691	1,645
2014	1,048	447	423	1,471	2,239	782	2,203	4,442
2015	1,286	492	1,161	2,447	2,220	754	811	3,031
2016	2,188	536	1,106	3,294	1,442	651	432	1,874
2017	1,256	423	596	1,852	1,319	708	836	2,155
2018	273	167	78	351	1,311	750	895	2,206
2019	1,168	464	680	1,848	1,961	504	1,521	3,482
2020	882	446	298	1,180	1,790	630	399	2,189
2021	1,274	646	983	2,257	1,536	562	1,226	2,762
2022	1,641	588	1,380	3,021	2,679	630	1,062	3,741
Average								
1999–2018	668	345	878	1,547	1,112	563	1,123	2,205
2019–2021	1,108	519	654	1,762	1,762	565	1,049	2,811

Note: These surveys are a combination of trap collection counts and foot surveys. Trap collection was designed to capture broodstock and not to enumerate fish. Foot surveys were designed to manage the fishery and ensure that the hatchery collected the required broodstock. After 2001, all surveys were foot only.

[a] Estimated escapement is the survey counts plus the number of adults collected at the hatchery. Survey dates vary by year and final escapement of salmon into the stream could be higher or lower but can't be verified due to varying survey conditions from year to year.

[b] Total number used for egg takes is unknown.

[c] Estimated escapement number would be survey number only. Accurate records for adults that made it to the hatchery are unknown.

[d] Total number of adults collected is unknown. The egg take number was used. The actual escapement is probably larger than reported.

[e] Survey was incomplete. Only surveyed to Reeves Blvd. Actual escapement is probably higher.

Appendix C2.–Eagle River salmon escapement estimates, Anchorage Management Area, 1999–2022.

Year	Chinook
1999	224
2000	[a]
2001[b]	77[c]
2002	27[c]
2003	167[c]
2004	157[d]
2005	122[d]
2006	101[d]
2007	117[d]
2008	156[d]
2009	152[d]
2010	10[d]
2011	7[d]
2012	[a]
2013	[a]
2014	[a]
2015	[a]
2016	34
2017	75
2018	61
2019	240
2020	[a]
2021	37
2022	26
2023	36
Average	
1999–2018	110
2019–2021	139

Note: Estimates are from foot surveys designed for Chinook salmon only; pink salmon catches were incidental.

[a] No survey conducted.

[b] Pink salmon catch was 19 this year.

[c] High water and poor visibility.

[d] Surveys include Meadow Creek.

Appendix C3.–Campbell Creek salmon escapement estimates, Anchorage Management Area, 1999–2022.

Year	Chinook	Coho	Sockeye	Pink	Chum
1999	1,035	537	435	–	–
2000	591	3,196	109	–	–
2001	717	2,377[a]	163	–	–
2002	744	7,574	1,473	–	–
2003	745	1,799	1,857	–	–
2004	964	713	776	–	–
2005	1,097	1,130	654	–	–
2006	1,052	542	589	3	1
2007	588	[b]	203	–	–
2008	439	403[c]	42	–	–
2009	554	766	69	–	–
2010	290	157	249	–	–
2011	260	[b]	434	–	–
2012	[b]	[b]	[b]	–	–
2013	[b]	146	[b]	–	–
2014	274	3,316	368	–	–
2015	654	1,178	585	–	–
2016	544	565	770	–	–
2017	475	1,983	1,685	–	–
2018	287	1,986	102	–	–
2019	393	299	234	–	–
2020	154	307	355	–	–
2021	339	1,019	1,116	–	–
2022	423	442	292	–	–
Average					
1999–2018	628	1,669	587	–	–
2019–2021	295	542	568	–	–

Note: Estimates are from foot surveys designed for Chinook, sockeye, and coho salmon; pink and chum salmon catches were incidental. En dashes indicate no data.

[a] Only South Fork and mainstem from forks to Folker Street were counted.

[b] No survey conducted.

[c] Only North Fork, South Fork, and mainstem from forks to Folker Street were counted.

Appendix C4.–Bird Creek salmon escapement estimates, Anchorage Management Area, 1999–2022.

Year	Chinook	Coho	Sockeye	Pink	Chum
1999	497	279	0	1,255	75
2000	117	703	13	1,873	12
2001	88	1,554	7	2,828	228
2002	48	66	0	1,341	633
2003	140	4	8	2,925	242
2004	307	376	4	1,902	234
2005	29	619	0	450	1
2006	[a]	442	[a]	[a]	[a]
2007	173	[a]	2	[a]	[a]
2008	106	115	0	5,357	62
2009	148	278	2	32,100	179
2010	12	19	0	0	0
2011	112	45	0	[c]	1
2012	[a]	[a]	[a]	[a]	[a]
2013	[a]	[a]	[a]	[a]	[a]
2014	19[b]	629	0[b]	958[b]	5[b]
2015	87	[a]	0	[c]	0
2016	76	463	7	1	0
2017	48	154	3	[c]	0
2018	25	614	7	4	0
2019	168	10	1	[c]	[c]
2020	[b]	629	[b]	[b]	[b]
2021	89	1,080	0	[c]	0
2022	[a]	[a]	[a]	[a]	[a]
2023	24[b]	297	[a]	[a]	[a]
Average					
1999–2021	120	398	–	–	–
2019–2021	129	573	–	–	–

Note: Estimates are from foot surveys designed for Chinook and coho salmon. An en dash indicates cannot be computed due to limitations of the data.

[a] No survey conducted.

[b] Incomplete survey.

[c] Observed but not counted.

Appendix C5.–Rabbit Creek salmon escapement estimates, Anchorage Management Area, 1999–2022.

Year	Chinook	Coho	Sockeye	Pink	Chum
1999	[a]	[a]	[a]	[a]	[a]
2000	[a]	[a]	[a]	[a]	[a]
2001	64	697	300[b]	7	–
2002	9	1,243	0	1,004	–
2003	7	348	0	33	–
2004	55	1,448	0	234	–
2005	73	7	71	257	–
2006	39	24	275	118	–
2007	[a]	[a]	[a]	[a]	[a]
2008	15	109	4	1,562	1
2009	36	1,725	1	524	0
2010	16	7	15	0	0
2011	68	–	39	1	0
2012	[a]	[a]	[a]	[a]	[a]
2013	[a]	[a]	[a]	[a]	[a]
2014	35	0	14	18	–
2015	[a]	[a]	[a]	[a]	[a]
2016	54	71	–	120	–
2017	57	248	–	–	–
2018	11	161	–	–	–
2019	22	40	54	600	–
2020	[a]	104	–	–	–
2021	13	30	–	–	–
2022	0	31	3	–	–
Average					
1999–2018	39	468	65	–	–
2019–2021	18	58	54	–	–

Note: Estimates are from foot surveys designed for Chinook and coho salmon. En dashes indicate no data.

[a] No survey conducted.

[b] Estimated from boardwalk at Potter Marsh.

APPENDIX D: SPORT FISHING REGULATIONS

Appendix D1.–Sport fishing regulations for Ship Creek, 1957–2022.

Year	Sport fishing regulations for Ship Creek
1957–1959	Closed to sport fishing from April 1 through May 27. Bag limit was 10 trout daily or in possession, only two 20 inches or more in length. No salmon fishing regulations.
1960	Closed to all sport fishing.
1961–1962	Closed to salmon fishing. Closed to sport fishing from April 1 through May 27. Bag limit was 10 trout daily or in possession, only two 20 inches or more in length. Anglers were allowed up to 20 resident fish if excess were Dolly Varden.
1963	Closed to sport fishing from April 1 through May 25.
1964–1965	Closed to sport fishing from April 1 through the third Friday in May. The fishery was open to salmon fishing (except Chinook salmon) downstream of a marker 300 feet below the Chugach Power Plant Dam. Bag limit was 3 chum, sockeye, or pink salmon with an additional 3 coho salmon allowed.
1966–1967	Legal gear was defined as a single-hook-only with gap between point and shank of one-half inch or less.
1968	Closed to all fishing from January 1 through August 31. Anglers were allowed 3 salmon. Closed to Chinook salmon fishing.
1969	From September 1 through December 31 anglers were allowed 3 salmon but excess Dolly Varden was removed from the resident fish bag limit.
1970	Closed to all fishing from January 1 through August 31 except for a Chinook salmon opening from July 4 through July 19. Bag limit was 1 Chinook salmon per day and 2 per season. From September 1 through December 31, anglers were allowed 3 salmon.
1971–1972	Closed to all fishing from January 1 through August 31 except for Chinook salmon openings on June 10 through June 11 and June 17 through June 18. A Chinook salmon punch card was required, and the bag limit was 1 Chinook salmon per day and 2 per season. From September 1 through December 31, anglers were allowed 3 salmon.
1973–1981	Closed to all fishing from January 1 through August 17. Closed to Chinook salmon fishing. From August 18 through December 31, anglers were allowed 3 salmon. Legal gear was single-hook-only with a gap between point and shank of one-half inch or less.
1982–1984	Same regulations as 1973–1981. In addition, rainbow trout daily bag limit was reduced to 5 fish, only one 20 inches or more in length.
1985–1986	Closed to all fishing from January 1 through July 31. Single-hook-only restriction was lifted. Anglers were allowed 3 salmon other than Chinook salmon from August 1 to December 31.
1987–1990	The area opened to salmon fishing was downstream of a marker located 100 feet below the Chugach Power Plant Dam. In addition, the creek was open to all fishing (including Chinook salmon) on Tuesdays and Wednesdays for 5 consecutive weeks commencing the second Tuesday in June. Chinook salmon bag and possession limits were 1 and 2, respectively, with no seasonal limit.

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Year	Sport fishing regulations for Ship Creek
1991–1992	Chinook salmon fishing was allowed from January 1 through July 13. Daily bag and possession limits were 1 and 2, respectively with no seasonal limit. Fishing for other salmon was allowed year-round with bag and possession limits of 3 and 3, respectively. In addition, fishing for Dolly Varden, rainbow trout, and other species was allowed year-round.
1993	A seasonal limit of 5 Chinook salmon in Cook Inlet waters was added.
1997	The possession limit for Chinook salmon was reduced to 1 and a regulation went into effect that prohibited anglers from continuing to sport fish in waters open to Chinook salmon fishing after harvesting a Chinook salmon.
1999	Chinook salmon bag and possession limits were 1 per day and 1 in possession, and anglers were not allowed to fish in Ship Creek for the remainder of the day after harvesting a Chinook salmon 20 inches or longer. For salmon other than Chinook salmon, 16 inches or longer in length, the bag and possession limits were 3 fish, and all three could be coho salmon. Reeve Boulevard upstream to 300 ft upstream of Elmendorf Dam was closed to all fishing.
2001	The bag and possession limits for Chinook salmon less than 20 inches in length, and other salmon less than 16 inches in length was 10 fish. The fishery was open all year for these small salmon. In waters open to fishing for Chinook salmon 20 inches or more in length, fishing was not allowed between 11:00 PM and 6:00 AM from May 15 through July 13.
	Statewide regulation defined the bag and possession limits for Chinook salmon less than 20 inches in length (jack salmon), in fresh waters open to Chinook salmon fishing, as 10 per day and 10 in possession.
2005	In waters closed to fishing for salmon 20 inches or more, fishing was closed for salmon less than 20 inches in length.
	A coho salmon 16 inches or longer that is removed from fresh water must be retained and become part of the bag limit of the person who originally hooked the fish. A person may not remove a coho salmon 16 inches or longer from the water before releasing it.
2012	Sport fishing is closed from April 15 to June 14 from 100 feet upstream of the Chugach Power Plant Dam upstream to Reeves Boulevard.
	Footgear with absorbent felt or other fibrous material on the soles are prohibited while sport fishing in the fresh waters of Alaska. The regulation was adopted by the Alaska Board of Fisheries in 2010 to reduce the potential for introduction and spread of invasive organisms, including plants, into Alaska waters. Invasive organisms spread by contaminated waders and other gear can threaten resident fish stocks and important fish habitat.
2017	A youth-only fishery for Chinook salmon occurs on Ship Creek between the C Street Bridge and the Bridge Restaurant on the third Saturday in June from 6:00 AM to 6:00 PM. The area closed to sport fishing on Ship Creek was extended to all waters upstream of the Chugach Power Plant Dam to 300 feet above the Elmendorf Power Plant Dam.
2020	The hours of the Ship Creek Youth Fishery were extended from 6:00 AM–6:00 PM to 6:00 AM–11:00 PM.

Note: Underlined regulations are still in effect as of 2022.

Appendix D2.–Sport fishing regulations for Eagle River, 1957–2018.unli

Year	Sport fishing regulations for Eagle River
1957–1959	Closed to sport fishing from April 1 through May 27. Bag limit was 10 trout daily or in possession, only two 20 inches or more in length. No salmon fishing regulations.
1960	Closed to salmon fishing upstream of one-quarter mile above Glenn Highway Bridge. Bag limits were 10 salmon or trout daily, 3 could be salmon greater than 16 inches in length, and 2 could be Chinook salmon.
1961–1962	Anglers were allowed up to 20 resident fish if the excess were Dolly Varden.
1963	Closed to sport fishing from April 1 through May 25. Closed to salmon fishing upstream of one-quarter mile above Glenn Highway Bridge. Bag limit was 6 coho salmon; 3 pink, chum, or sockeye salmon; and 1 Chinook salmon. Resident fish bag limits were 10 trout daily, only 2 over 20 inches. Anglers were allowed up to 20 resident fish if the excess were Dolly Varden.
1964–1967	Closed season was from April 1 through the third Friday in May.
1968	No closed season. Bag limit was 3 salmon, 16 inches or greater in length. Closed to Chinook salmon fishing.
1969–1981	Excess Dolly Varden removed from bag limit in 1969.
1982–1986	Rainbow trout bag limit was reduced to 5 per day, only one 20 inches or greater in length in 1982. Bag limits were 10 for other resident fish.
1987–1991	South Fork Eagle River below the falls was closed to all fishing from June 1 through August 14.
1993–1996	Regulations restricted Chinook salmon fishing to a 30-day period commencing the Saturday before Memorial Day. Fishing was restricted to that portion of Eagle River upstream of Bailey Bridge on Fort Richardson to an ADF&G marker located approximately adjacent to Mile 7.4 of Eagle River Road. The area located approximately 100 yards on either side of the confluence of South Fork Eagle River was closed to fishing from June 1 through August 14. North Fork Eagle River upstream from an ADF&G marker located near its confluence with Eagle River was closed to all fishing during the Chinook salmon season. Passes were required to fish on Fort Richardson.
1999–2001	In areas open for fishing Chinook salmon less than 20 inches in length and other salmon 16 inches in length or less, the fishery was open all year. Bag and possession limits for these small salmon was 10 fish. Statewide regulation defined the bag and possession limits as 10 per day and 10 in possession for Chinook salmon less than 20 inches in length (jack salmon) in fresh waters open to Chinook salmon fishing.
2005	In waters closed to fishing for salmon 20 inches or more, waters were closed to fishing for salmon less than 20 inches in length.
2011	A coho salmon 16 inches or longer that is removed from fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish. A person may not remove a coho salmon 16 inches or longer from the water before releasing it.
2012	Footgear with absorbent felt or other fibrous material on the soles are prohibited while sport fishing in the fresh waters of Alaska. The regulation was adopted by the Alaska Board of Fisheries in 2010 to reduce the potential for introduction and spread of invasive organisms, including plants, into Alaska waters. Invasive organisms spread by contaminated waders and other gear can threaten resident fish stocks and important fish habitat.

Note: Underlined regulations are still in effect as of 2022.

Appendix D3.–Sport fishing regulations for Campbell Creek, 1957–2022.

Year	Sport fishing regulations for Campbell Creek
1957–1959	Closed to sport fishing from April 1 through May 27. Bag limit was 10 trout daily or in possession, only two 20 inches or more in length. No salmon fishing regulations.
1960	Campbell Creek was open to salmon fishing, except Chinook salmon, from August 22 through September 23. Bag limits were 10 salmon or trout daily, only 3 could be salmon greater than 16 inches in length and only 2 could be trout over 20 inches in length.
1961–1962	Anglers were allowed up to 20 resident fish if excess were Dolly Varden.
1963	Closed to sport fishing April 1 through May 25. Bag limit was 6 coho salmon; 3 pink, chum, or sockeye salmon. Resident fish bag limits were 10, only 2 over 20 inches.
1964–1967	Closed to sport fishing from April 1 through the third Friday in May. Open to salmon fishing (except Chinook salmon) from August 1 through September 30. Closed to salmon fishing above the Seward Highway. Bag limit was 6 coho, and 3 chum, sockeye, or pink salmon.
1968	Open to salmon fishing (except Chinook salmon) from August 1 through September 30. Closed to salmon fishing above the Seward Highway. Bag limit was 3 salmon 16 inches or greater in length. No closed season for resident fish.
1969–1970	Excess Dolly Varden removed from bag limit in 1969.
1971–1981	Closed to fishing above the Seward Highway and closed to salmon fishing throughout the drainage.
1982–1984	Rainbow trout bag limit was reduced to 5 per day, only one 20 inches or greater in length in 1982.
1985	Closed to all fishing above the Forks and closed to salmon fishing below the Forks.
1986	Entire drainage was open to fishing but closed to salmon fishing.
1987–1992	Only unbaited, artificial lures could be used upstream of Forks, and rainbow trout could not be kept.
1993–1994	Open to coho salmon fishing from July 25 through October 15, with fishing limited to that portion of Campbell Creek upstream from Dimond Boulevard to an ADF&G marker located in the vicinity of Folker Street. Bag and possession limits for coho salmon were 3 and 3, respectively. Fishing for all other salmon was closed. Campbell Lake was closed to all fishing in 1993.
1996–1998	The portion of Campbell Creek that flows through Wickersham subdivision between Lake Otis Parkway and Shelikof Street was closed to all sport fishing year-round. Coho salmon fishing was allowed from July 25 through October 1 from Dimond Boulevard upstream to C Street. Coho salmon fishing was allowed from August 5 through October 1 upstream of C Street to markers near Piper Street except for the Wickersham closed area.
1999–2001	Regulations were the same as those established by the BOF during 1996–1998.
2005	In waters closed to fishing for salmon 20 inches or more in length, waters were closed to fishing for salmon less than 20 inches in length. ADF&G created a youth-only fishery on Campbell Creek for Chinook salmon.
2011	A coho salmon 16 inches or longer that is removed from fresh water must be retained and becomes part of the bag limit of the person who originally hooked the fish. A person may not remove a coho salmon 16 inches or longer from the water before releasing it.
2012	Footgear with absorbent felt or other fibrous material on the soles are prohibited while sport fishing in the fresh waters of Alaska. The regulation was adopted by the Alaska Board of Fisheries in 2010 to reduce the potential for introduction and spread of invasive organisms, including plants, into Alaska waters. Invasive organisms spread by contaminated waders and other gear can threaten resident fish stocks and important fish habitat.
2017	Closed to all fishing on a portion of Campbell Creek (from Lake Otis Blvd upstream to the forks near Piper Street) when that portion is not open to coho salmon fishing (October 2–July 13).

Note: Underlined regulations are still in effect as of 2022.

Appendix D4.–Sport fishing regulations for all other locations in the AMA, 2005–2022.

Year	Sport fishing regulations for other locations
2011	Removed Symphony Lake from list of stocked lakes. Set bag limit to 5 per day with only one 12 inches or greater in length.
	Established a seasonal spawning closure for rainbow trout in Campbell and Chester Creeks.
	Established a seasonal spawning closure for rainbow trout in Ship Creek.
	Closed Bird Creek to all sport fishing between January 1 and July 14.
2014	Reduced the bag limit for landlocked Chinook and other salmon in Anchorage stocked lakes.
2017	Amended the regulations for the Anchorage Bowl drainages to allow harvest of salmon, other than Chinook salmon, that are less than 16 inches in length in waters open to salmon fishing.
	Lower Sixmile Lake was added to the list of stocked lakes.

Note: Underlined regulations are still in effect as of 2022.

APPENDIX E: STOCKING IN THE ANCHORAGE MANAGEMENT AREA

Appendix E1.–Chinook and coho salmon smolt stocking in Anchorage Management Area by year (1999–2022) and site.

	Chinook salmon	Coho salmon			
Year	Ship Creek	Bird Creek	Campbell Creek	Ship Creek	Total
1999	197,168	111,430	42,046	165,388	318,864
2000	265,582	97,409	63,730	260,070	421,209
2001	254,924	0[a]	69,836	233,563	303,399
2002	290,501	0[a]	69,836	212,639	282,475
2003	329,416	0[a]	78,576	234,716	313,292
2004	320,226	109,949	85,790	241,006	436,745
2005	358,029	100,605	60,387	251,446	412,438
2006	176,055	104,974	78,805	252,775	436,554
2007	333,940	104,979	82,138	255,380	442,497
2008	341,495	113,035	83,421	245,490	441,946
2009	282,735	113,300	15,400	287,825	416,525
2010	332,597	157,534	50,214	252,319	460,067
2011	314,194	136,047	71,960	254,718	462,725
2012	329,082	70,004	0[b]	243,499	313,503
2013	324,145	110,297	83,088	273,173	466,558
2014	358,517	91,443	29,028	226,576	347,047
2015	365,246	132,870	52,110	249,401	434,381
2016	363,545	131,981	52,807	275,402	460,190
2017	340,937	131,547	53,449	257,047	442,043
2018	389,797	126,879	51,966	400,784	579,629
2019	361,380	127,173	53,534	257,516	438,223
2020	595,705	121691	55,929	255,392	433,012
2021	581,387	126858	56,609	241,317	424,784
2022	593,774	122157	52,347	237,431	411,935

Source: All stocking information is from ADF&G Division of Sport Fish hatchery records.

[a] Bird Creek was not stocked from 2001 to 2003 due to construction of the parking area just north of the creek.

[b] Excessive mortality occurred during early rearing in 2012. No fish were stocked in Campbell Creek to ensure adequate fish were available for Ship Creek and future broodstock needs. Excess fish beyond Ship Creek needs were stocked in Bird Creek.

Appendix E2.–Rainbow trout stocking in Anchorage Management Area streams by year (1999–2022) and site.

Year	Site		Total
	Campbell Creek	Chester Creek	
1999	3,030	1,000	4,030
2000	4,563	852	5,415
2001	3,909	2,335	6,244
2002	2,291	2,036	4,327
2003	4,264	1,779	6,043
2004	1,560	976	2,536
2005	1,697	613	2,310
2006	1,522	326	1,848
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	3,139	935	4,074
2013	2,354	1,000	3,354
2014	4,465	1,000	5,465
2015	3,559	902	4,461
2016	3,415	1,073	4,488
2017	3,293	1,011	4,304
2018	2,968	1,029	3,997
2019	3,699	2,343	6,042
2020	1,999	995	2,994
2021	1,490	975	2,465
2022	1,980	1,045	3,025

Source: All stocking information is from ADF&G Division of Sport Fish hatchery records.

APPENDIX F: DOLLY VARDEN CATCH AND HARVEST

Appendix F1.–Dolly Varden sport fish catch and harvest (Harv), Anchorage Management Area, 1999–2022.

	Bird Creek		Campbell Creek		Eagle River		Ship Creek		Twentymile R.		Other freshwater		Area total	
Year	Catch	Harv	Catch	Harv	Catch	Harv	Catch	Harv	Catch	Harv	Catch	Harv	Catch	Harv
1999	90	0	1,693	626	814	97	44	22	190	99	1,693	1,181	4,524	2,025
2000	137	0	5,161	83	1,275	409	184	0	935	154	6,485	722	14,177	1,368
2001	22	0	12,760	238	87	0	648	33	2,027	189	1,714	441	17,258	901
2002	17	0	2,339	369	507	190	589	0	482	0	3,251	779	7,185	1,338
2003	70	50	2,568	228	820	0	536	10	702	153	6,108	1,644	10,804	2,085
2004	27	13	3,386	200	777	281	912	13	271	27	6,145	3,651	11,518	4,185
2005	39	13	4,116	35	953	0	584	0	260	81	4,025	1,229	9,977	1,358
2006	177	14	701	0	476	127	127	0	514	119	2,812	1,501	4,807	1,761
2007	59	0	710	15	225	115	599	0	1,177	218	3,819	919	6,589	1,267
2008	92	0	379	76	396	15	246	0	878	31	3,460	578	5,451	700
2009	79	33	198	0	0	0	28	0	1,174	57	3,069	1,037	4,548	1,127
2010	118	29	969	51	29	0	220	15	428	148	1,376	188	3,140	431
2011	19	0	504	0	376	9	1,203	16	491	198	2,686	549	5,279	772
2012	11	11	211	0	111	32	13	13	589	263	1,504	737	2,439	1,056
2013	13	0	1,542	35	54	19	662	35	331	35	2,169	318	4,771	442
2014	140	0	718	0	0	0	95	0	91	91	5,987	723	7,031	814
2015	39	0	385	41	39	0	103	0	236	0	2,982	208	3,784	249
2016	0	0	418	0	798	23	181	0	737	226	4,115	467	6,249	716
2017	0	0	85	17	0	18	38	0	29	0	1,334	33	1,486	68
2018	0	0	438	13	0	0	0	0	1,125	0	1,416	247	2,979	260
2019	166	50	167	17	17	0	0	0	0	0	79	33	429	100
2020	0	0	103	0	30	0	6	0	502	14	2,275	281	2,916	295
2021	0	0	106	28	103	0	0	0	7	0	2,766	323	2,982	351
2022	45	0	0	0	125	0	0	0	497	106	2,441	482	3,108	588
Average														
1999–2018	57	8	1,964	101	387	67	351	8	633	104	3,308	858	6,700	1,146
2019–2021	55	17	125	15	50	0	2	0	170	5	1,707	212	2,109	249

Source: Alaska Sport Fishing Survey database [Internet]. 1996–present. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited November 2023). Available from: http://www.adfg.alaska.gov/sf/sportfishingsurvey/.