Fishery Management Report No. 09-27

Area Management Report for the Recreational Fisheries of Northern Cook Inlet, 2005 and 2006

by

Sam Ivey,

Chris Brockman,

and

Dave Rutz

June 2009

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

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

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)

Measures (fisheries)

fork length	FL
mid eye to fork	MEF
mid eye to tail fork	METF
standard length	SL
total length	TL

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

FISHERY MANAGEMENT REPORT NO. 09-27

AREA MANAGEMENT REPORT FOR THE RECREATIONAL FISHERIES OF NORTHERN COOK INLET, 2005 AND 2006

by

Sam Ivey,
Chris Brockman,
and
Dave Rutz

Division of Sport Fish, Palmer

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

June 2009

This investigation was partially financed by the Federal Aid in Sport Fish Restoration Act (16 U.S.C. 777-777K) under Project F-10-21, Job Numbers S-2-17; S-2-19; S-2-26a, b; S-2-29; S-2-35; R-2-6; Project F-31-17, Job Number F-31-17e, F-13-M-36 (R-2);F-13-M-37 (R-2); Project F-10-22, Job Numbers R-2-6; S-2-17; S-2-19;, S-2-26 a, b; S-2-29; S-2-35; S-2-38; Project Number F-31-18, Job Number F-31-18b; F-13-M-38 (R-2); F-13-M-39 (R-2).

The Fishery Management Reports series was established in 1989 by the Division of Sport Fish for the publication of an overview of management activities and goals in a specific geographic area, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: http://www.sf.adfg.state.ak.us/statewide/divreports/html/intersearch.cfm. This publication has undergone regional peer review.

Sam Ivey
Alaska Department of Fish and Game, Division of Sport Fish
1800 Glenn Highway, Suite 4
Palmer, AK 99645-6736, USA

Chris Brockman
Alaska Department of Fish and Game, Division of Sport Fish
1800 Glenn Highway, Suite 4
Palmer, AK 99645-6736, USA

and

Dave Rutz
Alaska Department of Fish and Game, Division of Sport Fish
1800 Glenn Highway, Suite 4
Palmer, AK 99645-6736, USA

This document should be cited as:
Ivey, S., C. Brockman and D. Rutz. 2009. Area management report for the recreational fisheries of Northern Cook Inlet, 2005 and 2006. Alaska Department of Fish and Game, Fishery Management Report No. 09-27, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:
ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526
U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203
Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240
The department's ADA Coordinator can be reached via phone at the following numbers:
(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078
For information on alternative formats and questions on this publication, please contact:
ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375.

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF FIGURES

LIST OF APPENDICES

ABSTRACT

This report provides a detailed summary of sport fisheries occurring within the Northern Cook Inlet Management Area. Included is an organizational and geographic description of the management area, a description of programs related to management of the area, a historical overview of each fishery, how each fishery is managed, and sport fishery performance and escapement for the 2005 and 2006 management years.

Key words: Northern Cook Inlet Management Area, Knik Arm Management Unit, Eastside Susitna Management Unit, Westside Susitna Management Unit, West Cook Inlet Management Unit, sport fisheries overview, stocked lakes, Chinook salmon, coho salmon, sockeye salmon, rainbow trout, northern pike, personal use, dip net, subsistence, educational fisheries, Alaska Board of Fisheries.

INTRODUCTION

This report provides a detailed summary of sport fisheries within the Northern Cook Inlet Management Area (NCIMA). Included is a description of the management area and programs related to management of area fisheries. Fisheries are described and organized by species and management unit. A historical overview and description of each fishery, historical harvest and escapement, management strategies and objectives, and sport fishery performance and escapement for 2005 and 2006 are discussed.

DIVISION OF SPORT FISH STRATEGIC PLAN

The guiding document for the Alaska Department of Fish and Game (ADF&G), Division of Sport Fish (SFD) continues to be the Strategic Plan (ADF&G 2002). It highlights key issues currently facing the SFD and guides division leaders in their decision making. The plan is also used to communicate internally as well as with the public about the most important issues facing the division and the management of Alaska's recreational fisheries. In the future issues and strategic directions will be added, deleted, or modified as necessary. Annual work plans and budget submissions are linked to this plan based on regional needs and priorities.

MANAGEMENT AREA DESCRIPTION

The Northern Cook Inlet (NCI) sport fish management area (Figure 1) includes all freshwater drainages and adjacent marine waters of Upper Cook Inlet between the southern tip of Chisik Island and the Eklutna River, excluding the upper Susitna River drainage above the Oshetna River confluence. The management area encompasses approximately 30,000 square miles and is dominated by the Susitna River drainage which originates in glaciers of the Alaska and Talkeetna mountain ranges and flows south about 200 miles to Cook Inlet near Anchorage. Most sport fisheries in the NCIMA are easily accessible by road or jet boat, with the exception of the remote West Cook Inlet Unit (WCI) waters accessible only by boat or aircraft.

For the purposes of management and harvest reporting, the NCIMA is divided into four major units (Figure 1):

1. Knik Arm Management Unit (KAMU): includes all waters bounded on the north by Willow Creek (not including Willow Creek), on the west by a line ½ mile east of the Susitna River, on the south by Cook Inlet, Knik Arm and the Eklutna River (not including the Eklutna River), and on the east by the Upper Susitna River drainage upstream of its confluence with the Oshetna River. All adjacent marine waters of Cook Inlet are included.
2. Eastside Susitna Management Unit (ESMU): includes all drainages of the upper Susitna River above the Chulitna River to and including the Oshetna River drainage, all eastside

drainages of the Chulitna River, and all eastside drainages of the Susitna River below its confluence with the Chulitna River to and including Willow Creek to the south. This management unit has no marine waters.

3. Westside Susitna Management Unit (WSMU): includes all westside drainages of the Chulitna River, and all westside drainages of the Susitna River below its confluence with the Chulitna River and, primarily for management purposes, eastside drainages of the Susitna River within a half-mile of the Susitna River downstream of Willow Creek. This management unit has no marine waters.
4. West Cook Inlet Management Unit (WCIMU): includes all freshwater drainages entering Cook Inlet between the Susitna River and the latitude of the southern tip of Chisik Island, and all adjacent marine waters of Cook Inlet.
5. In terms of political geography, the major portion of this management area is very similar to the boundaries of the Matanuska-Susitna Borough; the West Cook Inlet Unit extends into the Kenai Peninsula Borough. The State of Alaska is the principal land manager in the NCIMA. Other significant land managers include the Matanuska-Susitna (Mat-Su) Borough, Kenai Peninsula Borough, various Native corporations and villages, and the federal government.

FISHERY DEVELOPMENT AND REGULATION

The waters of the NCIMA fall within four sport fishing regulatory areas: the Knik Arm, Susitna River, West Cook Inlet, and the Cook Inlet/Resurrection Bay Salt Water regulatory area. Regulations governing the sport fisheries of the Knik Arm, Susitna River, West Cook Inlet and the Cook Inlet/Resurrection Bay Salt Water regulatory areas are established in Chapters 60-62 and 58, respectively, of Title 5 of the Alaska Administrative Code. Regulations pertaining to other Cook Inlet fisheries including subsistence (Chapter 01), personal use (Chapter 77), educational permits (Chapter 93), statewide provisions (Chapter 75) and commercial fisheries (Chapter 21) are also contained in Title 5 of the Alaska Administrative Code.

The process of developing fishing regulations appropriate for fisheries in the NCIMA occurs within the established Alaska Board of Fisheries (BOF) process. Public input concerning regulation changes and allocation issues is provided for in this process through various means including submission of proposals, direct testimony to the BOF, and/or participation in local fish and game advisory committees. Advisory committees have been established throughout Alaska to assist the Boards of Fisheries and Game in assessing fisheries and wildlife issues and proposed regulations. Active committees meet several times each year. SFD staff and other ADF&G divisions are often invited to attend the committee meetings. In this way, advisory committee meetings allow for direct public interaction with staff involved with resource issues of local concern. Within the NCIMA there are four Fish and Game Advisory Committees: Denali, Matanuska, Tyonek, and Mt. Yenlo (Appendix A1). Staff also interact frequently with the Anchorage Advisory Committee, whose constituents and concerns affect the NCIMA. Under the current operating schedule the BOF meets on a 3-year cycle. Proposals regarding the NCIMA finfish species were addressed most recently in January 2005. The next regularly-scheduled BOF meeting to address NCI issues is scheduled for February 2008. Appendices B1 to B5 provide summaries of BOF regulatory actions.

MANAGEMENT PLANS

Upper Cook Inlet fisheries have been the focus of intensive allocation battles for many years. These conflicts have led the BOF to establish numerous management plans and policies to guide the area's fisheries. These plans attempt to assure sustained yield of the area's fish resources, as well as establishing allocations, management actions and guidelines. There are presently 14 management plans or policies which the BOF has adopted that impact NCIMA fisheries (Appendix C1).

RECREATIONAL EFFORT, HARVEST, AND CATCH

Beginning in 1977, recreational angler effort in the NCIMA has been estimated using the Statewide Harvest Survey (SWHS), a mail survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001 a-d; Walker et al. 2003;Jennings et al. 2004; 2006a-b; Jennings et al. 2007, In prep a-b). This survey estimates the number of angler-days of sport fishing effort expended by recreational anglers fishing Alaskan waters, as well as the harvest and, beginning in 1990, catch (number harvested plus number released) of important sport species. The SWHS is designed to provide estimates of effort, harvest and catch by site, but is not designed to provide estimates of effort directed towards a single species at a site. Additionally, onsite creel surveys have been selectively used for fisheries that require more detailed information or inseason management. The following summary of recreational effort, harvest, and catch in the NCIMA is based on the SWHS data.

The NCIMA is composed of two complete and a portion of a third SWHS reporting area (Jennings et al. 2007). These areas include: (1) the Knik Arm Drainage Area reporting unit (Area K), (2) the West Cook Inlet reporting unit (Area N), and (3) the Susitna River Drainage reporting unit (Area M). The West Cook Inlet Area presently includes fresh and marine waters between the southern tip of Chisik Island and Cape Douglas, an area outside of the NCIMA. The Susitna River area includes several rivers and many lakes north of the Oshetna River boundary of the NCIMA. Area N and M fisheries outside of the NCIMA are not included in this report. During 1999 the SWHS project staff initiated a review and updating of existing programming code. During this review it was discovered that the non-response bias adjustment model had not been applied for prior estimates. Subsequently, SWHS estimates for the years 1996-1998 were revised. The estimates for years 1996-1998 presented herein represent the updated estimates.

Effort

An average of 297,208 angler-days were expended by anglers fishing NCIMA waters from 1977 through 2004 (Table 1). Historically, the effort expended by anglers fishing NCIMA waters has represented an average of 14% of the total statewide and 20% of the Southcentral Region[1] (Region II) angling effort. Angler-effort peaked at 403,805 angler-days in 1992 (Figure 2). From 1995 through 1998 effort fell abruptly, mirroring years when major Chinook salmon *Oncorhynchus tshawytscha* fisheries were either closed or severely restricted. Total effort for NCIMA averaged 324,803 angler-days from 2000-2004. The Kenai Peninsula sport fish management area is currently the only management area in Alaska that receives greater use by recreational anglers (Jennings et al. 2007).

[1] ADF&G, Sport Fish Division, Southcentral Region (i.e., Region II) includes the following management areas: Anchorage Area, Bristol Bay, Kodiak/Aleutians, Lower Cook Inlet (Kenai), Northern Cook Inlet (Mat-Su), Prince William Sound Area, Seward North Gulf Coast, and Upper Kenai Peninsula.

During 2005 and 2006 anglers spent an estimated 298,086 and 294,295 angler-days respectively fishing NCIMA waters, both below the 5-year mean. Effort in 2005 and 2006 represented 12 to 13% and 17 to 18% of the total statewide and Southcentral Region angling effort, respectively (Table 1).

About 40% of the total effort from the NCIMA has historically occurred in the Knik Arm Management Unit (Table 1). From 1977 to 2004, these waters supported an average of 117,915 angler-days of fishing effort. Nearly all of the effort over this period was expended in fresh water (Table 2). The Little Susitna River is the most heavily fished stream in the KAMU, averaging 35,062 angler-days of effort for the period 1977-2004 (Figure 3). Other major fisheries occur in the many stocked lakes in the basin (notably in Finger Lake and the Kepler Lake complex) and at various road-accessible streams including Knik River tributaries, the Eklutna Power Plant tailrace, Big Lake drainage, and Cottonwood and Wasilla creeks (Figure 3). The creation of a terminal Chinook salmon fishery at Eklutna Tailrace in 2001 was likely responsible for the noticeable increase in effort in 2005 when the first returns of age-4 and age-5 Chinook salmon were realized. A limited saltwater (i.e., marine) fishery also occurs off the mouth of Fish Creek in Knik Arm (Figure 3).

Anglers fishing the Eastside Susitna Management Unit from 1977 through 2004 expended an average of 98,011 angler-days (Table 1), representing an average of 33% of the total sport effort from all NCIMA waters. A total of 87,893 and 85,029 angler-days, respectively, were spent in this area during 2005 and 2006, both below the 2000-2004 mean (Table 3). Major fisheries occur in Willow Creek, Montana Creek, Sheep Creek, Little Willow Creek, and Talkeetna River (Figure 4).

Anglers fishing the Westside Susitna Management Unit from 1977 through 2004 expended an average of 70,023 angler-days (Table 1). This expenditure of effort has represented an average of 24% of the total effort from all NCIMA waters during this time period. A total of 73,971 angler-days occurred during 2005, a slight increase from the previous 5-year average (Table 4). Major fisheries occur in Deshka River, Alexander Creek, and Yentna River including Lake Creek (Figure 5). Other fisheries occur in numerous remote lakes in the area.

From 1977 through 2004 anglers fishing West Cook Inlet Management Unit waters expended an average effort of 11,259 angler-days (Table 1). This expenditure of effort represents an average of 4% of the total effort from all NCIMA waters for the same period. A record total of 20,459 angler-days occurred during 2005 (Table 5). WCIMU effort dropped in 2006 to 15,771 angler-days, slightly below the 2000-2004 mean. The sockeye salmon *O. nerka* fishery at Big River Lakes (Big River drainage, including Wolverine Creek) has developed during the last decade into the largest fishery in WCIMU; other major fisheries include the Kustatan, Chuitna, and Theodore rivers (Figure 6).

Harvest

From 1977 through 2004, an average of 207,405 fish were caught and kept (i.e., harvested) by anglers fishing NCIMA waters (Figure 7). In 2005 and 2006, 169,482 and 181,692 fish respectively were harvested in NCIMA, with 60 to 64% of these totals coming from the KAMU and ESMU (Table 6). Coho salmon *O. kisutch*, rainbow trout *O. mykiss* and Chinook salmon accounted for 29%, 19%, and 12% of this average harvest (Table 7). In 2005 and 2006, coho salmon, Chinook salmon, and northern pike *Esox lucius* harvests exceeded their 1977-2004

means, whereas harvests of rainbow trout and all other species were below their historical average both years (Figure 8).

On average, fish from the Knik Arm Management Unit accounted for 43% of fish caught and kept within the NCIMA during 1977-2004 (Table 6). Rainbow trout, coho salmon, and landlocked salmon[2] dominated the harvest (Table 8). The Eastside Susitna and Westside Susitna management units accounted for 27% and 24% of the NCIMA harvest during this time period, respectively, with coho salmon, Chinook salmon, pink salmon *O. gorbuscha*, rainbow trout and Arctic grayling *Thymallus arcticus* dominating harvests (Tables 9 and 10). The West Cook Inlet Unit accounted for only 5% of the NCIMA harvest (Table 6), with coho, sockeye, and Chinook salmon accounting for the majority of the WCI harvest (Table 11).

Catch-and-Release

Estimates of the number of fish caught and released by anglers fishing NCIMA waters became available for the first time during 1990 (Mills 1991). From 1995 through 2004 the average percent released was approximately 70% of the total catch (Table 12).

The proportion and type of fish released by anglers varies within and among management units (Tables 13 and 14). Pink salmon, chum salmon *O. keta*, Arctic grayling, and rainbow trout were the most frequently released fish species during 2000-2005. In all units during 1997-2006, the number of fish caught and released was greater than the number of fish caught and harvested, except the West Cook Inlet Unit in 1999 (Figure 9).

OTHER USER GROUPS

Salmon returning to the NCIMA are harvested by various set and drift gillnet fisheries in Upper Cook Inlet (UCI) commercial salmon fishing districts (Appendix D1). In nearly all cases harvests in the commercial fisheries are much larger than in NCIMA sport fisheries (Figure 10). The average commercial harvest from 1977 through 2004 was approximately 5 million salmon by the various UCI commercial fisheries, whereas during this same period an average of approximately 100,000 anadromous salmon were harvested annually by sport fish anglers (Table 7 and Appendix D2). Chinook salmon are the exception; since 1988 the yearly sport harvest of Chinook salmon has exceeded the commercial harvest in all years except 1995 (Table 7, Appendix D2).

Fish stocks of NCIMA are also harvested in the Tyonek subsistence fishery, Fish Creek personal use dip net fishery, Upper Yentna River subsistence fish wheel fishery, and by various educational fisheries through permits issued to the villages of Eklutna and Tyonek, the Knik Tribal council, and the Big Lake Cultural Outreach program. The harvest by these fisheries on wild stocks is relatively small when compared to recreational and commercial harvests.

RELATED PROGRAMS

The Recreational Boating and Angler Access Program provide new and upgrade existing angler access in order to increase fishing opportunities in NCIMA fisheries. Proposed, current, and completed access projects as well as a detailed stocked lakes access summary are provided in Appendix E.

[2] Landlocked salmon = a hatchery-reared Chinook or coho salmon caught or harvested from a landlocked lake.

The Information and Education Program (I & E) aims to educate the public on sport fish opportunities and regulations as well as biological aspects such as life histories of fish, their habitat needs, and in ecosystem/watershed awareness. Appendix F summarizes the ongoing I & E programs in NCIMA.

CHINOOK SALMON FISHERIES

Chinook salmon runs to the NCIMA are made up of many stocks, and collectively make up the largest proportion of Cook Inlet drainage stocks. The Susitna River stock is the most numerous in the management area, and the fourth numerous in Alaska, smaller only than the Yukon, Kuskokwim and Nushagak river stocks (Delaney and Vincent-Lang *Unpublished*)[3]. Although estimates of total return are unavailable for Northern Cook Inlet Chinook salmon because estimates of escapement are not available for all stocks, the collective annual return is probably from 100,000-200,000 fish (Delaney and Vincent-Lang *Unpublished*)[3].

From 1893 through World War I (1918) the total harvests of NCI Chinook salmon for all users varied from about 11,000 to 67,000 fish (Table 15), averaging about 32,000 fish. From 1919 through World War II (1945) the total Chinook salmon harvest for NCI averaged 51,000 fish. After World War II the NCI Chinook salmon harvests increased substantially, peaking at 150,000 fish in 1951. Thereafter, Chinook salmon harvests in NCI declined precipitously until all fisheries were closed in 1963 to allow stocks to rebuild (Figure 11).

In 1976, the Magnuson Fishery Conservation and Management Act was passed. This act, also known as the 200-mile limit law, extended federal fishery management authority into waters within 3 to 200 miles of the United States coast. It phased out foreign fishing fleets and implemented fishery management in offshore waters. Its effects on Cook Inlet Chinook salmon stocks are not fully understood; however, it is likely that the act and its associated fishery management plans increased Chinook salmon returns to NCI.

A variety of users have historically harvested NCIMA Chinook salmon returns, including freshwater and marine sport, commercial, subsistence, personal use, and educational. However, harvest strategies for NCI Chinook salmon have changed substantially since the 1890s. The fishery has slowly evolved from a mixed-stock commercial harvest to a recreationally dominated harvest that targets a multitude of discrete sub stocks. A detailed user history is documented in Whitmore et al. (1994).

From 1975-1990, sport fisheries targeting NCI Chinook salmon runs were gradually expanded to allow harvest of increasing returns (Figure 11). The Upper Cook Inlet Salmon Management Plan (5 AAC 21.363), adopted by the BOF in 1977, guided these expansions. This plan as it relates to NCI Chinook salmon stocks, originally stipulated that stocks normally moving through Upper Cook Inlet to spawning grounds prior to July 1 are to be managed primarily for recreational uses. Therefore, sport fisheries were expanded and currently constitute the largest harvests. In 1986 the BOF adopted the Northern District King Salmon Management Plan (5 AAC 21.366) to allocate a portion of the increasing NCI Chinook salmon returns to the commercial fishery. This step-down plan allows for a harvest up to 12,500 Chinook salmon by a commercial setnet fishery in the Northern District during June.

---

[3] Delaney, K. and D. Vincent-Lang. *Unpublished*. Current status and recommendations for the future management of Chinook salmon stocks of Northern Cook Inlet. Report to the Alaska Board of Fisheries, November 1992. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

Under these plans, total harvest of NCI Chinook salmon continued to increase from 1986-1993, ranging from 40,300-54,300 fish (Table 16). Sport harvests decreased thereafter to a low of 16,500 fish in 1995 due in part to fishery closures and restrictions (Appendix B1) placed on sport fisheries following poor escapements in the early 1990s. As Chinook salmon stocks rebounded in the mid to late 1990s, fisheries were reopened and some restrictions were lifted. Beginning in 1997 sport harvests trended upward peaking at 33,100 fish in 2000. They have since stabilized with an average of 29,144 fish harvested from 2000-2004. The average total harvest of NCI Chinook salmon by all users was 32,756 fish during the same time period (Table 16).

In response to development of a recreationally dominated harvest that targeted a multitude of discrete sub stocks, biological escapement goals (BEGs)[4] were established in 1993 for 18 NCIMA Chinook salmon spawning streams based on long-term escapement survey data. Escapement goals are intended to ensure the long-term viability of NCIMA Chinook salmon stocks. The 1993 BEGs were replaced with sustainable escapement goals (SEGs)[5] as new assessment methods were developed (Bue and Hasbrouck *Unpublished*). Escapement goals were revised during the February 2002 BOF meeting (Bue and Hasbrouck *Unpublished*), and again at the 2005 BOF meeting (Hasbrouck and Edmundson 2007) based on the Policy for the Management of Sustainable Salmon Fisheries (5 AAC 39.222.) and the Policy for Statewide Salmon Escapement Goals (5 AAC 39.223.), both adopted by the BOF during winter 2000-2001. Currently there are 16 SEGs and one BEG governing Chinook salmon escapements in the NCIMA (Table 17).

Therefore, the primary management objective for NCIMA Chinook salmon is to achieve established escapement goals. Spawning escapement on each of the 17 streams is indexed annually using helicopter surveys or weirs. To ensure escapement goals are met, fishery managers may reduce harvest potential by reducing daily and seasonal bag limits, prohibiting bait, and reducing time and areas open to fishing. Streams that consistently fall below escapement goals may be closed to Chinook salmon fishing. On streams with weirs or programs that provide inseason sport harvest information, regulations may be liberalized by emergency order (EO) if harvestable surpluses are projected.

From the late 1970s through 1989, escapement goals were achieved. However, beginning in 1990, observed spawning escapements in streams with escapement goals decreased, and in 1992-1995 were well below escapement goals in many streams. In response, actions were taken in 1994 through EOs and BOF regulations to reduce harvest levels. As a result, the combined sport harvest of NCI Chinook salmon from 1995-1998 was reduced to approximately half of the 1993 peak harvest (Table 16). Escapement goals were again achieved beginning in 1997. Fisheries were subsequently reopened contributing in part to increased harvest levels beginning in 1999. Harvests have remained stable since the early 2000s despite liberalizations to major fisheries. Emergency orders affecting these fisheries since 2001 are outlined in Appendix G. The regulatory history of Chinook salmon in Northern Cook Inlet waters is presented in Appendix B1.

---

[4] Biological escapement goal or BEG means the escapement that provides the greatest potential for maximum sustained yield (5 AAC 39.222 Policy for the Management of Sustainable Salmon Fisheries).

[5] Sustainable escapement goal or SEG means a level of escapement, indicated by an index or an escapement estimate, that is known to provide for sustained yield over a 5 to 10 year period, used in situations where a BEG cannot be estimated due to the absence of a stock specific catch estimate (5 AAC 39.222 Policy for the Management of Sustainable Salmon Fisheries).

In coming years NCI managers will be looking for signs of reduced sibling return from brood year 2006 due to a 100-year flood which impacted many Chinook salmon spawning and rearing streams in the NCIMA during the third week of August 2006 (Appendix H). Major scouring and definite channelization was observed on the Little Susitna River above the Parks Highway where most Chinook salmon spawning occurs.

KNIK ARM MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

Within the Knik Arm Management Unit (Figure 12), the Little Susitna River is the only stream open to Chinook salmon harvest, other than the Eklutna Tailrace terminal fishery (see section below). It supports a major Chinook salmon fishery as well as the largest coho salmon fishery in the NCIMA. Chinook salmon bound for the Little Susitna River are also harvested in marine sport and commercial fisheries, and subsistence and personal use fisheries.

Chinook salmon return to the Little Susitna River from late May through early July with the peak immigration approximately mid-June. Spawning occurs from the Burma Road area upstream into Hatcher Pass with the majority of spawning taking place upstream of the Parks Highway Bridge. Peak spawning typically occurs during the last week of July.

Angler access to the Little Susitna River occurs at three primary locations: (1) intertidal waters of the river are accessed by boats crossing Knik Arm from the Port of Anchorage public boat launch; (2) the road-accessible Little Susitna Public Use Facility (Burma Road Access) which includes a launch and campground; and (3) private and public launches near the Parks Highway which provide access to the upper reaches of the river. The Little Susitna Public Use Facility is the most heavily used access to the river. Powerboats can travel on the Little Susitna River from its mouth to the Parks Highway during periods of moderate to high water levels. However, during low flows, travel is restricted to smaller jet boats between river mile (rm) 28 and the Parks Highway at rm 70.

Historical Harvest and Escapement

Information about the fishery and Chinook salmon stock is available from several sources. Inseason sport harvest and fishing effort for Chinook salmon were estimated by onsite creel surveys from 1979 through 1990. Creel survey and SWHS estimates produced comparable results; therefore, the creel survey program was discontinued in 1991. Average annual harvest of Chinook salmon from the Little Susitna River was 2,124 fish from 1977-2004 (Table 18; Figure 13).

Due to the semiglacial character of the Little Susitna River, aerial survey counts of Chinook salmon on spawning grounds cannot be conducted annually, although surveys were completed in 19 years since 1983 (Table 19). The average Chinook salmon escapement index during these years was 1,308 fish, with a peak count of 3,197 fish in 1988 (Figure 14). During 1988, 1989, 1994 and 1995 a weir was operated at rm 32.5, with escapement counts ranging from 2,809-7,374 fish (Table 19).

Stocking Program

To increase road-accessible harvest opportunities and ensure sustainability of the area's wild Chinook salmon populations, SFD began a program to stock Chinook salmon at the Eklutna Power Plant tailrace (Figure 15) in 1999. Ship Creek Chinook salmon are used as broodstock

(Loopstra 2007). There are no wild Chinook salmon returns to the Eklutna Tailrace, although a few hold in the confluence area before traveling to other Knik River streams to spawn. All fishing takes place in the ½ mile long power plant tailrace from the Old Glenn Highway to its confluence with Knik River.

In May 2002, the first Chinook smolt were stocked in the Eklutna Tailrace (Table 20). Harvests have varied from 23 fish in 2004 to 941 fish in 2005.

Fishery Management and Objectives

The Chinook salmon fishing season for Little Susitna River is from January 1 through July 13 with fishing permitted from the river's mouth upstream to the Parks Highway, a distance of about 70 miles.

Management of Chinook salmon has undergone changes (Appendix B1). In 2002, an SEG range of 900-1,800 Chinook salmon was set for the Little Susitna River (Bue and Hasbrouck *Unpublished*), replacing the BEG of 850 Chinook salmon that was set in 1993. From 1995-2004 the harvest varied from 1,484-3,144 fish and the escapement ranged from 1,079-1,694 fish (Tables 18 and 19), indicating that the present regulatory framework is maintaining the necessary escapement to ensure a sustainable fishery.

The management objective for the Little Susitna River Chinook salmon fishery is to maximize fishing opportunity while ensuring the attainment of the SEG. The annual objective for the Eklutna Tailrace stocking program is to release 150,000 Chinook smolt, resulting in a return of 4,000 adults and generating 10,000 angler-days of effort. The only other Knik Arm Unit Chinook salmon stream indexed annually is Moose Creek, a tributary of the Matanuska River, but there is no escapement goal.

Fishery Performance and Escapement in 2005 and 2006

The 2005 and 2006 sport harvest of Chinook salmon from the Little Susitna River was 2,724 and 3,303 fish, respectively (Jennings et al. *In prep* a-b), both above the 2000-2004 mean of 2,538 fish (Table 18). The Little Susitna River harvest accounted for approximately 10% and 11% of the total Chinook salmon sport harvest from NCIMA waters in 2005 and 2006. Aerial indices for Little Susitna River in 2005 and 2006 were 2,095 and 1,855 Chinook salmon, respectively (Table 19), both above its SEG range of 900-1,800 fish (Figure 14).

In 2005, the Eklutna Tailrace provided its first opportunity to harvest 4- and 5-year old Chinook salmon. Anglers reported excellent success with an estimated Chinook harvest of 941 fish (Table 20). Sport fishing effort more than doubled at Eklutna Tailrace from a 2000-2004 average of 9,576 angler-days to 19,339 angler-days in 2005 (Table 2). However, about half of this effort may have been directed at the terminal coho fishery later in the season. During 2006, sport fish guides (Appendix I) and anglers reported good catches at Eklutna Tailrace throughout the Chinook fishing season. Department staff observations of fishing at Eklutna Tailrace indicated fair catches from late-May through mid-July. The estimated harvest of Chinook salmon at the Eklutna Tailrace in 2006 was 484 fish (Table 18). Age 4-, 5-, and 6-year old Chinook salmon were present in the 2006 harvest.

Besides Little Susitna River, the only other Chinook salmon stream indexed annually in Knik Arm Unit Management Unit is Moose Creek, a tributary of the Matanuska River. The aerial counts of Chinook salmon at Moose Creek in 2005 and 2006 were 254 and 216 fish,

respectively, both substantially below the 10-year average of 420 fish (Table 19). Aerial counts for Moose Creek Chinook salmon have been below the 1983-2004 mean since 2000.

For several years, the Chickaloon Village Traditional Council has been working on a multiphase project to restore the upper watershed of Moose Creek for use by salmon. The project's main focus was to restore the original stream channel and reestablish fish passage where barriers had formed from channelization work done by the railroad in the early 1920s when they constructed a railroad spur for the coal industry. Work done in 2005 and 2006, successfully restored fish passage around one major and three minor waterfall barriers. Consequently, Chinook salmon have been observed spawning above these waterfalls annually since 2005.

EASTSIDE SUSITNA MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

The Eastside Susitna Management Unit (ESMU; Figures 1 and 16) is composed of three distinct geographical areas with different regulations: (1) the eastside Susitna River tributaries between the Deshka and Talkeetna rivers, (2) the Talkeetna River, and (3) the upper Susitna area which includes the Susitna River and its tributaries between Talkeetna River and Oshetna River (including the Oshetna River drainage) and all eastside tributaries of the Chulitna River (including the East Fork drainage of the Chulitna River).

Deshka to Talkeetna Area

The numerous eastside tributaries of the Susitna River between Deshka River and Talkeetna River (Figures 16 and 17) are characterized by their clear water. The majority of the fisheries in this portion of the management unit are accessible by road. Exceptions include Little Willow and Greys creeks and various Susitna River side sloughs that require a boat to access their most productive portions. The George Parks Highway (Alaska Route 1), which connects Anchorage and Fairbanks, parallels the Susitna River on the east. The Alaska Railroad also parallels the east side of the Susitna River to a large extent. Both transportation systems provide angler access to numerous tributaries.

Talkeetna River

The Talkeetna River joins the Susitna River about 98 miles upstream from Cook Inlet. This glacial system contains two major and numerous minor clearwater tributaries that support Chinook salmon (Figure 16). Clear Creek is the most prominent Chinook fishery within the Talkeetna River drainage. The Talkeetna Spur Road provides access to the Talkeetna River; however, a boat is required to reach virtually all Chinook salmon fisheries within the drainage. This area is primarily accessed from the Talkeetna boat launch.

Upper Susitna River Area

The upper Susitna River area (Talkeetna to Devils Canyon; Figure 16) is accessible only by boat or railroad. A public boat launch adjacent to the community of Talkeetna provides access to the area. Boat travel is relatively safe from the Talkeetna River upstream to the entrance of Devils Canyon, a distance of about 55 miles. Boat travel beyond the entrance to Devils Canyon is extremely hazardous and few boat operators venture past this location. Indian River and Portage Creek are the most prominent Chinook salmon fisheries within the Upper Susitna River Area. The entrance to Devils Canyon, beyond which salmon cannot migrate, is about 150 miles upstream from Cook Inlet.

The Chulitna River empties into the Susitna River a short distance upstream of Talkeetna River at rm 92 (Figure 16). Most tributaries entering the Chulitna River from the east are relatively short, high gradient streams, which receive few spawners. The exception is the East Fork, currently the only Chulitna River tributary supporting a Chinook salmon fishery (Middle Fork, West Fork mouth and lower Honolulu Creek are included in this fishery).

Stocking Program

Willow Creek was identified in 1981 as a candidate for Chinook salmon stocking in the Cook Inlet Regional Salmon Enhancement Plan (CIRPT 1981). A Chinook salmon smolt stocking program was initiated in 1985 and the program has continued annually with the exception of 1987. The goals of this program are to: (1) maintain the present quality and quantity of natural Chinook salmon production, (2) produce through stocking an additional 6,000 returning Chinook salmon of which 4,000 would be available for harvest at Willow Creek on an annual basis, and (3) provide 10,000-15,000 angler-days of fishing opportunity during Chinook salmon season (Sweet 1999). To meet these objectives, about 200,000 Chinook salmon smolt were stocked in Willow Creek drainage annually (Table 21). Smolt were typically released during early June at rm 4 of Deception Creek. A project to estimate the relative contribution of stocked Chinook salmon to the sport harvest was conducted at the mouth of Willow Creek annually from 1988-2005. The program was ended when it was determined that harvests of stocked fish were well documented and relatively stable, averaging about 40% of the total harvest and ranging from 26 to 51% for 1991-2005, years in which a full complement of stocked fish returned (Sweet 1999; Whitmore and Sweet 1998, 1999; Rutz and Sweet 2000;Sweet and Rutz 2001; Sweet et al. 2003, 2004).

Historical Harvest and Escapement

Information about the ESMU Chinook salmon sport fishery and Chinook salmon stocks are available from the SWHS, creel surveys, escapement surveys, and tagging studies. In the Deshka to Talkeetna area, most of the Chinook salmon harvest occurs during the third and fourth weekends in June. Few Chinook salmon arrive at the mouths of eastside Susitna tributaries prior to mid-June. At the Talkeetna River the fishery peaks the first week of July. The Upper Susitna River fishery has run timing similar to Talkeetna River.

Tagging studies have shown that Chinook salmon sub stocks from Willow Creek, Talkeetna River, Sheep Creek, and Montana Creek are subject to harvest at stream mouths other than their natal stream (Peltz and Sweet 1992). For example, stocks from upper portions of the drainage, such as Prairie Creek, are harvested at stream mouths along their migration corridor. The magnitude of non-natal stream harvest has not been determined.

From 1979-1995, the ESMU Chinook salmon sport harvest ranged from 1,298 Chinook salmon in 1979 to 22,688 in 1993 (Table 22). From 2000-2004, ESMU fisheries averaged about 37% of the total NCIMA Chinook salmon harvest. Harvest steadily declined during this period, from about 13,504 Chinook salmon in 2001 to 8,498 in 2004. Included in these harvests are approximately 355 to 4,566 hatchery fish taken annually in Willow Creek since 1988.

Willow Creek, Talkeetna River, Sheep Creek, and Montana Creek traditionally produce the largest harvest of Chinook salmon in the Eastside Susitna Management Unit (Table 23). The 2000-2004 average annual Chinook salmon harvest for these fisheries ranged from 1,079 fish in Sheep Creek to 3,737 fish in Willow Creek.

Creel surveys were employed from 1979-1989 to monitor the effort for and harvest of Chinook salmon and to collect biological samples at Montana Creek and the Talkeetna River. In 1991, 1992 and 1995 creel surveys were conducted for the Talkeetna River. Biological samples were collected from the Talkeetna River during the 1993, 1994, and 1996 seasons. Creel surveys were intermittently conducted at Sheep, Goose, Caswell, Little Willow, Sunshine, and Birch creeks and within the upper Susitna River area (Watsjold 1980, 1981; Bentz 1982, 1983; Hepler and Bentz 1984-1987; Hepler et al. 1988, 1989; Sweet and Webster 1990; Sweet et al. 1991; Peltz and Sweet 1992, 1993; Sweet and Peltz 1994; Whitmore et al. 1995, 1996; Whitmore and Sweet 1997).

Aerial survey escapement counts suggest that ESMU sub stocks have contributed an average of 20,358 fish annually to the Susitna River Chinook salmon escapement since 1979 (Table 24). Prairie Creek, a headwater tributary of Talkeetna River, consistently receives the largest escapement with an average escapement of 5,353 Chinook salmon from 1995-2004 (Table 25).

Fishery Management and Objectives

Management of Chinook salmon in the Eastside Susitna Management Unit has undergone numerous changes since the 1980s, as has management of Chinook salmon in the entire NCIMA (Appendix B1).

In the Deshka to Talkeetna area, waters within one-quarter mile of Susitna River are open to Chinook salmon fishing from January 1 through the third Monday in June and on Saturday, Sunday, and Monday for three consecutive weeks beginning the fourth Saturday in June. For the Willow, Little Willow, Caswell, Kashwitna, Sheep, Goose, and Montana creeks (Figure 16), fishing is allowed from the Susitna River upstream to the Parks Highway. Fishing on Montana Creek extends one-half mile upstream of the Parks Highway Bridge.

The Talkeetna River and upper Susitna River drainages are open to Chinook salmon fishing from January 1 through July 13, from 6:00 am to 11:00 pm. Bag and possession limits are one fish per day and one in possession. Within the Talkeetna River area, Clear Creek is open upstream to rm 2. Both Larson and Prairie creeks are closed to Chinook salmon fishing. Eastside Chulitna River tributaries are closed to Chinook salmon fishing with the exception of East Fork Chulitna and its tributaries. Harvest is allowed within a quarter mile of the confluence of the East Fork and West Fork of Chulitna River and including the Middle Fork and the first quarter mile of Honolulu Creek under the weekend only management strategy described for the Deshka to Talkeetna area. During the rest of the week, only catch-and-release fishing is allowed. The portion of Susitna River above Talkeetna River is designated as a trophy fishery for rainbow trout; therefore, only unbaited, single-hook artificial lures are permitted as terminal gear.

SEG ranges for nine ESMU streams were established in 2002 based on historic escapement index counts (Bue and Hasbrouck *Unpublished*). The Deception Creek SEG was removed at the 2005 BOF meeting (Hasbrouck and Edmundson 2007) because Deception Creek is managed as part of Willow Creek. Currently eight SEGs are in effect in the ESMU (Table 17). The management objective for these eight streams is to achieve the escapement goal for each system. In the streams that cross the George Parks Highway, management strategies provide maximum levels of sustained Chinook salmon fishing opportunity while attaining escapement objectives.

In the near future NCI managers will be looking for signs of reduced sibling return from brood year 2006 due to a 100-year flood which swept much of the NCIMA during the third week of

August 2006 (Appendix H). Major scouring and channelization were observed on Willow and Montana creeks above the Parks Highway where most Chinook salmon spawning occurs. Other major eastside Chinook salmon producing streams were likely affected as well.

Fishery Performance and Escapement in 2005 and 2006

The 2005 Chinook salmon harvest from the Eastside Susitna Management Unit was 8,453 fish, approximately 80% of the 2000-2004 average harvest of 10,794 fish, and about 30% of the entire Chinook salmon harvest from the NCIMA (Table 22). During 2005 the harvest of 2,466 Chinook salmon from Willow Creek (approximately 981 hatchery produced fish), and about 4,200 combined from Talkeetna River, Montana Creek, and Sheep Creek, accounted for the majority of the total harvest from the ESMU (Table 23). Hatchery fish accounted for approximately 40% of the Willow Creek harvest in 2005 (Table 26). About 44% of the wild Chinook salmon harvested at Willow Creek were 5-year old fish (age 1.3) in 2005; about 73% of the hatchery fish were of this age (Table 27). All SEGs within the ESMU were met in 2005 (Figure 17).

Information provided to the department from recreational anglers and guides indicated that returns to eastside Susitna tributaries were above average in 2006. The estimated Chinook salmon harvests from major ESMU fisheries in 2006 were: Willow Creek (2,141 fish), Montana Creek (1,672 fish), Talkeetna River (1,561 fish), and Sheep Creek (707 fish) (Table 23). The hatchery component of the 2006 return to Willow Creek was assumed to be similar to years past (40%). All SEGs were met in 2006 with the exception of Sheep Creek which was 20 fish below the lower end of its SEG range of 400-1,200 Chinook salmon (Figure 17).

WESTSIDE SUSITNA MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

The Westside Susitna Management Unit (WSMU) includes all westside drainages of Chulitna River, and all westside drainages of Susitna River below its confluence with the Chulitna River and, primarily for management purposes, eastside drainages of Susitna River within a half mile of the Susitna River downstream of Willow Creek.

Major tributaries in the WSMU that support Chinook salmon fisheries include: the glacially turbid Yentna River, the largest tributary which flows into Susitna River about 30 miles upstream from Cook Inlet; the Deshka River (confluence at rm 40 of Susitna River); and Alexander Creek (confluence at rm 10 of Susitna River). The Deshka River produces the largest return of Chinook salmon to the NCIMA. Lake Creek (confluence at rm 34 of Yentna River), has the largest Chinook salmon fishery on Yentna River.

Access to these relatively remote fisheries is achieved primarily by boat or aircraft. Susitna Landing, located at the mouth of Kashwitna River, and Deshka Landing, located about 4 miles upstream from Deshka River, are the principal boat access sites on Susitna River. A few anglers also gain access to WSMU fisheries by boating across Cook Inlet from the Port of Anchorage. The Petersville Road provides the only vehicular access to this portion of Susitna River drainage, allowing anglers to fish the upper reaches of Deshka River and Peters Creek.

Historical Harvest and Escapement

Information about the WSMU fishery and Chinook salmon stock is available from the SWHS, weirs, and escapement surveys. Chinook salmon enter WSMU tributaries in May and June.

Peak harvest at the mouth of Alexander Creek normally occurs during the first week of June. Harvests of Chinook salmon usually peak at the mouth of Deshka River in mid-June and at Lake Creek during the third week in June.

The WSMU produced the largest harvests of Chinook salmon in the NCIMA from 1979-1991 and 2000-2006 (Table 22). Within the management unit, Deshka River, Lake Creek, and Alexander Creek have the largest Chinook salmon fisheries (Table 28), making up about 85% of the Chinook salmon harvest of the unit from 2000-2004. The Deshka River has historically provided the largest Chinook salmon harvest within the entire NCIMA except during the mid 1990s when the fishery was closed due to low escapements.

Harvest by major WSMU fisheries increased substantially from 1979-1993 (Table 28), probably as a result of improved access (Whitmore et al. 1994) and population growth. However, liberalized regulations from 1986-1992 also contributed to increased harvests (Appendix B1).

Escapements have been monitored annually in six WSMU tributaries using aerial surveys (Table 29). A weir has been used to census escapements to the Deshka River since 1995 (Table 29). From 1991-1996, Chinook salmon spawning abundance in WSMU tributaries fell below escapement goals (Table 29). At the Deshka River, Chinook salmon escapement index counts declined sharply during this period, while the average sport harvest of Chinook salmon from 1990-1992 was approximately 40% greater than the average harvest during the previous 10 years (Table 28). In response, restrictions were implemented on major WSMU streams and the Deshka River was closed to Chinook salmon fishing from June 17, 1994 to June 21, 1997 (Appendix B2). The escapement goal for the Deshka River of 11,200 Chinook salmon, counted by aerial survey, was not met from 1991-1996 (Table 29). In 1997-2004, the SEG or BEG was met for all streams, except Alexander Creek which fell 164 and 88 fish short in 2002 and 2003, respectively (Figure 18).

Fishery Management and Objectives

Management of Chinook salmon in the WSMU has undergone numerous changes since the 1980s, as has management of Chinook salmon in the entire NCIMA (Appendix B1). These changes reflect periods of strong Chinook salmon returns during most of the 1980s and from about 1997 to present, surrounding a period of weak returns.

An escapement monitoring weir at rm 7 of the Deshka River is an important tool for managing this Chinook salmon fishery because of large escapements and relatively early run timing. The Deshka weir operates from mid May through the duration of the Chinook salmon season to provide managers with timely inseason run information as well as postseason biological data used to assess productivity in this system.

In 2002, a weir-based BEG range of 13,000-28,000 Chinook salmon was established for the Deshka River based on actual escapement, age, and harvest data gathered at the weir (Table 17). SEG ranges for four other WSMU systems (Lake Creek, Alexander Creek, Peters Creek, and Talachulitna River) were also established at this time. SEGs were based on historical aerial index counts of escapement (Bue and Hasbrouck *Unpublished*). The management objective for these five systems is to achieve the escapement goals while providing maximum levels of Chinook salmon fishing opportunity.

Inseason liberalizations to the Deshka River Chinook salmon fishery by emergency order have been common since 2000 (Appendix G1). The Deshka River escapement exceeded the

escapement goal of 17,500 fish from 1999-2001 and exceeded or was within the more recent BEG range since 2002 (Figure 18).

The SEG for Alexander Creek was not met in 3 out of the past 5 years (Figure 18). Northern pike *Esox lucius* predation on juvenile salmon may be impacting Chinook salmon productivity in this system. As a result, management for sustainable yield through reduction in harvest is anticipated in the near future.

Currently, the bag limit for WSMU Chinook fisheries is one daily and two in possession (except Alexander Creek; one in possession), and a seasonal limit of five Cook Inlet Chinook salmon. Only unbaited, single-hook artificial lures are allowed in large portions of Lake Creek, Alexander Creek, Deshka River, and Talachulitna River. Sport fishing guides may not participate or engage in fishing for Chinook salmon while clients are present or within their control.

In coming years, NCI managers will be looking closely for signs of reduced returns from brood year 2006 due to a 100-year flood which impacted many streams in NCIMA during the third week of August 2006 (Appendix H). Major scouring and some channelization were observed on Moose Creek, a major tributary of Deshka River, where significant Chinook salmon spawning occurs.

Fishery Performance and Escapement in 2005 and 2006

In 2005 and 2006, the total Chinook salmon harvest from all Westside Susitna Management Unit streams was 15,945 and 16,454 fish, respectively (Table 22). Both of these WSMU Chinook harvests exceeded the 2000-2004 mean. Deshka River, Lake Creek, Yentna River, and Alexander Creek fisheries supported the largest harvests of Chinook salmon within NCIMA in 2005 and 2006. The Talachulitna River 2005 Chinook salmon harvest was 160% greater than the recent 5-year mean (Table 28).

Based on escapement surveys, all WSMU streams met or exceeded their escapement goals in 2005 (Figure 18).

Early in the 2006 season, catch information from lodge owners, guides and anglers at Alexander Creek and Deshka River indicated a later than average return of Chinook salmon to these and other WSMU streams. The run eventually materialized at the Deshka River. The final Deshka River weir count of 31,150 Chinook salmon exceeded the BEG range (13,000-28,000 fish) (Table 29), Emergency order liberalizations to the Deshka River sport fishery in 2005 and 2006 increased fishing time and bag/possession limits (Appendix G1). About 55% of the Deshka Chinook escapement was composed of 5-year old fish (age 1.3) in 2005 and 2006 (Table 30).

The 2006 Chinook escapement at Alexander Creek (885 fish) failed to reach its SEG (Table 29). However, other inseason reports from the Yentna River drainage (i.e., Lake Creek and Talachulitna River) indicated an above average return of Chinook salmon in 2006. Escapement surveys at Lake Creek and Talachulitna River confirmed these observations with counts within and above their SEG ranges, respectively (Figure 18).

WEST COOK INLET MANAGEMENT UNIT CHINOOK SALMON FISHERIES

Fishery Description

Prior to 2000 the West Cook Inlet Management Unit (WCIMU) extended south from the mouth of the Susitna River to the West Foreland of Cook Inlet (Figure 19). Beginning in 2000 it was expanded to include all waters along the westside of Cook Inlet to the latitude of the southern tip of Chisik Island (lat 60°05′42″ N). Streams in the WCIMU, with the exception of the Chakachatna-McArthur and the Beluga River drainages, are relatively small clearwater coastal drainages that originate in the Alaska Range, the Aleutian Range, or slopes of Mount Susitna. The Chakachatna-McArthur and Beluga River drainages are largely glacial and receive minor use by Chinook salmon anglers. Beginning in 2000, the data in this report reflect harvest, effort and catch data from the expanded management unit.

The Chuitna River is the WCIMU's most prominent Chinook salmon sport fishery (Table 31). Streams south of the West Foreland, namely the Kustatan River and Polly Creek, support small returns of Chinook salmon and generate a small Chinook harvest. Stocks from the WCIMU are also harvested in Upper Cook Inlet commercial salmon fisheries and a subsistence fishery located near the village of Tyonek (Table 16).

Chinook salmon begin to arrive in the WCIMU during late May and the peak of most fisheries occurs in mid to late June.

Access to the coastal fisheries of the WCIMU is by air or water only; there is no road link to the Southcentral Alaska highway system. Helicopters are used to access the upper reaches of these streams, and airplane combined with vehicle to access the lower reaches. A road network, built to facilitate oil and gas exploration and the timber industry, does exist in the Tyonek/Beluga area. Several gravel aircraft landing strips are present and a few roads also serve as runways. The village of Tyonek, with a population of nearly 300, is the area's primary population center.

Historical Harvest and Escapement

The total annual harvest of Chinook salmon from all streams in the WCIMU ranged from 722 to 1,227 fish and averaged 1,004 fish from 2000-2004 (Table 22).

In the mid-1990s, escapement goals were not met for some West Cook Inlet streams (Figure 20). The reduced abundance of spawning Chinook salmon in WCIMU is probably due to increased sport harvest and flood-related mortality of eggs and juveniles in 1986. Inspection of the West Cook Inlet coastal streams after an October 1986 flood revealed substantial streambed scouring and channelization. In association with flooding, there was severe erosion, landslides and subsequent deposition of earth and debris into the streams. After the flood in 1986, Chinook salmon escapement goals weren't met in all major West Cook Inlet tributaries until 1997 (Figure 20). Since then WCIMU Chinook salmon escapement index counts have remained within established SEG ranges with the exception of Theodore River in 2004 and 2005; although these escapements did not reach the lower end of the SEG range (500 fish) they were close (Table 32).

Fishery Management and Objectives

SEGs for three WCIMU streams were established in 2002 (Table 17), based on historical escapement index counts. The management objective for these three streams is to achieve the escapement goal while providing maximum levels of sustained Chinook salmon fishing opportunity.

West Cook Inlet Chinook fisheries are open January 1 to June 30. The current bag and possession limit is one daily and one in possession, and a seasonal limit of five Cook Inlet Chinook salmon. Only unbaited, single-hook artificial lures are allowed in drainages between the mouth of Susitna River and West Foreland. In drainages from West Foreland to the southern tip of Chisik Island, bait is allowed after May 15. The Chuitna River is the main indicator for gauging the strength of Chinook salmon runs to WCIMU streams. The Chuitna River is open to Chinook salmon sport fishing below the old cable crossing. Both the Lewis and Theodore rivers have been catch-and-release only Chinook salmon fisheries since the 2002 BOF meeting (Appendix B1).

Fishery Performance and Escapement in 2005 and 2006

The 2005 WCIMU harvest totaled 546 Chinook salmon, substantially less than the previous 5-year mean of 1,004 (Table 22). Aerial surveys in 2005 indicated below average returns, but achievement of the SEGs established for the Chuitna and Lewis rivers. The Theodore River fell below the lower end of its SEG for the second consecutive year (Figure 20).

Catch information in 2006 from anglers fishing the Chuitna River was limited due to high water conditions experienced throughout most of the season. WCIMU anglers had an estimated harvest of 1,038 Chinook salmon in 2006, which is slightly better than the recent 5- and 10-year means (Table 31). An escapement index survey flown in late July indicated an average run for 2006. The Chuitna, Theodore, and Lewis rivers were all within their SEG ranges in 2006 (Table 32).

COHO SALMON FISHERIES

AREAWIDE OVERVIEW

Areawide Historical Harvest and Escapement

Sport harvests of coho salmon in the Northern Cook Inlet Management Area (NCIMA) ranged from 17,206-105,252 fish from 1977-2004, and averaged 91,305 fish during the last 5 years (Table 33). From 2000-2004 NCIMA harvests accounted for 20% of the coho salmon harvests in Southcentral Region and 12% of the statewide harvests (Table 33). Within the NCIMA, the Knik Arm Management Unit (KAMU), which includes Little Susitna River, had the largest coho salmon harvest through 2004 with the exception of 1999 and 2000 when coho harvests from Eastside Susitna Management Unit (ESMU) surpassed it. The ESMU coho harvest is usually a close second followed by the Westside Susitna Management Unit (WSMU). The West Cook Inlet Management Unit (WCIMU), with fewer accessible streams, has the smallest average coho salmon harvest. Harvests of coho salmon in KAMU are primarily from Little Susitna River while harvests from other management units come from several river systems (Tables 34 to 37).

Areawide Fishery Management and Objectives

Management of coho salmon in the NCIMA has undergone numerous changes (Appendix B3). Each season, management strategies for NCIMA coho salmon are implemented as the stocks enter Cook Inlet and are caught by the commercial and sport fisheries.

The magnitude, catch per unit effort, and geographical distribution of the commercial harvest are indices of general run strength. Comparison between years can be difficult because commercial fishery restrictions can vary from year to year. As coho salmon enter fresh water, the department

has limited ability to gauge overall run size. Until 1997, counting weirs at Little Susitna River and Deshka River provided the only quantitative measure of coho salmon abundance in NCIMA. Beginning in 1997, weirs were also operated annually in Wasilla, Cottonwood, and Fish creeks to monitor their coho salmon runs. Wasilla Creek and Fish Creek weirs were discontinued after 2003 and Cottonwood Creek weir ceased operations after 2004. The Fish Creek weir currently operates at about rm 3.0 to count the sockeye salmon *O. nerka* escapement only and is removed about August 15, halfway through the historical coho salmon run. Yentna River sonar and foot and aerial index counts for a few streams also contribute information about relative abundance. Within the NCIMA, nine index areas are surveyed annually by foot: Yellow Creek (Matanuska River), McRoberts and upper Jim creeks (Knik River), Cottonwood and Wasilla creeks (Knik Arm), and Rabideux, Birch, Question, and Answer creeks (Susitna River).

A creel survey to estimate coho salmon harvest and fishing effort was conducted at Little Susitna River from 1982 through 1993. Intermittent or partial creel survey data have also been collected from other coho salmon fisheries.

Poor runs in 1997 and 1999 prompted inseason restrictions to both sport (Appendix B3) and commercial fisheries. In response to a poor return of coho salmon to Cook Inlet in 1997, emergency orders were issued to close the commercial fishery and to institute an areawide bag limit reduction and bait prohibition for wild stock sport fisheries. Restrictive action was again taken in the commercial fishery in 1998 because of a poor sockeye return. Because of the nature of the multi-species fishery, this action probably resulted in higher escapements. No additional action was required in the sport fishery during 1998, because instream coho abundance seemed to be above average. In 1999, poor returns again resulted in restrictions to the sport and commercial fisheries. Unfortunately these restrictions were made too late to increase coho salmon escapement. Low escapements of coho salmon to UCI streams prompted the governor and users to submit a request to the BOF to meet out of cycle and address this conservation problem. The BOF met in February 2000 and significant actions to both the sport (Appendix B3) and commercial fisheries were taken to reduce the overall harvest of Cook Inlet coho salmon. Since then, coho salmon returns to NCIMA streams have been mostly above average. A 100-year flood which swept much of the NCIMA during the third week of August 2006 (Appendix H) could impact future returns of coho salmon. Impact would be greatest for adults returning in 2008.

KNIK ARM MANAGEMENT UNIT: LITTLE SUSITNA RIVER COHO SALMON FISHERY

Fishery Description

Access to Little Susitna River (Figure 12) occurs at three primary locations: (1) intertidal waters of the river are accessed by boats crossing Knik Arm from the Port of Anchorage public boat launch; (2) the road-accessible Little Susitna Public Use Facility (Burma Road Access) which includes a launch and campground; and (3) private and public launches near the Parks Highway which provide access to the upper reaches of the river. The Little Susitna Public Use Facility is the most heavily used access to the river. Powerboats can travel on Little Susitna River from the mouth to the Parks Highway during periods of moderate to high water levels. However, during low flows travel is restricted to smaller jet boats between rm 28 and the Parks Highway at rm 70.

Coho salmon return to Little Susitna River primarily from mid-July through early September. Tagging studies indicate that coho salmon migrate slowly up Little Susitna River and remain available to the fishery for about 4 weeks, after which they pass the George Parks Highway Bridge into waters closed to fishing for salmon. Spawning takes place from late September through mid-October. Spawning primarily occurs upstream from the George Parks Highway in the mainstem of the river, but some spawning also occurs in tributary streams.

Stocking Program

Stocking of coho salmon occurred at Little Susitna River from 1982-1995. Beginning in 1987, returns from smolt releases started to make significant contributions to the sport harvest. The 1995 smolt release in Nancy Lake was the last stocking of hatchery-reared coho salmon for Little Susitna River. The program was terminated because it was no longer cost effective to stock Little Susitna River because of the strength of the natural run and high cost of hatchery enhancement. Details of this coho salmon stocking program are presented in the following reports: Bartlett and Conrad (1988); Bartlett and Vincent-Lang (1989); Bartlett and Sonnichsen (1990); Bartlett and Bingham (1991, 1993); Bartlett (1992, 1994, 1996a-b).

Historical Harvest and Escapement

From 1977-2004, harvest of Little Susitna River coho salmon ranged from 2,835-27,610 fish with a mean harvest of 12,332 fish (Table 34). It has been a consistent second to the Kenai River, which supports the largest freshwater coho salmon sport fish harvest in Alaska.

Prior to 1986, coho salmon escapement to Little Susitna River was indexed by ground and/or aerial surveys when water conditions permitted. Coho salmon escapements were counted at a weir in 1986 and from 1988 to the present (Table 38). In 1986 the weir was damaged for several days by floodwaters and the weir count was incomplete. Weir counts in 1997, 1999, 2005, and 2006 were also incomplete due to high water events. In 1986 and 1988-1995 the weir was operated at rm 32.5. From 1996 to the present, the weir has been operated at rm 71. Although most spawning occurs above rm 71, direct comparison of counts between these two weir sites is not possible.

During 1997 and 1999 Little Susitna River (Table 38) experienced poor coho salmon returns. However, these low returns did not appear to affect returns in subsequent years; the 2001 escapement was 30,587 coho salmon and a record 47,938 coho salmon escaped in 2002 (Table 38).

SWHS harvest estimates and escapement data indicate that coho salmon abundance at Little Susitna River fluctuates widely. Inriver returns (escapement plus sport harvest) ranged from approximately 11,881-67,216 fish from 1996-2004 (Table 39), years after the stocking program ended and for which complete escapement counts are available. This wide range of inriver returns was mostly related to run size and to a lesser extent, sport harvest. Mean inriver exploitation has varied with escapement over the same time period and averaged 45% (Figure 21).

Fishery Management and Objectives

Little Susitna River coho salmon sport fishery has been managed in accordance with the Little Susitna River Coho Salmon Management Plan (5 AAC 61.060) since 1991 and as modified following the 1992 and 1996 seasons (Appendix C1). Management objectives in the plan call for

a sustainable escapement goal (SEG) of 10,100-17,700 naturally spawning coho salmon upstream of George Parks Highway and provide coho salmon fishing opportunity from George Parks Highway downstream to tidewater without emergency restrictions.

The current bag and possession limits for Little Susitna River coho salmon (16 inches or longer) are only two per day or two in possession. Only unbaited, artificial lures are allowed at Little Susitna River from October 1-August 5. This regulation was originally designed to reduce the catch rate of early arriving nonhatchery fish; however, it remains in effect to reduce hook-and-release mortality. The hook-and-release mortality of bait-caught, ocean-fresh coho salmon has been estimated to be about 70% (Vincent-Lang et al. 1993). The management plan allows the use of bait beginning August 6. Downstream of rm 32.5 (the original weir site) anglers are required to stop fishing when they reach their bag limit of Little Susitna coho salmon. Coho salmon intended for release cannot be removed from the water. Both these regulations are intended to reduce hook-and-release mortality.

Coho salmon runs on Little Susitna River were found to be significantly correlated to coho runs other Knik Arm streams (Namtvedt and Yanusz *In prep*). However, the Little Susitna River weir at its present location (rm 71) has little potential for gauging inseason run strength in other Knik Arm streams or for inseason management of the fishery which occurs primarily in the lower 40 miles of the river. Despite its limited use for inseason management, Little Susitna weir counts were used to liberalize bag and possession limits and fishing time restrictions on Little Susitna River and Cottonwood, Fish, and Wasilla creeks in 2006 (Appendix B3).

Fishery Performance and Escapement in 2005 and 2006

During 2005 and 2006, 10,203 and 12,399 coho salmon were harvested from Little Susitna River. Both years' harvest were below the 2000-2004 mean of 17,137 fish (Table 34). The final weir count for 2005 was 16,839 coho salmon (Table 38 and Appendix J1), near the high end of the Little Susitna's SEG range of 10,100-17,700 fish (Figure 22). Coho salmon at the weir were sampled for age and sex composition and mean length-at-age in 2005 and 2006 (Table 40).

Fishing guides (Appendix I1) and anglers reported above average catches of coho salmon throughout the 2006 season in Knik Arm Management Unit despite extremely high water levels during the peak of the salmon run. Observations during the first half of the historical run were indicative of a large early run. The magnitude of the 2006 run and an earlier than average run timing led to use of the Little Susitna River weir counts (Appendix J2) to liberalize coho fisheries throughout KAMU (Appendix G). When this emergency order (EO) went into effect, the Little Susitna River flooded and the weir was submerged beneath the flood waters for the last 2 weeks in August. This resulted in an incomplete 2006 coho salmon escapement count of only 8,800 fish (Table 38). However, the Little Susitna River's SEG of 10,100-17,700 coho salmon was likely met because historical run timing suggests that at least half the run usually passes during the 2 weeks the weir was inoperable. Also, escapement index surveys on Wasilla and Cottonwood creeks, both of which closely mirror the Little Susitna River run, were above average (Table 38). Reports from anglers fishing below the weir during the flood were good despite unfavorable fishing conditions.

KNIK ARM MANAGEMENT UNIT: OTHER COHO SALMON FISHERIES

Fishery Description

The Knik Arm Management Unit (Figures 1 and 12) presently supports five significant sport coho salmon fisheries in addition to Little Susitna River: Fish Creek, Cottonwood Creek, Wasilla Creek, Jim Creek, and Eklutna Tailrace. This unit also has a personal use dip net fishery on Fish Creek and four educational permit fisheries (Knik Tribal Council, Eklutna Village, Big Lake Cultural Outreach, and Intertribal Native Leadership).

Next to Little Susitna River, Jim Creek is historically the second largest Knik Arm coho salmon sport fishery in NCIMA in terms of participation and harvest (Table 34). Jim Creek enters the glacial Knik River about 10 river miles upstream from salt water. Most sport fishing occurs at the confluence of Jim Creek and Knik River, an area locally known as Jim Creek Flats. Fishing effort and harvest rates in Jim Creek Flats area are strongly influenced by Knik River because its glacial waters can inundate the entire area. Powered and unpowered boats can access the upper reaches of Jim Creek. Jim Lake, McRoberts Creek, and upper Jim Creek (i.e., tributaries supporting large spawning populations) are the only areas closed to coho salmon fishing in the Jim Creek drainage.

Coho salmon return to Knik Arm Management Unit fisheries from late-July through August. Spawning occurs in late September to mid-October. The average weight of KAMU coho salmon, excluding those of Little Susitna River origin, is less than 6 pounds.

Stocking Program

The Eklutna Tailrace sport fishery at Eklutna Power Plant (Figure 15) was originally developed to target stocked coho salmon returning to the Cook Inlet Aquaculture Association's[6] (CIAA) hatchery located at the head of the tailrace. The nonprofit Eklutna Hatchery operated from 1981-1998. Presently fish reared at the ADF&G Fort Richardson Hatchery support the fishery which is confined to the 0.5 mi long tailrace. Sport anglers harvest stocked coho salmon, and a few wild sockeye salmon, and chum salmon in the tailrace during the coho salmon return. Salmon of Knik River and Matanuska River drainage origin are also harvested at the confluence of the tailrace and the Knik River. Current objectives of the Eklutna Tailrace stocking program are to stock 120,000 thermally marked coho salmon annually to produce a return of 7,500 adult coho salmon and generate 6,000 angler-days of effort (Loopstra 2007).

Coho salmon have been periodically stocked into other KAMU systems. Stocking of Fish and Cottonwood creeks was initiated during the late 1970s, and stocking at Jim and Wasilla creeks in the late 1980s (Whitmore et al. 1994-1996; Whitmore and Sweet 1997-1999; Rutz and Sweet 2000; Sweet and Rutz 2001; Sweet et al. 2003, 2004). Contributions of hatchery fish to the sport fish catch and harvest of these stocked streams was not evaluated.

Historical Harvest and Escapement

From 1987-1998 Knik Arm coho salmon stocks were harvested by a commercial set gillnet fishery that operated near the mouth of Fish Creek. Coho salmon harvests averaged 2,900 fish annually during this period (Whitmore et al. 1996; Whitmore and Sweet 1997-1999). BOF

[6] A nonprofit regional association, based in Kenai, AK, that is involved with hatchery management, lake fertilization, flow control structure operation, fishway management and construction, habitat surveying, and education in the Cook Inlet drainage.

action closed the Knik Arm commercial set gillnet fishery beginning in 1999 to allow higher coho and sockeye salmon escapements to KAMU streams. The total annual harvest for the five sport fisheries (Fish Creek, Cottonwood Creek, Wasilla Creek, Jim Creek, and Eklutna Tailrace) averaged 15,540 coho salmon from 2000-2004 (Table 34). Jim Creek's average harvest during this period was 9,383 coho salmon, whereas the average harvest for the three weekend-only fisheries were 590 fish (Fish Creek), 537 fish (Cottonwood Creek), and 283 fish (Wasilla Creek) (Table 34).

Escapement index surveys have been conducted on four KAMU streams: Cottonwood, Wasilla, Jim, and Yellow creeks. Historically, most Fish Creek coho salmon escapements were monitored by weir. However, from 1994-1996 and 2004-2006, the Fish Creek weir was removed prior to August 15 (i.e., before the peak of the coho salmon run). Low escapements were observed in 1997 and 1999; the 2001 return was above average and 2003 was below average (Table 38).

Fishery Management and Objectives

Fish Creek, Cottonwood Creek, and Wasilla Creek (Figure 12) fisheries are restricted primarily to intertidal areas, and they have been open to salmon fishing on weekends only (Saturday and Sunday) since 1971. Additional fishing time restrictions were added in February 1999 after poor returns to these creeks in 1997 and 1999 (Appendix B3). Motorboats are not permitted on Wasilla Creek during weekends from July 15 to August 15.

To address poor coho salmon returns to Knik Arm Management Unit in 1997 and 1999 (Table 38), the BOF in February 2000 (Appendix B3) set the bag and possession limits for all KAMU fisheries, excluding the stocked coho salmon fishery at Eklutna Tailrace, at two coho salmon 16 inches or more in length. These bag limits remain in effect today.

Historical escapement data are available for Fish, Cottonwood, and Wasilla creeks from past weirs operated on each creek from about July 20 through September 25 and foot index counts conducted annually on Cottonwood and Wasilla creeks. For Jim Creek, foot surveys are conducted on McRoberts Creek, a tributary of Jim Creek, and on Upper Jim Creek; the counts are summed to provide a total Jim Creek escapement index. However, only the McRoberts Creek counts are used in the escapement goal. Biological escapement goals set in 1994 were reevaluated in 2002 and SEGs were established for Fish, Cottonwood, and Jim creeks. The BEG for Wasilla Creek was dropped in 2002 because of a lack of historical escapement data from which to develop one. The Jim Creek SEG was based on historic escapement index counts, and the Fish and Cottonwood goals were based on average coho salmon weir counts. Wasilla and Fish Creek weirs were discontinued after 2003 and Cottonwood Creek weir after 2004. Therefore the Cottonwood and Fish Creek SEGs were subsequently dropped. Only one SEG of 450-700 fish on the Jim Creek drainage (McRoberts Creek) remains (Table 38). The management objective for these four systems is to achieve the escapement goal while providing a maximum level of sustained coho salmon fishing opportunity.

Coho salmon weir counts on Wasilla, Cottonwood, and Fish creeks and the Little Susitna River are significantly correlated (Namtvedt and Yanusz *In prep*). Little Susitna weir counts were used to liberalize bag and possession limits as well as fishing time restrictions on Little Susitna River, Cottonwood Creek, Fish Creek, and Wasilla Creek on August 19, 2006. However, area flooding, which began at the same time and continued through August, may have negated the effects of these liberalizations.

Fishery Performance and Escapement in 2005 and 2006

The total sport harvest of coho salmon in Knik Arm streams (excluding Little Susitna River) was 16,563 fish in 2005 and 27,290 fish in 2006, both above the 2000-2004 mean of 15,540 fish (Table 34). Weir and index counts of coho salmon escapements in 2005 were above average (Table 38, Appendix J3). Wasilla Creek was not surveyed due to high water (Table 37). The 2005 coho salmon return was largely the product of a strong 2001 brood year.

Limited inseason information for Fish, Cottonwood, and Wasilla creeks indicated an above average or even exceptional return in 2006. Anglers reported good catches at Jim Creek. Reports from anglers and onsite inspection by area staff indicated an average run at Eklutna Tailrace. Index survey counts in 2006 were above average (Table 38). The upper limit of the SEG for coho salmon at McRoberts Creek (Jim Creek drainage) was exceeded (Figure 22). McRoberts Creek accounting for 58% of the total index count for the Jim Creek drainage. The Fish Creek sockeye salmon weir's count of the 2006 coho salmon escapement to Fish Creek drainage through August 14th was 4,967 fish. An additional 756 coho salmon were counted, under poor counting conditions, below the weir on the day it was pulled (Appendix J4). The partial count is comparable in magnitude to years in which complete counts were made.

EASTSIDE SUSITNA AND WESTSIDE SUSITNA MANAGEMENT UNITS COHO SALMON FISHERIES

Fishery Description

A description of these management units, including access, is presented in the Chinook salmon section of this report. The Susitna River drainage supports the largest coho salmon stock within the NCIMA and the entire Upper Cook Inlet area. Coho salmon returning to Susitna River units are early-run stocks, which begin to enter these drainages about mid-July. The migration into Yentna River drainage (rm 28 of Susitna River, WSMU) normally peaks the last week in July, whereas the peak passage into Talkeetna River (rm 98 of Susitna River, ESMU) takes place 7 to 10 days later. Few coho salmon enter Susitna River after early September. Most coho salmon in the Susitna River drainage spawn between mid-September and mid-October.

All Eastside Susitna Management Unit tributaries provide fishing opportunities for coho salmon. The Deshka River and Lake Creek are the major Westside Susitna Management Unit coho salmon fisheries. Fish Lakes Creek and Talachulitna River provide modest harvests, while the Alexander Creek fishery has diminished over the past decade, possibly a result of northern pike predation on juvenile coho salmon.

Historical Harvest and Escapement

Coho salmon harvests averaged 26,123 fish in the ESMU and 18,097 fish in the WSMU from 2000-2004 (Tables 35 and 36). The contribution from the ESMU and WSMU to the total NCIMA coho salmon harvest during 2000-2004 was 28% and 20%, respectively (Table 33).

From 2000-2004, Willow Creek, Talkeetna River, and Montana Creek produced the largest coho salmon harvests in the ESMU, averaging 5,491, 5,395, and 4,670 fish, respectively, and accounting for approximately 60% of the Eastside Susitna harvest (Table 35). During the same period, Westside Susitna coho salmon harvest averaged 5,649 fish from Deshka River, 5,578 fish from Lake Creek, and 1,430 fish from Fish Lakes Creek, accounting for 70% of the WSMU coho harvest (Table 36).

Total coho salmon abundance in the Susitna River drainage has not been estimated. Abundance in portions of the drainage has been measured by sonar, fish wheel, weir, and mark-recapture methods. From 1981-1983, average coho salmon abundance was an estimated 47,000 fish in the Susitna River excluding all systems below rm 80 (Table 41). It is important to recognize that significant coho salmon returns occur in tributaries of the Susitna River downstream of rm 80. Coho salmon abundance in the Deshka River, Alexander Creek, Willow Creek, and other important coho salmon systems was not measured during the 1981-1983 studies.

Side-scan sonar and fish wheels have been used to estimate coho salmon abundance in the Yentna River from 1981-2006 (Westerman and Willette 2007a). The ADF&G, Division of Commercial Fisheries (CFD) Yentna River sonar program was designed to estimate sockeye salmon escapement utilizing sonar counters and fish wheels on opposite banks. Species apportionment of the sonar counts based on fish wheel catches are also used to calculate a coho salmon estimate. However since the offshore distribution of upstream migrating coho salmon affects the accuracy of these estimates, the Yentna River sonar coho salmon estimates are considered index counts only (Davis and King 1997). Coho salmon estimates from 1981-1984 encompassed the entire coho salmon migration. Yentna River coho salmon escapements from 1985-2006 are only partial estimates because the sonar project shut down before the end of the coho run. The number of coho salmon passing rm 80 on Susitna River exceeded the number of coho salmon entering Yentna River annually from 1981-1983 (Tarbox et al. 1983). Sonar enumeration of coho salmon entering the Yentna River drainage ranged from 6,279-92,343 fish from 1981-2004 (Table 41) with the peak occurring in 2004.

Coho salmon have been counted through a weir on the Deshka River since 1995. The weir was operated at rm 17 from 1995-1996 and at rm 7 from 1997 to 2006. During 1996 the weir was operational only through July 30, after which high water made counting fish impossible. Incomplete counts were also recorded in 1998-1999 and 2002 due to high water events (Ivey *In prep*). Estimating escapement during incomplete count years is nearly impossible as run timing for Deshka River coho is highly variable (Ivey *In prep*). Mean escapement from 2000-2004 at rm 7 was 32,234 coho salmon (Table 41). A peak escapement of 62,940 coho salmon occurred in 2004. The weir continues to be operated at this site annually.

Fishery Management and Objectives

Coho salmon sport fishing is permitted throughout the year at most sites in the ESMU and WSMU. However, portions of several ESMU fisheries are closed to salmon fishing to protect spawning fish. Closures usually include upper reaches of road accessible tributaries.

Flowing waters of major tributaries, or portions of tributaries, within the Susitna River drainage are restricted to unbaited, single-hook artificial lures throughout the year. These regulations are implemented as part of special management regulations for rainbow trout under the Cook Inlet and Copper River Basin Rainbow/Steelhead Trout Management Policy (CIRTMP) and in part under current Chinook salmon management strategies. Under CIRTMP, only unbaited artificial lures may be used from September 1 through May 15 in all flowing waters of the Susitna River drainage. Additionally, except in the Deshka River, bait is prohibited from May 15 through July 13 in waters open to Chinook salmon fishing. Exceptions have been made for fishing burbot *Lota lota* when legal burbot fishing gear is used.

In the ESMU, the bag and possession limit for coho salmon is two fish 16 inches or more in length. Bag and possession limits were increased in the WSMU at the January 2005 BOF

meeting (Appendix B3) to three fish 16 inches or more in length and six in possession, except in Alexander Creek where the two fish bag/possession limit was retained.

Coho salmon escapements are enumerated annually at Deshka River weir. Stream surveys are also conducted each year on four other streams (i.e., Rabideux, Birch, Question, and Answer creeks) to index coho escapements (Table 41). There are no SEGs within the ESMU and WSMU.

Fishery Performance and Escapement in 2005 and 2006

The 2005 sport harvest of coho salmon was an estimated 17,471 fish from the Eastside Susitna Unit, and 18,266 fish from the Westside Susitna (Table 33). The Eastside unit fell below its 5-year mean. A relatively small increase in harvest occurred in the Westside unit. The Deshka River weir count (Appendix J5) and escapement index counts for all Eastside and Westside Susitna streams, except Answer Creek, were above average in 2005 (Table 41). The 2005 sample of coho salmon at Deshka River weir was composed of 60% age-4 fish (Table 42).

Inseason catch information from ESMU anglers and guides combined with periodic observations of the sport fishery by Sport Fish staff indicated an above average return for 2006. WSMU fishing guides and anglers reported average to above average catches of coho salmon early in the season.

In 2006 the estimated sport harvest of coho salmon increased in both Susitna management units. An estimated 22,719 coho salmon were harvested in the ESMU, slightly less than the 1995-2004 mean. Harvests at Sheep Creek, Sunshine Creek, Kashwitna River, and Goose Creek all exceeded their recent 5-year average. The WSMU coho salmon harvest of 20,474 fish exceeded the 2000-2004 mean. Lake Creek, Deshka River, Yentna River, Fish Creek, and Rabideux Creek all produced strong coho harvests.

There are no department programs that monitor inseason returns of coho salmon to ESMU streams; however, index counts of coho salmon on two Eastside streams near Talkeetna (Birch and Answer creeks) were about average relative to previous years (Table 41).

In the WSMU, the final 2006 escapement count at Deshka River weir was 59,419 coho salmon, the second highest count ever recorded at this weir (Table 41). However, the actual escapement was even higher because weir operations were cut short by heavy flooding in 2006 and no counts were recorded after August 15 (Appendix J6). The Yentna River sonar estimated a record 130,952 coho salmon passed the sonar site at rm 4 in 2006. As stated earlier, this is a partial escapement estimate because coho salmon continued to run after the sonar shut down on August 12.

WEST COOK INLET MANAGEMENT UNIT COHO SALMON FISHERIES

Fishery Description

A description of this management unit, including access, is presented in the Chinook salmon section of this report. Little information is available regarding run timing of West Cook Inlet Management Unit coho salmon; however, it is assumed to be similar to Susitna River. The Chuitna and Theodore rivers provide the major fisheries north of the West Foreland, and the Kustatan River and tributaries of Big River Lakes provide the major fishery sites south of the West Foreland. Harvest levels on Big River Lakes' tributaries surpassed those of Chuitna River every year since 2003. Currently this fishery mirrors the Kustatan River in size.

Historical Harvest and Escapement

Coho salmon harvests averaged 13,810 fish in the WCIMU from 2000-2004 (Table 33). The unit's contribution to the total NCIMA was 15% during this period. The Kustatan River is the primary producer of coho salmon in WCIMU. Average harvest in this stream from 2000-2004 was an estimated 4,873 fish, accounting for approximately 35% of the harvest within this management unit (Table 37). The second and third major coho producers are tributaries of Big River Lakes, with a 2000-2004 sport harvest of 1,360 fish and the Chuitna River with 2,173 coho salmon harvested during the same period (Table 37).

During recent years ADF&G has collected no coho salmon escapement information in the West Cook Inlet Management Unit, so there is little information on coho salmon abundance. In June 2003 the lower 12 miles of Kustatan River was surveyed to evaluate its potential for a future weir site. General river characteristics observed in this area were: channel width (231 to 474 ft), channel depth (≤ 5 ft), surface velocity (about 2.3 to 2.9 ft/sec), and bottom substrate (deep fine sand throughout the survey area). The surveyors concluded that operating a weir on Kustatan River had several major obstacles (R. Yanusz, ADF&G, Palmer; personal communication). The river width would require a large weir with estimated high costs to construct it. The remote location would increase project transportation, installation, and operating costs. The soft substrate would make it extremely difficult to anchor and maintain a conventional weir. Locating the weir near salt water would increase fish handling mortality. If the weir were located within the fishery (below rm 5.5) adjustments to weir counts would be needed to allow for harvests above the weir and propeller-driven boat traffic passing through the weir. If the weir were located above the main sport fishery (rm 5.5), the proportion of the run which enters a slough at rm 5.5 (which may receive a significant portion of the Kustatan River coho run) would need to be estimated. Last but not least, no suitable camp sites were found in the lower 12 miles of Kustatan River; river banks were generally low, covered with brush, tall grass, and few trees; and all areas were susceptible to flooding. Alternative recommendations for collecting information about Kustatan River coho salmon were: consider a preliminary radiotelemetry study, periodic aerial and/or ground surveys, a mark-recapture project, and investigate alternate weir sites above rm 12.0.

Fishery Management and Objectives

The regulatory history for the WCIMU coho salmon sport fishery is presented in Appendix B3. In the WCIMU all flowing waters are closed to salmon fishing October 1-December 31. In the drainages north of the West Foreland, the bag and possession limits for coho salmon are two per day and four in possession. South of the West Foreland the limit is three per day and six in possession.

Fishery Performance and Escapement in 2006 and 2007

The estimated 2005 coho salmon sport harvest from WCIMU was 12,572 fish (Table 37), 91% of its 5-year mean. Inseason catch information received in 2006 from recreational anglers and guides indicated an average return. The West Cook Inlet coho harvest of 11,940 fish in 2006 was slightly larger than the 1995-2004 average. The largest harvests both years came from Big River Lakes and Kustatan River.

SOCKEYE SALMON FISHERIES

FISHERY DESCRIPTION

The sport fishery for sockeye salmon in NCIMA drainages is mostly incidental to harvest of other salmon. Big River Lakes, a major sockeye salmon sport fishery in the WCIMU, is growing rapidly and is currently the largest fishery in the NCIMA. The majority of the harvest in this fly-fishing-only fishery occurs at the mouth of Wolverine Creek which drains into Big River Lakes. Other directed sockeye salmon fisheries occur in the Susitna River drainage at Larson Creek (Talkeetna River drainage) in the ESMU, Lake Creek and the Talachulitna River in the WSMU, and the mouth of Nancy Lake Creek (Little Susitna River drainage) and at Jim Creek in the KAMU; harvests are generally smaller in the WCIMU.

STOCKING PROGRAM

Due to declining abundance of sockeye salmon during the early 1970s, stocking of Fish Creek with sockeye salmon was initiated in 1975 (Table 43). The Big Lake state fish hatchery supported the program through 1992 using Fish Creek broodstock. After the Big Lake Hatchery closed in 1993, stocking continued using Fish Creek broodstock reared at Eklutna Salmon Hatchery[7], a private non-profit hatchery operated by Cook Inlet Aquaculture Association (CIAA), located on Knik River in the Eklutna Power Plant tailrace. CIAA discontinued operation of the Eklutna Salmon Hatchery in 1998 following the 1997 release, at which time the program was moved to the Trail Lakes Hatchery, another CIAA facility. Beginning in 1998, CIAA began thermal marking 100% of smolt stocked into Fish Creek. The adult escapement has been sampled for thermal marks since 2001. The full complement of hatchery-marked fish was realized beginning in 2003. The wild component has declined in recent years. Estimates of hatchery contribution to the escapement are forthcoming. Current production goals are 9 million sockeye salmon eggs of Fish Creek brood, from which sockeye salmon fry and smolt are released annually into the Big Lake drainage.

HISTORICAL HARVEST AND ESCAPEMENT

Sport harvests of sockeye salmon in the NCIMA ranged from 3,140-23,235 fish during 1977-2004 and averaged 13,377 fish (Table 44). Within NCIMA, KAMU and ESMU historically accounted for the majority of the sockeye salmon harvest. The WCIMU, with fewer accessible streams, had the smallest annual sockeye harvest until about 1993 when the sport fishery at Wolverine Creek (including Big River Lakes) began to grow (Figure 23). The Little Susitna River, Knik River, and Cottonwood Creek produce most of the KAMU sockeye salmon harvests (Table 45) while ESMU harvests are predominately from Talkeetna River (Larsen Creek; Table 46). The Talkeetna River accounted for 71% of the ESMU sockeye salmon harvest from 2000-2004. Lake Creek is the largest sockeye fishery in the WSMU (Table 47). The WCIMU sockeye harvest is predominately from Wolverine Creek (Big River Lakes; Table 48). Wolverine Creek, located in Redoubt Bay Critical Habitat Area, has developed into a popular sockeye salmon fly-fishing and bear viewing area since the early 1980s. Charter operators and guides have reported actual harvest and client counts annually since 2001 (Table 49).

[7] Primarily a commercial salmon fishery stocking program; benefits to anglers were ancillary to commercial fish operations.

Sockeye salmon populations are present in numerous streams throughout the KAMU, some of which were surveyed sporadically in the past (Table 50). Escapements of sockeye salmon to Fish Creek drainage have been documented by weir counts since 1936 (Kyle and Chlupach 1990). From 1969-2004, escapement of sockeye salmon ranged from 2,705 fish in 1973 to 192,352 fish in 1984 (Table 50). Escapements were below the historical average from 1998-2001 and 2004 (Figure 24). Age, sex, and length data are collected at the Fish Creek weir annually The dominant age class is typically 4-year old (age 1.2) fish (Table 51). Bodenburg Creek, a Knik River tributary, was surveyed annually from 1968-2006, except for 1984 and 1988 (Table 52).

Escapements of sockeye salmon to Susitna River drainage have been documented annually since 1978 at the CFD Yentna River sonar site at rm 4, and at various times by CIAA weirs at Chelatna Lake (Lake Creek drainage), Larson Lake (Talkeetna River drainage), and Hewitt Lake (Yentna River drainage, Table 50). Within NCIMA, CFD has also operated a weir at Packers Creek on Kalgin Island and at Judd Lake (Yentna River drainage).

CIAA operated a weir on Wolverine Creek (Big River Lakes drainage) from 1981-1983 (Table 50). Since 2004, ADF&G has tried to collect sockeye salmon escapement data annually at Wolverine Creek with a remote camera; however, all data collected to date have been incomplete due to technical problems with equipment (Table 50).

FISHERY MANAGEMENT AND OBJECTIVES

Regulations for sockeye salmon sport fisheries in NCIMA follow general regulations for other salmon over 16 inches in length. The bag and possession limits on WSMU and WCIMU tributaries are three per day and six in possession; ESMU and KAMU tributaries are three per day and three in possession. Wolverine Creek is managed as the area's only fly-fishing-only waters June 1-July 31, within a 500-yard radius of its mouth.

The management objective for sockeye salmon in NCIMA sport fisheries is to attain established escapement goals as measured at various weirs and sonar sites while harvesting fish in excess of these escapement goals. The SEG for Fish Creek is 20,000-70,000 sockeye salmon counted through a weir. The SEG for the Yentna River is 90,000-160,000 counted by side-scan sonar at rm 4 of the Yentna River. The Yentna River also has an Optimal Escapement Goal (OEG) of 75,000-185,000 fish when returns to the Kenai River exceed 4,000,000 sockeye salmon.

Management of Fish Creek sockeye salmon has undergone many changes in conjunction with an observed decline in total escapements in recent years. During the February 2002 BOF meeting, Fish Creek sockeye salmon were designated as a stock of yield concern after demonstrating a chronic inability to meet the escapement goal, 50,000 fish at the time, over the previous 5 years (Table 50, Figure 24). At the same meeting, an SEG of 20,000-70,000 fish was recommended based on wild fish (pre-hatchery) escapements from 1938-1978 (Bue and Hasbrouck *Unpublished*). An action plan was developed, as directed by the BOF in 2002, to modify current land use patterns that may adversely affect fish habitat resource values in the Fish Creek watershed through education, increased community planning involvement, monitoring, and research to increase escapement toward the goal of achieving the SEG. Specific actions recommended for achieving this objective may be found in Sweet et al. (2004).

Litchfield and Willette (2002) found dissolved oxygen and nutrient concentrations similar to levels experienced in the early 1980s, suggesting no relationship to the decline in survival of Fish

Creek sockeye salmon. Aggregate survival (hatchery and wild fish) to the smolt life stage was ¼ the survival rates of other sockeye producing systems during the late 1980s. Further, wild survival to the smolt stage was lower than hatchery stocked fish. Two plausible explanations to overall decline in wild stock productivity were: (1) a cofferdam at Big Lake outlet could have reduced productivity of the subpopulation spawning below the dam; (2) Big Lake Hatchery operations prevented sockeye salmon from entering Meadow Creek above the hatchery in an effort to reduce potential spread of disease (Litchfield and Willette 2002). The cofferdam was removed in 2004 to improve salmon fry passage to Big Lake (Hasbrouck and Edmundson 2007).

The Fish Creek sockeye salmon stock was reevaluated at the 2005 BOF meeting where it was determined it was no longer a stock of yield concern. However, the 2004 sockeye salmon return to Fish Creek was only 32% of the 1979-2004 mean escapement (i.e., years since enhancement of the stock began; Table 50). Consequently, sockeye salmon sport fisheries on Susitna River and Fish Creek have been restricted by emergency orders (Appendix G) prohibiting retention since 2004. The Fish Creek personal use fishery has not been opened since 2001 (see the personal use section below for details). The EOs were based on low inseason escapement estimates at the Yentna River sonar and a low preseason projection in 2006 of a 190,000 sockeye salmon return to Susitna River. About half the projected sockeye run (i.e., 95,000 fish) in 2006 were expected to return to Yentna River.

FISHERY PERFORMANCE AND ESCAPEMENT IN 2005 AND 2006

The 2005 sport harvest of sockeye salmon in Knik Arm Management Unit totaled 3,460 fish (Table 44). The majority of this harvest occurred in Little Susitna River (Table 45). Sockeye harvests from the Eastside Susitna, Westside Susitna, and West Cook Inlet management units were 1,677 fish, 2,219 fish, and 4,025 fish, respectively (Table 46-48). KAMU, ESMU, and WSMU sockeye harvests fell to about half their 2000-2004 means. WCIMU exceeded its recent 5-year average harvest of sockeye salmon and most of the harvest came from Wolverine Creek (Table 49). Fish Creek and Yentna River failed to make the lower end of their SEGs in 2005 and achieved only 26 and 33% of their 10-year means, respectively (Table 50). CIAAs weir on Larson Creek also recorded a poor 2005 escapement compared to prior years (Table 50).

In 2006, anglers fishing KAMU streams reported fair sockeye salmon catches. However, based on low Yentna River sonar counts early in the season, combined with a preseason projection near the low end of the Yentna River SEG range, managers took actions to reduce the sport harvest of Susitna sockeye salmon on July 15 by prohibiting retention of sockeye salmon while fishing for other salmon species. The EO was rescinded and sport harvest resumed after the low end of the escapement goal for Yentna River was achieved on August 11, near the end of the run. The final Yentna River sonar count was 92,045 sockeye salmon, within the SEG range of 90,000-160,000 fish (Table 50). Since the EO spanned the majority of the historical run, its effect likely reduced harvest on other sockeye salmon sport fisheries in Susitna River drainage, such as Larson Creek.

In 2006, the KAMU sockeye sport harvest increased to 4,622 fish (Table 44) with the majority of the harvest coming from Knik River and Little Susitna River (Table 45). Eastside Susitna, Westside Susitna, and West Cook Inlet management units harvested 1,412 sockeye salmon, 626 sockeye salmon, and 4,993 sockeye salmon respectively (Tables 46-48). Sockeye harvests in all management units, except WCIMU, were below their 2000-2004 means. WCIMU exceeded its recent 5-year average harvest of sockeye salmon for the second consecutive year and once again Wolverine Creek produced most of the harvest (Table 49). Sockeye salmon escapements at Fish

Creek in 2006 were within the established SEG range (i.e., 20,000 to 70,000 fish; Table 50). Yentna River sockeye escapement estimate (i.e., 92,045 fish) failed to reach the lower end of its SEG in 2006. CIAA reported 56,305 sockeye salmon passed Larson Creek weir in 2006, a near-record escapement compared to prior years (Table 50).

Due to recent declines in sockeye salmon escapements to Susitna River, several new studies were implemented in 2006 to better understand sockeye salmon production in Susitna River. A 3-year capture-recapture study using a combination of fish wheels and weirs was used to estimate abundance. SFD operated fish wheels on the lower Susitna near Flathorn Lake and on the upper Susitna near Sunshine (rm 80). CFD operated fish wheels at rm 4 of Yentna River. Cook Inlet Aquaculture Association operated weirs on outlet streams of eight major sockeye-producing lakes: Chelatna, Shell, Hewitt, Judd, Larson, and Byers lakes (Table 50). The whole-drainage abundance estimate derived from the capture-recapture study will be compared to the Yentna River sockeye salmon sonar count to establish the relationship between the two and whether the sonar can be used as a reliable index in future years. Part of this project is directed at establishment of a genetic baseline for Susitna River sockeye salmon. Microsatellite and Single Nucleotide Polymorphism (SNPs) technology will be used to further our understanding of stock identification and, in turn, exploitation of Susitna River origin sockeye salmon among various fisheries. The validity of stock composition estimates generated by the currently used weighted age composition analysis method will be tested as will historical estimates evaluated (Shields and Willette 2005).

PERSONAL USE AND SUBSISTENCE FISHERIES

OVERVIEW

Brannian and Fox (1996) and Reimer and Sigurdsson (2004) provide a detailed history of subsistence and personal use salmon fishing in Upper Cook Inlet. Sockeye salmon have traditionally been the predominant species harvested in the subsistence and personal use fisheries.

Fish Creek sockeye salmon have long been used in commercial and subsistence (Engel and Vincent-Lang *Unpublished*)[8], as well as personal use, fisheries. The Knik Arm subsistence fishery was operational through 1970. In 1971 the fishery was closed because of declining sockeye salmon escapements in the Fish Creek drainage. It was reopened in 1984 and 1985, and then closed again in 1986.

The Fish Creek commercial set gillnet and personal use dip net fisheries along the northwest shore of Knik Arm were initiated by the BOF in 1986 to harvest sockeye salmon surplus to spawning and egg take needs. These fisheries continued annually, contingent upon a projected escapement of 50,000 Fish Creek sockeye salmon. The commercial gillnet fishery was closed by BOF action from 1999 through 2001, due to low returns in 1997 and 1998 (Table 50). The fishery was eliminated by the BOF in 2002 because returns were still below desired escapement levels. Mean annual harvest of sockeye salmon in the commercial gillnet fishery during this time was 23,400 fish. A personal use fishery is authorized for Fish Creek, but it has not been open since 2001.

[8] Engel, L. , and D. Vincent-Lang. *Unpublished*. Area management report for the recreational fisheries of Northern Cook Inlet. Report to the Alaska Board of Fisheries, November 1992. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

An Upper Cook Inlet Subsistence Management Plan (5 AAC 01.598) provided for a subsistence set gillnet fishery in marine waters in the Northern District of Upper Cook Inlet in 1991 and 1992. Subsistence set gillnet fishing was allowed for a total of 17 days between May 21 and September 28. Hours for the fishery were 8:00 a.m. until 8:00 p.m. The BOF repealed this plan in May 1993. The threat of a court-ordered closure of this subsistence fishery for the 1995 season caused the BOF to take action to allow the fishery to proceed as a personal use gillnet fishery. Annual harvest ranged from 3,900 fish in 1985 to 53,300 fish in 1994 with a mean harvest of 31,500 sockeye salmon (see Table 23 in Sweet et al. 2003). Coho, sockeye, and pink salmon were harvested as well. This personal use gillnet fishery was eliminated by the BOF prior to the 1996 season.

FISHERY DESCRIPTION

Current personal use fisheries in NCIMA include a sockeye salmon dip net fishery in Fish Creek and a personal use smelt *Osmeridae* fishery, which takes place primarily in Susitna River. There is also a small smelt harvest in KAMU at the mouth of Fish Creek (Table 53). Subsistence fisheries include a Tyonek Subdistrict gillnet fishery, on the west side of Cook Inlet in the Northern District, and a fish wheel fishery on the upper Yentna River near the community of Skwentna. The subsistence fish wheel fishery occurs in the mainstem Yentna River between Martin Creek and Skwentna River. Most participants are local residents from Skwentna.

HISTORICAL HARVEST AND ESCAPEMENT

The Fish Creek personal use dip net fishery sustained an annual mean harvest of 9,700 sockeye salmon from 1987-2001, ranging from 460 fish in 2001 to 37,200 fish in 1993 (Sweet et al. 2003). The fishery was closed by EO after the third day in 2001 and has not opened since. Prosecution of this fishery is dependent on projected escapements into Fish Creek, which have been mostly below average since about 1998 (Table 50).

The average Susitna River smelt harvest from 1995–2004 was about 4,959 fish and ranged from 9-16,923 fish (Table 53). The inriver return of smelt to the Susitna River drainage is thought to range in the millions with personal use harvest accounting for less than 1% of this return. In terms of harvest, this fishery is likely one of the most underutilized in the state. It is managed inseason with spot checks conducted by Palmer ADF&G staff and postseason through the SWHS. Unless increased access is provided to the Susitna River, the personal use harvest of smelt will likely remain fairly stable.

Average annual harvest in the upper Yentna River subsistence fishery was 535 total fish from 1996-2004 (Table 54). Mean harvest per permit holder was 28 fish over the same period. Sockeye salmon are the targeted species, although some coho, pink, and chum salmon are also harvested. No Chinook salmon harvest is allowed.

Chinook salmon dominate the harvest in the Tyonek subsistence fishery, with a smaller harvest of coho and sockeye salmon. Few pink and chum salmon are harvested. From 1980 to 2004, the mean Chinook salmon harvest was 1,333 fish (Table 55). The average number of permits issued during the same period was 69.

FISHERY MANAGEMENT AND OBJECTIVES

In 2002, the SEG for sockeye salmon on Fish Creek was changed from a point goal of 50,000 fish to a range of 20,000-70,000 fish (Bue and Hasbrouck *Unpublished*). Further, the Fish Creek

dip net fishery was modified under the Upper Cook Inlet Personal Use Salmon Fisheries Management Plan (5AAC 77.540). The commissioner will open the fishery from July 10 through July 31, if the department projects the escapement of sockeye salmon into Fish Creek will be above the upper end of the escapement goal of 20,000-70,000 fish. Prior to 2002, the fishery was open until closed by EO. Participants in the fishery must obtain an Upper Cook Inlet personal use permit, which also includes the Kenai River and Kasilof River personal use dip net fisheries, and the Kasilof River set gillnet personal use fishery. The annual limit is 25 fish for the head of household plus 10 fish for each additional household member, and is inclusive of all Upper Cook Inlet personal use fisheries. Permits must be returned with the total catch recorded. All Upper Cook Inlet personal use salmon fisheries close on July 31 to limit the coho salmon harvest.

The BOF established the Skwentna River Personal Use Salmon Fishery in March 1996. As a result of actions by the State of Alaska Supreme Court and the BOF, it was reinstituted as the Upper Yentna River Subsistence Salmon Fishery beginning in 1998. The open season for this subsistence fishery is July 15 through July 31, from 4:00 a.m. until 8:00 p.m. on Mondays, Wednesdays, and Fridays.

A Tyonek subsistence fishery was established in 1980. Participants are allowed to harvest all salmon species. Tyonek natives are the primary users. The season starts on May 15 and continues through October 15.

The management objective for the Fish Creek personal use fishery is to allow escapement of sockeye salmon throughout the run and to harvest fish in excess of spawning needs. There are no specific management objectives for the personal use smelt fishery, Tyonek subsistence fishery, or the Upper Yentna River subsistence fish wheel fishery. However, all fisheries are managed to provide sustained yield.

FISHERY PERFORMANCE AND ESCAPEMENT IN 2005 AND 2006

The personal use fishery on Fish Creek was not opened in 2005 or 2006 due to low sockeye salmon returns to Fish Creek drainage as measured by the Fish Creek weir. The total weir count in 2005 and 2006 was 14,215 and 32,562 fish, respectively (Table 50; Appendices J3 and J4).

The 2005 NCIMA estimated smelt harvest was 3,068 fish, approximately 33% of the 2000-2004 mean (Table 53). An estimated 71 smelt were harvested in NCIMA in 2006.

Twenty-one permits were issued for the 2005 Upper Yentna River subsistence fishery with an average harvest per permit of 13 fish, below the 1996-2004 average of 28 (Table 54). The harvest of 26 fish per permit in 2006 was close to the 5-year mean. Total harvest for 2006 was 608 fish of which 388 were sockeye salmon, 178 coho salmon, 15 pink salmon, and 27 chum salmon.

The 2005 and 2006 Tyonek subsistence gillnet salmon fishery harvest estimate totaled 1,184 and 869 fish, respectively. Harvest by species in 2006 was 836 Chinook salmon, 19 sockeye salmon, 14 coho salmon, 0 pink salmon, and 0 chum salmon (Table 55).

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 the department to issue educational fishing permits.

The Knik Tribal Council and the Native Village of Eklutna were first issued 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 the department annually. The Tyonek Subsistence Camp was issued permits from 1998 to 2000. More recently, two additional educational fisheries were added in NCIMA. Educational fishery permits were issued to the Big Lake Cultural Outreach Program in 2005 and 2006 and a permit was also issued to the Intertribal Native Leadership group in 2006. The current educational fisheries are limited to certain areas and periods of operation as described in the following Fishery Management and Objectives section. In general the Eklutna and Knik villages fish waters adjacent to their respective community. Educational fishing also takes place along the north shores of Goose Bay and Pt. MacKenzie and on Fire Island.

HISTORICAL HARVEST

The total salmon harvest by the Knik Tribal Council educational fishery averaged 307 fish annually from 1994-2004 (Table 56). The Eklutna Native Village educational fishery harvested an average of 300 salmon annually during the same period.

FISHERY MANAGEMENT AND OBJECTIVES

The objective of this fishery is to implement the provisions of the permit. 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). The open fishing season is from May 1 to September 30. The fishery can take place at the discretion of the permit holder except in the Fish Creek Terminal Harvest Area during commercial fishery openings and on Mondays or Thursdays when commercial openings are scheduled in the Northern District between Point MacKenzie and the Little Susitna River and adjacent to Fire Island. Otherwise, the fishery may be prosecuted in waters of the Northern District between Point Mackenzie and Little Susitna River and adjacent to Fire Island, and in waters within 1 mile of mean high water on the western shore of Knik Arm from the Goose Bay airstrip beach access road boat launch located on the north shore of Goose Bay to Fish Creek. The educational fishery may not occur in the tidal channel of Fish Creek or in Fish Creek. Permits are issued on an annual basis and must be renewed each year. 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. Council and Tribal objectives for the educational fisheries include teaching and preserving the cultural and traditional subsistence way of life as well as providing food for elders and others in need.

Reports on the educational program, as required by each permit, have been submitted annually to the NCIMA biologist and compiled in the Area Management Report. Educational fishery salmon harvests are minimal and they do not affect inriver sport fisheries.

FISHERY PERFORMANCE AND ESCAPEMENT IN 2005 AND 2006

The Knik Tribal Council educational fishery salmon harvest in 2005 was 330 fish and in 2006 they harvested 315 fish. Sockeye salmon was the predominate species, with 200 fish harvested in 2005 and 197 fish harvested in 2006 (Table 56).

The educational fishery conducted by Eklutna Native Village harvested 517 salmon in 2005 and 319 salmon in 2006. Coho salmon was the primary species in their harvest with 242 fish in 2005 and 199 fish in 2006 (Table 56).

The Big Lake Cultural Outreach educational fishery began in 2005. In its first year, the group harvested a total of 348 salmon, with coho salmon (99 fish) and sockeye salmon (98 fish) comprising over half of their harvest (Table 56). In 2006, this educational fishery harvested 92 salmon and most were sockeye salmon.

The Intertribal Native Leadership educational fishery was new in 2006. Nearly 40% of their total harvest of 348 fish was sockeye salmon (Table 56).

STOCKED LAKE FISHERIES

Currently 85 lakes in NCIMA are stocked on an annual or biennial basis, including one research lake that is closed to fishing. These lakes range from 2 to 362 surface acres and are stocked with a variety of sizes and species of sport fish including rainbow trout, coho salmon, Chinook salmon, Arctic grayling, Arctic char *Salvelinus malma*, and lake trout *S. namaycush*.

In most cases stocked landlocked lakes represent new fisheries because sport fish were not present before stocking occurred. Stocked lakes benefit anglers and related businesses by providing diverse, year-round fishing opportunities and by diverting angling pressure from wild stocks. The majority of the stocking is directed toward road-accessible lakes that tend to draw entire family groups for some combination of fishing, camping, picnicking, boating, snow machining, and ice skating.

HISTORICAL STOCKING PROGRAM

The stocking program began in 1952 when two lakes received 22,000 rainbow trout fry. Eight species of salmonids have been stocked since 1952. Steelhead *O. gairdneri* from the Karluk River (Kodiak) and four strains of Alaska rainbow trout (Naknek River, Talarik Creek, Swanson River, and Big Lake), as well as rainbow trout from federal and private hatcheries located in Idaho, Montana, Oregon, and Washington, have been stocked. Landlocked salmon fisheries have been supported by coho salmon from Washington State and at least nine Alaskan egg take sources, and Chinook salmon from three Alaskan sources. Since 1979 only indigenous Alaskan fish have been stocked in the NCIMA. Arctic grayling egg take sources have been Junction Lake, Tolsona Lake, and Moose Creek. Arctic char, originating from egg takes at Aleknagik Lake, and lake trout from Paxson Lake, were first stocked in 1988.

The final egg take from Big Lake strain rainbow trout broodstock at Fort Richardson Hatchery took place in 1993. All resulting fingerlings were stocked in Big Lake drainage lakes and all remaining broodstock was stocked in Anchorage area landlocked lakes and in Big Lake.

Swanson River strain rainbow trout are the sole rainbow trout broodstock source remaining at Fort Richardson Hatchery. Beginning in 1994, Big Lake drainage lakes having intermittent outlets have been stocked with triploid all-female Swanson River strain rainbow trout.

CURRENT STOCKING PROGRAM

Rainbow trout, coho salmon, Arctic char, and Arctic grayling are now the primary species used in the stocking program. Rainbow trout comprised 53% of all fish stocked in landlocked NCIMA lakes from 2005 to 2006. Annual releases of all species into landlocked lakes during these years ranged from 715,815 to 738,949 fish (Appendix K1).

The majority of rainbow trout stocked in NCIMA are fingerlings. Most fingerlings weigh 1 to 2 g and are released in July and August. Catchable rainbow trout, weighing about 100 g, are stocked in nonproductive lakes to increase angling opportunities and help maintain good catch rates in heavily fished lakes. From 2004-2006, about 12% of the rainbow trout stocked in NCIMA were catchable size.

Coho salmon are normally stocked as fingerlings (3 to 5 g) in May. These fish achieve a harvestable size (6 to 11 in) at age 2, the year following release. Most coho salmon are either harvested or die after becoming sexually mature by age 3. Stocked salmon provide important winter fishing opportunities in the NCIMA.

Arctic grayling may be stocked in early summer as fingerlings weighing 70 to 80 g. Chinook salmon are stocked as catchables, weighing about 100 g, in early November providing winter ice fishing opportunities in three heavily fished lakes. Arctic char are stocked as catchables weighing about 100 g in May, providing more diversity for sport fishing.

STOCKING PROGRAM EVALUATIONS

Research has accompanied development of the area's stocking program since the early 1970s. The primary objective of this research has been to develop cost-effective stocking practices that provide both expanded and diverse fishing opportunities. A survey of anglers fishing stocked NCIMA lakes in 1977 revealed that 70% preferred to fish for rainbow trout, 19% desired landlocked coho salmon, and 11% listed Arctic grayling as their choice (Watsjold 1978).

Lake stocking research has also been directed toward evaluation and selection of rainbow trout broodstock, development of effective stocking densities and size of stocked fish for various lake environments, establishment of optimal time and frequency of stockings in various landlocked lake environments, evaluation of sterile coho salmon and rainbow trout for stocking lakes that have open or intermittent linkage with drainages that support wild fish, and evaluation of female diploid rainbow trout to eliminate high mortality associated with spawning males (Bentz et al. 1991). Although research indicates that the contributions from the landlocked lake stocking program have been significant to date, poor survival of stocked fish has also been documented.

Studies have also documented growth of stocked rainbow trout fingerlings released in July and August weighing 1 to 2 g. By June of the year following introduction, age 1 fingerlings will typically grow to 3 to 6 in lengths, at age 2 (6 to 11 in), at age 3 (11 to 16 in), and age 4-5 (16 in or more). Approximately 70 to 80% of the rainbow trout harvested from stocked lakes are age 2 and about 15 to 20% are age 3. Few stocked rainbow trout exceed age 5 and relatively few rainbow trout achieve harvestable size prior to age 2 (Havens et al. 1995).

Current evaluations are conducted by sampling lakes on a rotational basis due to the large number of stocked lakes in the area and limited staff time. Relative abundance, survival, growth, and species composition are summarized for about 20 lakes each year, and each evaluated about once every 5 years. Data collected are used to evaluate stocking plans and update the Matanuska-Susitna Valley lakes fishing forecast.

FISHERY MANAGEMENT AND OBJECTIVES

The primary objective of the stocking program is to provide additional fishing opportunities in a cost effective manner on a sustainable basis by stocking lakes with sport fish that are indigenous to Alaska. An additional objective is to reduce effort on the area's wild stocks and ensure that stocking does not negatively impact wild stock genetics or other fisheries. All stocking is conducted in accordance with guidelines set forth in the Statewide Stocking Plan for Recreational Fisheries[9].

Current lake stocking practices follow guidelines set forth in a manual (Havens et al. 1995) produced to provide managers the tools necessary to effectively manage lakes of Southcentral Alaska based on extensive research conducted during the 1980s. Aside from stocking policies and technical procedures involved in stocking area lakes, the manual recommends stocking strains, sizes, timing, and densities; and covers multi-species compatibility, ploidy and all-female stocking options. Southcentral Alaska lakes are given stocking priority based on SWHS estimates of effort and catch/harvest, past success with respect to species survival and growth, access, and public input. The Statewide Stocking Plan for Recreational Fisheries[9] is a 5-year stocking document which is updated annually to reflect stocking needs based on prioritization. However, actual hatchery production dictates the numbers of fish that can be stocked into lakes each year.

Presently there are three lake management plans in the Statewide Stocking Plan for Recreational Fisheries[9] that address stocking in NCIMA: Finger Lake Management Plan, Kepler-Bradley Complex Management Plan, and Matanuska-Susitna Valley Small Lakes Management Plan.

Stocked landlocked lakes fall under the maximum sustained yield management concept. Consequently, rainbow trout bag and possession limits were changed at the January 2005 BOF meeting (Appendix B4) to help assure full utilization of older fish. Current regulations are five rainbow trout daily only one over 20 inches with an annual limit of 10 fish over 20 inches. General regulations for Arctic char and Arctic grayling are five per day and five in possession. Landlocked salmon regulations are 10 per day and 10 in possession. Although stocked lakes are primarily managed for put-and-take fisheries, three stocked lakes (Long Lake in the Kepler/Bradley complex, Wishbone Lake, and X Lake) have been established for catch-and-release fishing to provide a diversity of fishing opportunity. These three lakes allow only unbaited artificial lures, and are closed November 1 to April 30.

Future management of stocked lakes faces four main issues:

(1) Loss of heat at Elmendorf and Fort Richardson Fish Hatcheries has limited the production and therefore availability of catchable size fish for stocking. The number of catchables stocked in area lakes in 2006 was less than half the number normally stocked (Appendix K1).

---

[9] ADF&G. *Unpublished*. Statewide stocking plan for recreational fisheries 2003-2007. Produced in January 2003 by Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

It was anticipated that normal catchable stocking would resume in 2007. However, since evidence of a parasite which causes whirling disease, a disease never before experienced in Alaska, was detected at Elmendorf Fish Hatchery in the fall of 2006, the stocking of potentially affected fish will be limited to fully landlocked (category 1) lakes only in 2007. Reductions in catchables in 2008 are also anticipated due to a lower number of eggs being collected in 2006. The construction of a new state operated hatchery near the existing Elmendorf Hatchery in the next 4-7 years could remedy some of the problems associated with catchable production.

(2) The current hatcheries utilize a combination of Ship Creek water and well water for fish rearing. The hatcheries are vulnerable to various fish diseases as a result. In 2005 Bacterial Kidney Disease (BKD) swept Fort Richardson Hatchery resulting in a 65% reduction in numbers of Chinook salmon stocked into Deception Creek (Willow Creek drainage) in 2006 (Appendix K1) as well as stocked lakes receiving Chinook salmon earlier than normal as all fingerling (i.e. no catchable Chinook stocked in 2006). As mentioned above, evidence of whirling disease associated DNA found at the Elmendorf Hatchery will result in the catchable stocking program being dropped in lakes with intermittent or weired outlets (category 2 and 3 lakes) beginning in 2007 until a new state hatchery is brought online. The construction of a new hatchery that uses only well water should help reduce problems with disease.

(3) Northern pike have been illegally stocked in local lakes. An invasive species program is currently underway (see northern pike section of this report) with a goal to control or eradicate northern pike in stocked lakes and to prevent future illegal stockings. The alternative to northern pike control is to discontinue or alter stocking on a case-by-case basis. Differences in lake structure with respect to available northern pike habitat and deep water refuges for stocked species warrant different approaches to management. Stocking in Big and Little No Luck lakes was discontinued. Stocking has been altered and limited to fully landlocked catchable fish only in South Rolly, Prator, and Memory lakes due to presence of northern pike (Appendix K1).

(4) The fourth issue is ongoing in our area. In the past 20 years the Mat-Su Valley population has increased enormously. Subdivisions have been developed around lakes that once had no development and very little use. Now sport fishing, wildlife viewing, and jet skiing are new activities on many of these lakes. Increasing arguments between lakefront owners and other users concerning noise and boat wakes led to the creation of Mat-Su Borough Lake Management Plans for a number of Mat-Su Valley lakes (Appendix L1). These plans were developed through a public meeting process which determined prohibited activities for each lake. As the population continues to increase the number of management plans that limit use of lakes will increase as well.

FISHERY PERFORMANCE IN 2005 AND 2006

In 2005, 74 landlocked lakes were stocked with 673,665 sport fish (Table 57). The majority of these lakes are located in the Knik Arm Management Unit and the remainder in the Eastside Susitna Management Unit. Releases in 2005 included: 380,033 rainbow trout, 173,179 Arctic char, 69,915 coho salmon, 41,627 Chinook salmon, and 8,725 Arctic grayling (Appendix K1). In 2006, an additional 282,934 rainbow trout, 153,426 Arctic char, 88,884 coho salmon, 133,962 Chinook salmon, and 56,609 Arctic grayling were released in 68 lakes (Table 57).

An estimated 26,372 angler-days of participation resulted from the area's landlocked stocking program in 2005 (Table 58), excluding effort at lakes having both stocked and indigenous game fish. The 2005 catch from stocked landlocked lakes included an estimated 41,437 rainbow trout of which 10,943 (26%) were harvested; 17,473 landlocked salmon of which 38% were harvested; 1,229 Arctic grayling of which 41% were harvested; and 4,809 Arctic char of which 31% were harvested. In 2005 the Kepler Lake Complex (including Kepler, Bradley, Canoe, Echo, Irene, and Long lakes) supported 2,203 angler-days of effort. Finger Lake supported 5,514 angler-days of effort (Table 58). Collectively, these two sites yielded approximately 29% of the effort associated with stocked landlocked lakes within the NCIMA.

In 2006, the landlocked lake stocking program provided an estimated 22,869 angler-days of participation (Table 59). The 2006 catch from stocked landlocked lakes included an estimated 33,607 rainbow trout (31% harvested), 10,286 landlocked salmon (33% harvested), 1,756 Arctic grayling (37% harvested), and 3,485 Arctic char (31% harvested). The Kepler Lake Complex (including Kepler, Bradley, Canoe, Echo, Irene, and Long lakes) supported 3,216 angler-days of effort in 2006. Finger Lake supported 6,055 angler-days of effort (Table 59). These two sites combined received approximately 41% of the effort for all stocked landlocked lakes in the NCIMA.

Rainbow trout from stocked lakes represented 25 to 28% of all rainbow trout caught and 63 to 70% of the total NCIMA harvest of this species in 2005 and 2006, respectively (Tables 58, 59, and 60).

RAINBOW TROUT FISHERIES

FISHERY DESCRIPTION

Most angling for wild rainbow trout occurs in the ESMU and WSMU (Figure 1). Wild rainbow trout fisheries of the Eastside Susitna Unit extend from Willow Creek north along the Susitna River as far as Portage Creek and they also include Talkeetna River and smaller tributaries of Chulitna and East Fork Chulitna rivers. Most eastside tributaries are coldwater streams originating in the Talkeetna Mountains. Access is primarily from the George Parks Highway and by jet boat. The WSMU includes tributaries of the Yentna River and all streams entering the Susitna River from the west (Figure 16). Westside tributaries are a mix of streams either originating out of lake systems or from the Alaska Range. Access to these fisheries is by raft, power boat, or airplane. Drop off float trips are common in shallow Westside Susitna Unit streams. Many lodges accommodate WSMU anglers.

HISTORICAL HARVEST

Rainbow trout are a highly sought after sport fish within the NCIMA. To ensure sustained yield, various research projects have been conducted. Assessment of migration and the age and length characteristics of rainbow trout stocks were the primary focus of several investigations, including stocks of Deshka River, Lake Creek, and Talachulitna River in 1989 and 1990 (Bradley 1990, 1991), Kashwitna River in 1991, Peters Creek in 1992 (Rutz 1992, 1993) and North Fork Kashwitna River in 1996. Onsite creel surveys were also conducted at Lake Creek during 1988 (Vincent-Lang and Hepler 1989) and 1989 (Bradley 1990).

There were significant differences in age composition and mean length-at-age among Susitna River tributaries sampled during 1989-1992 (Rutz 1992, 1993). Rainbow trout tagged during

1991 and 1992 indicated low numbers of trout over 510 mm in length, the size limit for trophy trout defined in the Criteria for Establishing Special Management for Trout (subsequently renamed Special Management Areas and Liberal Harvest Opportunities for Trout (5 AAC 75.210). The lack of trophy sized fish, combined with the relatively slow growth rate of Susitna River basin trout compared to trout in other Alaskan waters containing trophy trout, suggests that Susitna River stocks are not viable candidates for management as trophy fisheries (Rutz 1992).

Northern pike investigations conducted in the mid 1990s revealed the potential for a reduction of Susitna River drainage rainbow trout stocks as a direct result of northern pike colonization and proliferation throughout the area. Several lake and riverine populations of rainbow trout in the WSMU may have been severely impacted by northern pike predation (Rutz 1999; Appendix M1).

The present rainbow trout study is focused on understanding seasonal habitat usage and basic population dynamics of Susitna River trout stocks. Streams along George Parks Highway in the ESMU were given higher research priority over those in other management units because of higher angler use and increasing residential and commercial development (Appendix N1). The first phase was a radiotelemetry study in 2003 that identified some major spawning locations in the Eastside Susitna Management Unit between Willow Creek and Clear (Chunilna) Creek. In 2005, the second phase of the project focused on the Willow Creek spawning stock. It addition to learning more about seasonal habitat usage by rainbow trout, we also expect to collect information on population abundance, spawner abundance, and natural mortality.

NCIMA rainbow trout harvests ranged from 19,884 to 74,962 fish and averaged 38,875 fish from 1977 to 2004 (Table 60), accounting for 38% of the average harvest in Region II and 27% in the state. The 1995 to 2004 average sport catch of rainbow trout in the NCIMA was 152,758 fish (Table 60).

Rainbow trout harvested from KAMU accounted for approximately 72% of the total NCIMA harvest from 1977-2004. KAMU also dominates the catch. A large percentage of catch and harvest is a result of the stocked lakes program. The Little Susitna River and Big Lake produce the majority of wild rainbow trout in the KAMU. Together, they produced about 7% of the harvest and catch within the KAMU from 2000-2004 (Tables 61 and 62).

The WSMU accounted for 14% of the NCIMA harvest and the ESMU accounted for 13% from 1977-2004. Harvest of Susitna River (Eastside and Westside units combined) rainbow trout from 2000-2004 averaged 3,098 fish. Approximately 60% of the rainbow trout harvest from Susitna River drainage was from Eastside Susitna Management Unit tributaries during this time (Table 60). Only 1% of the 1977-2004 NCIMA rainbow trout harvest came from the West Cook Inlet Management Unit.

In the Eastside Susitna Unit, Willow and Montana creeks produced the largest rainbow trout harvests until 1997 (Tables 63 and 64), when the BOF designated them as catch-and-release fisheries for rainbow trout and Arctic grayling. The Deshka River and Lake Creek generally provide the largest harvests of rainbow trout among WSMU fisheries while Lake Creek and Talachulitna River usually produce the largest catches (Tables 65 and 66). In general, a comparison of long and short-term means among Susitna River tributaries shows a noticeable drop in rainbow trout harvest and an increase in catch. Increased catch rates indicate growing fisheries on Susitna River.

FISHERY MANAGEMENT AND OBJECTIVES

Management of wild rainbow trout in NCIMA has undergone numerous changes (Appendix B4). A statewide management plan (5 ACC 75.220) and policy (5 ACC 75.222) for the management of sustainable wild trout fisheries was adopted by the BOF in March 2003 as a means of uniformly managing wild trout stocks across Alaska. The goal of the policy is to protect the largely intact wild trout populations unique to Alaska by conservatively managing for optimal sustained yield. Under the optimal sustained yield concept, fishery benefits including quality of experience, diversity of opportunity, conservative consumptive harvest opportunity, and economic benefits are considered while maintaining healthy stock status (e.g. biologically desirable size compositions and abundance levels) and genetic diversity. Conservative management of wild trout in the NCIMA follows these standards: a bag and possession limit of two trout of which only one may be over 20 inches in length with an annual limit of two trout over 20 inches in length. Beginning in 1987, prior to development of statewide management standards, wild rainbow trout fisheries of NCIMA were managed under the conservative yield concept, aimed at maintaining historical size and age compositions and abundance.

In addition, many tributaries or sections of tributaries in NCIMA are designated as rainbow trout special management waters, either as trophy rainbow trout waters or as catch-and-release only waters. A major portion of the ESMU, from the junction of the Susitna and Talkeetna rivers upstream to Devils Canyon, has been managed for trophy-size trout (trout over 20 inches) since 1987. Under this strategy, only one trout 20 inches or more in length is allowed daily with a seasonal limit of two trout over 20 inches. All trout under 20 inches must be released immediately. An unbaited, single-hook lure requirement complements this strategy.

Catch-and-release rainbow trout fisheries include Talachulitna River, most of Lake Creek drainage, much of Deshka River, the Fish Creek drainage located within Talkeetna River drainage, the North Fork of Kashwitna River, and Willow and Montana creeks. Unbaited, single-hook lures are mandatory in all catch-and-release waters. Catch-and-release strategies perpetuate quality fishing rather than protect or rebuild depressed stocks (Engel and Vincent-Lang *Unpublished*)[8].

Wild trout fisheries are not supplemented with hatchery trout in the Susitna River drainage. Past public testimony has suggested little interest in the use of hatchery fish to augment wild stocks and the current stocking policy supports the public's stance. Stocked rainbow trout are generally managed for maximum sustained yield (see the Stocked Fisheries section above).

FISHERY PERFORMANCE IN 2005 AND 2006

The 2005 and 2006 harvests of rainbow trout in the Knik Arm Management Unit (14,367 and 13,524 fish, respectively) represents 63 to 59% of the 2000-2004 mean harvest for this stock (Table 60). The 2005 and 2006 catches in the ESMU (59,870 and 48,064 rainbow trout), were 23 and 38% less than the previous 5-year mean of 77,543 fish.

In 2005 and 2006, most rainbow trout harvests in the KAMU were from stocked lake fisheries: the Kepler Lake complex (3,657 and 2,419 fish), Finger Lake (1,358 and 1,566 fish), Nancy Lake complex (771 and 1,032 fish), Big Lake (752 and 1,005 fish), and Lucille Lake (391 and 996 fish respectively) (Table 61). Rainbow trout catches in KAMU during these years were highest at Kepler Lake complex (13,823 and 12,348 fish), Finger Lake (4,833 and 5,221 fish), and Big Lake (5,937 and 2,975 fish, respectively) (Table 62). The Little Susitna River rainbow

trout catches varied from 772 fish in 2005 (50% of the previous 5-year mean) to 1,583 fish in 2006 (slightly greater than the 2000-2004 mean) (Figure 25). The 2005 catch of rainbow trout in Big Lake was 5,937 fish, 18% above its previous 5-year mean of 5,045 fish (Table 62).

In the Eastside Susitna Management Unit the 2005 and 2006 harvests of rainbow trout (793 and 1,590 fish, respectively) represents 28 to 57% of the 2000-2004 mean harvest for this stock (Table 60). The 2005 and 2006 catches in the ESMU (36,188 and 38,862 rainbow trout), were 37 and 42% less than the previous 5-year mean of 61,920 fish.

Most rainbow trout in the ESMU in 2005 and 2006 were harvested at Talkeetna River (61 and 125 fish), Little Willow Creek (63 and 94 fish), Willow Creek (32 and 103 fish) and Sheep Creek (51 and 52 fish, respectively) (Table 63). During these 2 years, ESMU catches of rainbow trout were greatest at Willow Creek (10,863 and 10,032 fish), Talkeetna River (6,772 and 7,653 fish), and Montana Creek (6,151 and 7,610 fish, respectively) (Table 64).

The Westside Susitna Management Unit 2005 and 2006 harvests (339 and 1,027 fish) represents 14 and 43% of the 2000-2004 mean (Table 60). The 2005 and 2006 Westside Susitna Management Unit catches (46,575 and 44,018 fish), were both greater (124 and 117%) than the 2000-2004 average of 37,680 fish.

In the WSMU most rainbow trout were harvested in Lake Creek (209 fish) in 2005 and in Deshka River (523 fish) in 2006 (Table 65). The rainbow trout catches at Talachulitna River varied widely from an estimated catch in 2005 of 17,060 fish (2.3 times the previous 5-year mean of 7,448 fish to 2,883 fish in 2006 (Table 66).

The 2005 estimated catch on Deshka River (3,999 rainbow trout) was about 65% of the previous 5-year mean of 6,121 fish; however, the 2006 rainbow trout catch estimate for Deshka River (9,635 fish) is the highest ever recorded for this river (Figure 26).

Rainbow trout catches at Alexander Creek have been below the 2000-2004 mean (671 fish) in 4 of the last 5 years (Table 66). In 2005, the estimated catch at Alexander Creek was a record low (64 rainbow trout) (Figure 27). The rainbow trout catch at Alexander Creek was better in 2006 (402 fish) but still well below the recent 5-year mean. It is believed that northern pike predation is responsible for the decline in Alexander Creek rainbow trout catches since 1990.

NORTHERN PIKE FISHERIES

FISHERY DESCRIPTION

Northern pike are not indigenous to the NCIMA although they are north of the Alaska Range (Morrow 1980). It is believed they were illegally introduced into the area during the early 1950s (D. Rutz, ADF&G, Division of Sport Fish, Palmer; personal communication). Since then, northern pike have expanded their range both naturally and through subsequent illegal stockings. They have been reported in more than 100 lakes and more than a dozen tributaries of the Susitna River (Sweet and Rutz 2001; Appendix M1). Prior to about 1992 several of these lakes consistently produced northern pike in the trophy class range (greater than 40 inches for catch-and-release honorary certificates or 15 pounds) and it was common to find fish weighing up to 20 lb and occasionally over 30 lb. The potential for proliferation of northern pike in the Susitna Drainage is immense. Most northern pike and/or suitable pike habitat in the NCIMA are located in the lower Susitna River drainage from the headwaters of the Deshka River (Petersville Road), across the Kahiltna River to Hewitt Lake, and waters downstream from these areas to the mouth

of the Susitna River (Figure 16). In the KAMU, most pike habitat exists in a triangle created by the Susitna River and Parks Highway south of Willow (Figure 12). This area includes Nancy Lake, Big Lake, Flathorn Lake, Figure Eight Lake, and Little Susitna River drainage. Pike fisheries are expected to grow and/or develop in these areas of the NCIMA. Northern pike were documented in Big Lake and Nancy Lake in 2006 (Appendix M1). Northern pike have been documented or reported in some ESMU lakes (Appendix M1); however, suitable pike habitat in ESMU waters is very limited compared to the WSMU or KAMU.

HISTORICAL HARVEST AND CATCH

In 1977, the first year estimates were available, the harvest of northern pike in the NCIMA was only 132 fish, accounting for only 1.1% of the statewide harvest of northern pike (Table 67). Northern pike harvests slowly increased through 1983 when the harvest totaled 944 fish. Since 1984, harvest of northern pike has greatly increased. Interest in northern pike as a sport fish grew in the mid 1990s. Concerns about their increasing numbers and expanding range led to more liberalized regulations for northern pike (Appendix B5). As interest increased, harvest increased sharply (Figure 28). Pike harvests have been over 5,000 fish in all years since 1990 except 1994 and 1995. The 1995-2004 average harvest in the NCIMA was 9,434 northern pike, almost twice the historical average of 4,850 fish (Table 67).

Since 1990, the first year catch estimates were generated from the SWHS, the average catch of northern pike in the NCIMA has been about 3.5 times the harvest; however, 70% of northern pike are released by anglers (Figure 29). The first northern pike catches from the ESMU and WCIMU were documented in the SWHS in 1996 and 1993, respectively (Table 67). Previously little was known about northern pike harvest or catch from these areas other than anecdotal information.

The NCIMA northern pike harvest surpassed the Arctic-Yukon-Kuskokwim region for the first time in 1997 (Howe et al. 2001b), but AYK region northern pike catches still exceed those of NCIMA (Howe et al. 2001d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

FISHERY MANAGEMENT AND OBJECTIVES

The management objective for this fishery is to maximize harvest opportunity. The majority of the NCIMA does not have a bag or possession limit for northern pike. Note that this is in contrast to other areas of Alaska where northern pike are indigenous and are managed conservatively.

In 1997 and 2002, the BOF liberalized harvest methods in many NCIMA lakes where northern pike populations were pervasive (Appendix B5). Additional lakes may be added to this list as northern pike expand their range to new areas. In 1998 the BOF adopted a slot limit regulation for northern pike in Alexander and Trapper lakes to provide anglers the opportunity to catch large fish. The daily bag limits for northern pike were set at: less than 22 inches in length, no limit; 22-30 inches, no retention; and over 30 inches, 1 per day. The objective was to remove fish less than 22 inches in length from the population while protecting fish in the 22–30 inch range, allowing them a chance to attain a larger size when they would again be available for harvest. In 2002, the BOF repealed the slot limit for Trapper Lake. The board decided that only one lake, Alexander Lake, would be used to evaluate the effectiveness of the slot limit management strategy.

The current management strategy was based on a study conducted from 1994 to 1997 that described seasonal movements and age, length, and diet composition of northern pike in selected Susitna River tributaries (Rutz 1999). This study gathered baseline data to describe pike population structure and measure their effects on salmonid productivity in the area. Results were extrapolated to potential effects on other salmonid-producing areas of NCI (Whitmore and Sweet 1998; Appendix M1). Coho salmon productivity was found to be most adversely affected due to overlap in habitat use (Roth and Stratton 1984; Rutz 1999). Areas that once contained healthy fish populations but now contain mostly northern pike include Alexander Lake and all inlet streams into Alexander Lake, Fish Creek (Nancy Lake Recreation Area canoe system), Fish Creek (drains into Kroto Slough), and Fish Lake Creek (Yentna River drainage).

Future management of northern pike in NCIMA will follow guidelines and strategies outlined in the Management Plan for Invasive Northern Pike in Alaska[10] implemented in 2005, and the Alaska Aquatic Nuisance Species Management Plan[11]. Management will be integrated with long-term investigations and will follow the six steps identified in the Management Plan for Invasive Northern Pike in Alaska[10]: (1) detection and monitoring, (2) assessment, (3) defining management options, (4) public involvement, (5) management action, and (6) evaluation of management. Possible management strategies will depend on assessment results and will likely be tailored to specific systems.

Since the total number of waters identified for investigations outnumbers those that can be visited during one season, detection and assessment investigations are long-term and subject to prioritization. Priority for assessment work is currently given to systems most vulnerable to northern pike colonization such as anadromous and stocked waters containing suitable pike habitat. Eight areas that have been identified as high priority for northern pike assessment work are: (1) Mama Bear and Papa Bear lakes in Talkeetna, (2) Caswell Creek along Parks Highway, (3) Rabideux Creek near Susitna River bridge, (4) Big Lake system, (5) Little Susitna River drainage, (6) Jim Creek drainage, (7) Cottonwood Creek drainage, and (8) Three Mile River and lakes in the West Cook Inlet Management Unit. Northern pike were confirmed in Big Lake and Nancy Lake (Little Susitna River drainage) in 2006 during detection and general assessment work conducted from April 14-June 28 (Table 68). Although not confirmed yet, we believe northern pike may also be in Cottonwood Creek because they have been found in Anderson Lake, a lake intermittently connected to Cottonwood Creek drainage. The department has also received anecdotal reports of northern pike in Jim Creek. Because Big Lake, Cottonwood Creek, and Jim Creek have ideal pike habitat, salmonid populations in these systems can potentially be severely affected by northern pike colonization. The Little Susitna River has limited pike habitat, so the negative effects to salmonid stocks there is expected to be much less.

FISHERY PERFORMANCE IN 2005 AND 2006

The NCIMA estimated harvest of northern pike during the 2005 and 2006 seasons were 11,306 fish and 11,404 fish, respectively, both slightly above the 2000-2004 mean harvest of 10,966 fish. The KAMU and WSMU combined accounted for 80% of the pike harvest, with the remainder from the ESMU and WCIMU (Table 67). The Nancy Lake Complex, Figure Eight,

[10] ADF&G. *Unpublished*. Management plan for invasive northern pike in Alaska. Prepared in 2007 by the Southcentral Alaska Northern Pike Control Committee for the Alaska Department of Fish and Game, Anchorage. http://www.sf.adfg.state.ak.us/region2/pike/pike_management_plan.pdf.

[11] ADF&G. *Unpublished*. Alaska aquatic nuisance species management plan. Prepared in 2002 by Alaska Department of Fish and Game, Juneau. http://www.sf.adfg.state.ak.us/special/invasive/ak_ansmp.pdf

and Flathorn lakes produced approximately 79% of the KAMU mean catch from 2000–2004 (Table 69). Alexander Creek (including Alexander Lake), Fish Creek (Yentna River drainage), and Trapper Lake (Deshka River drainage) are the main producer of northern pike in the WSMU (Table 70).

ACKNOWLEDGEMENTS

Craig Baer made significant contributions to the Stocked Lakes and the Information and Education sections. Richard Price contributed information for the Fishery Access Improvements section. Drew Crawford made significant edits to this document. Margaret Leonard prepared this document for publication.

REFERENCES CITED

ADF&G (Alaska Department of Fish and Game). 1981. Adult anadromous fisheries project (June-September 1981). Susitna Hydro Aquatic Studies. Phase 1, Subtask 7.10 report. Alaska Department of Fish and Game, Anchorage.

ADF&G. 1983. Adult anadromous fish studies, 1982. Susitna Hydro aquatic studies. Phase 2, Volume 2 (Sections 1 and 2). Alaska Department of Fish and Game, Anchorage.

ADF&G (Alaska Department of Fish and Game). 2002. Division of Sport Fish strategic plan. Developed by the Division of Sport Fish Planning and Policy Analysis Unit in conjunction with the Department Leadership Team. Available at: http://www.sf.adfg.state.ak.us/statewide/stratplan/SPhome.cfm, Anchorage.

ADNR (Alaska Department of Natural Resources). 1991. Susitna Basin recreational rivers management plan. Alaska Department of Natural Resources, Division of Land, Land and Resources Section, Anchorage.

Barrett, B. M., F. M. Thompson, and S. N. Wick. 1984. Adult anadromous fish investigations: May-October 1983. Susitna Hydro Aquatic Studies. Report No. 1. Alaska Department of Fish and Game, Anchorage.

Bartlett, L. D. 1992. Creel, escapement, and stock statistics for coho salmon on the Little Susitna River, Alaska, during 1991. Alaska Department of Fish and Game, Fishery Data Series No. 92-24, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds92-24.pdf

Bartlett, L. D. 1994. Creel, escapement, and stock statistics for coho salmon on the Little Susitna River, Alaska, during 1993. Alaska Department of Fish and Game, Fishery Data Series No. 94-29, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds94-29.pdf

Bartlett, L. D. 1996a. Escapement and stock statistics for coho salmon of the Little Susitna River and selected streams of the Matanuska-Susitna Valley, Alaska, 1995. Alaska Department of Fish and Game, Fishery Data Series No. 96-39, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds96-39.pdf

Bartlett, L. D. 1996b. Escapement and stock statistics for Coho salmon on the Little Susitna River and selected Matanuska-Susitna Valley, Alaska streams during 1994. Alaska Department of Fish and Game, Fishery Data Series No. 96-16, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds96-16.pdf

Bartlett, L. D. *Unpublished* a. Biological and escapement studies of coho and sockeye salmon in the Jim Creek drainage, Knik Arm, Alaska, during 1993. Located at: Alaska Department of Fish and Game, Division of Sport Fish, 1800 Glenn Highway, Palmer.

Bartlett, L. D. *Unpublished* b. Coho and sockeye stock assessment studies in the Jim Creek drainage, Knik Arm, Alaska, during 1994. Located at: Alaska Department of Fish and Game, Division of Sport Fish, 1800 Glenn Highway, Palmer.

Bartlett, L. D., and A. E. Bingham. 1991. Creel and escapement statistics for coho salmon on the Little Susitna River, Alaska, during 1990. Alaska Department of Fish and Game, Fishery Data Series No. 91-46, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds91-46.pdf

REFERENCES CITED (Continued)

Bartlett, L. D., and A. E. Bingham. 1993. Creel, escapement, and stock statistics for coho salmon on the Little Susitna River, Alaska, during 1992. Alaska Department of Fish and Game, Fishery Data Series No. 93-32, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds93-32.pdf

Bartlett, L. D., and R. H. Conrad. 1988. Effort and catch statistics for the sport fishery for coho salmon in the Little Susitna River with estimates of escapement, 1987. Alaska Department of Fish and Game, Fishery Data Series No. 51, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds-051.pdf

Bartlett, L. D., and S. Sonnichsen. 1990. Creel and escapement statistics for coho salmon and Chinook salmon on the Little Susitna River, Alaska, during 1989. Alaska Department of Fish and Game, Fishery Data Series No. 90-59, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds90-59.pdf

Bartlett, L. D., and D. Vincent-Lang. 1989. Creel and escapement statistics for coho and Chinook salmon stocks of the Little Susitna River, Alaska, during 1988. Alaska Department of Fish and Game, Fishery Data Series No. 86, Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds-086.pdf

Bentz, R. W., Jr. 1982. Inventory and cataloging of the sport fish and sport fish waters in upper Cook Inlet. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1981-1982, Project F-9-14, 23 (G-I-D), Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/FREDf-9-14(23)G-I-D.pdf

Bentz, R. W., Jr. 1983. Inventory and cataloging of the sport fish and sport fish waters in upper Cook Inlet. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1982-1983, Project F-9-15, 24 (G-I-D), Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/FREDf-9-15(24)G-I-D.pdf

Bentz, R. W., Jr., A. C. Havens, G. H. Sanders, and C. L. Skaugstad. 1991. A summary of sport fish stocking evaluations in Alaska, 1985-1989. Alaska Department of Fish and Game, Fishery Manuscript No. 91- 7, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fms91-07.pdf

Bradley, T. J. 1990. Cook Inlet rainbow trout studies 1989. Alaska Department of Fish and Game, Fishery Data Series No. 90-60, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds90-60.pdf

Bradley, T. J. 1991. Cook Inlet rainbow trout studies 1990. Alaska Department of Fish and Game, Fishery Data Series No. 91-54, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds91-54.pdf

Brannian, L., and J. Fox. 1996. Upper Cook Inlet subsistence and personal use fisheries, report to the Alaska Board of Fisheries, 1996. Alaska Department of Fish and Game, Division of Commercial Fisheries Management and Development. Regional Information Report N0. 2A96-03, Anchorage.

CIAA (Cook Inlet Aquaculture Association). 1981. Big River Lakes pre-enhancement investigation, 1981. Cook Inlet Aquaculture Association, Kenai, Alaska.

CIAA (Cook Inlet Aquaculture Association). 1982. Big River Lakes pre-enhancement investigation, 1982. Cook Inlet Aquaculture Association, Kenai, Alaska.

CIAA (Cook Inlet Aquaculture Association). 1984. Big River Lakes pre-enhancement investigation, 1983. Cook Inlet Aquaculture Association, Kenai, Alaska.

CIAA (Cook Inlet Aquaculture Association). 1987. Shell Lake project progress report: 1986 adult enumeration, 1987 smolt enumeration. Cook Inlet Aquaculture Association, Kenai.

CIAA (Cook Inlet Aquaculture Association). 1991. Hewitt Lake sockeye salmon enhancement report for 1990. Cook Inlet Aquaculture Association, Kenai.

CIAA (Cook Inlet Aquaculture Association). 1998a. Chelatna Lake sockeye salmon enhancement progress report, 1995. Cook Inlet Aquaculture Association, Kenai.

CIAA (Cook Inlet Aquaculture Association). 1998b. Technical report, Larson Lake project. Progress Report 1984-1987. Cook Inlet Aquaculture Association, Kenai.

CIRPT (Cook Inlet Regional Planning Team). 1981. Cook Inlet regional salmon enhancement plan 1981-2000. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

REFERENCES CITED (Continued)

Davis, R. Z. 2000. Upper Cook Inlet salmon escapement studies, 1999. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A00-22, Anchorage.

Davis, R. Z., and B. E. King. 1997. Upper Cook Inlet salmon escapement studies, 1996. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A97-23, Anchorage.

Fox, J., and P. Shields. 2005. Upper Cook Inlet commercial fisheries annual report, 2004. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A05-01, Anchorage.

Groot, C., and L. Margolis, editors. 1991. Pacific salmon life histories. University of British Columbia Press, Vancouver.

Hasbrouck, J. J., and J. A. Edmundson. 2007. Escapement goals for salmon stocks in Upper Cook Inlet, Alaska: report to the Alaska Board of Fisheries, January 2005. Alaska Department of Fish and Game, Special Publication No. 07-10, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/sp07-10.pdf

Havens, A. C., T. Bradley, and C. Baer. 1995. Lake stocking manual for nonanadromous fisheries in Southcentral Alaska. Alaska Department of Fish and Game, Special Publication No. 95-2, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/sp95-02.pdf

Hepler, K. R., and R. W. Bentz. 1984. Chinook salmon population and angler user studies of upper Cook Inlet waters. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25 (G-II-M), Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/FREDf-9-16(25)G-II-M.pdf

Hepler, K. R., and R. W. Bentz. 1985. Chinook salmon population and angler use studies of Northern Cook Inlet waters. Alaska Department of Fish and Game. Federal Aid in Fish Restoration. Annual Performance Report, 1984-1985, Project F-9-17, 26 (G-II-M), Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/FREDf-9-17(26)G-II-M.pdf

Hepler, K. R., and R. W. Bentz. 1986. East Susitna Chinook salmon - West Susitna Chinook salmon. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1985-1986, Project F-10-1, 27 (S-32-7), Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/FREDf-10-1(27)S-32-7,8.pdf

Hepler, K. R., and R. W. Bentz. 1987. Harvest, effort, and escapement statistics for selected Chinook salmon (*Oncorhynchus tshawytscha*) sport fisheries in northern cook Inlet, Alaska, 1986. Alaska Department of Fish and Game, Fishery Data Series No. 8, Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds-008.pdf

Hepler, K. R., R. H. Conrad, and D. Vincent-Lang. 1988. Estimates of effort and harvest for selected sport fisheries for Chinook salmon in northern Cook Inlet, Alaska, 1987. Alaska Department of Fish and Game, Fishery Data Series No. 59, Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds-059.pdf

Hepler, K. R., A. G. Hoffmann, and D. Vincent-Lang. 1989. Estimates of effort and harvest for selected sport fisheries for Chinook salmon in northern Cook Inlet, Alaska, 1988. Alaska Department of Fish and Game, Fishery Data Series No. 85, Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds-085.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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/FedAidPDFs/fds95-24.pdf

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001a. Revised Edition. Harvest, catch, and participation in Alaska sport fisheries during 1996. Alaska Department of Fish and Game, Fishery Data Series No. 97-29 (revised), Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds97-29(revised).pdf

REFERENCES CITED (Continued)

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001b. Revised Edition. Harvest, catch, and participation in Alaska sport fisheries during 1997. Alaska Department of Fish and Game, Fishery Data Series No. 98-25 (revised), Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds98-25(revised).pdf

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001c. Revised Edition. Participation, catch, and harvest in Alaska sport fisheries during 1998. Alaska Department of Fish and Game, Fishery Data Series No. 99-41 (revised), Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds99-41(revised).pdf

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001d. Participation, catch, and harvest in Alaska sport fisheries during 1999. Alaska Department of Fish and Game, Fishery Data Series No. 01-8, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds01-08.pdf

Ivey, S. *In prep*. Deshka River Chinook and coho salmon studies, 1995-2004. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.

Jennings, G. B., K. Sundet, and A. E. Bingham. 2007. Participation, catch, and harvest in Alaska sport fisheries during 2004. Alaska Department of Fish and Game, Fishery Data Series No. 07-40, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds07-40.pdf

Jennings, G. B., K. Sundet, and A. E. Bingham. *In prep-a*. Participation, catch, and harvest in Alaska sport fisheries during 2005. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.

Jennings, G. B., K. Sundet, A. E. Bingham, and D. Sigurdsson. 2004. Participation, catch, and harvest in Alaska sport fisheries during 2001. Alaska Department of Fish and Game, Fishery Data Series No. 04-11, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds04-11.pdf

Jennings, G. B., K. Sundet, A. E. Bingham, and D. Sigurdsson. 2006a. Participation, catch, and harvest in Alaska sport fisheries during 2002. Alaska Department of Fish and Game, Fishery Data Series No. 06-34, Anchorage. http://www.sf.adfg.state.ak.us/FedAidpdfs/fds06-34.pdf

Jennings, G. B., K. Sundet, A. E. Bingham, and D. Sigurdsson. 2006b. Participation, catch, and harvest in Alaska sport fisheries during 2003. Alaska Department of Fish and Game, Fishery Data Series No. 06-44, Anchorage. http://www.sf.adfg.state.ak.us/FedAidpdfs/fds06-44.pdf

Jennings, G. B., K. Sundet, and A. E. Bingham. In prep-b. Participation, catch, and harvest in Alaska sport fisheries during 2006. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.

Kraus, F. R. 1999. Summary of public education and outreach activities conducted by the Salmon Trout Restoration Education and Aquatic Management (STREAM) program, July 1990-June 1998. Alaska Department of Fish and Game, Special Publication No. 99-3, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/sp99-03.pdf

Kyle, G. B., and R. S. Chlupach. 1990. Enhancement of Big Lake sockeye salmon (*Oncorhynchus nerka*): summary of fisheries production, 1976–1989. Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement, and Development Division Report 106 (available from: Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau).

Litchfield, V. P., and T. M. Willette. 2002. Fish Creek sockeye salmon - technical review. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 2A01-30, Anchorage.

Loopstra, D. 2007. Statewide stocking plan for recreational fisheries, 2007-2011. Alaska Department of Fish and Game, Division of Sport Fish, Sport Fish Hatchery Program, Online Report, Anchorage. http://www.sf.adfg.state.ak.us/statewide/Hatchery/

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.sf.adfg.state.ak.us/FedAidPDFs/FREDf-9-11(20)SW-I-A.pdf

REFERENCES CITED (Continued)

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.sf.adfg.state.ak.us/FedAidPDFs/FREDf-9-12(21)SW-I-A.pdf

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

Mills, M. J. 1981b. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game, Federal Aid in Fish Restoration, Annual Performance Report 1980-1981, Project F-9-13, 22 (SW-I-A), Juneau. http://www.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/FedAidPDFs/fds-052.pdf

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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/FedAidPDFs/fds91-58.pdf

Mills, M. J. 1992. 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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/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.sf.adfg.state.ak.us/FedAidPDFs/fds94-28.pdf

REFERENCES CITED (Continued)

Morrow, J. E. 1980. The freshwater fishes of Alaska. Alaska Northwest Publishing Company, Anchorage.

Namtvedt, T. B., and R. J. Yanusz. *In prep*. Coho salmon escapements at four weirs in Knik Arm, Cook Inlet, Alaska, during 1997-2003. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.

Peltz, L., and D. E. Sweet. 1992. Performance of the Chinook salmon enhancement program in Willow Creek, Alaska, 1985-1991. Alaska Department of Fish and Game, Fishery Data Series No. 92-33, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds92-33.pdf

Peltz, L. R., and D. E. Sweet. 1993. Performance of the Chinook salmon enhancement program in Willow Creek, Alaska, 1985-1992. Alaska Department of Fish and Game, Fishery Data Series No. 93-22, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds93-22.pdf

Reimer, A. M., and D. Sigurdsson. 2004. Upper Cook Inlet personal use salmon fisheries, 1996-2003. Alaska Department of Fish and Game, Fishery Data Series No. 04-31, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds04-31.pdf

Roth, K. J., and M. E. Stratton. 1984. The migration and growth of juvenile salmon in the Susitna River. Alaska Department of Fish and Game, Susitna Hydro Aquatic Studies Report Series, Report No. 7, Part 1, Anchorage.

Rutz, D., and D. Sweet. 2000. Area management report for the recreational fisheries of Northern Cook Inlet, 1999. Alaska Department of Fish and Game, Fishery Management Report No. 00-08, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr00-08.pdf

Rutz, D. S. 1992. Age and size statistics for rainbow trout collected in the Susitna River drainage during 1991. Alaska Department of Fish and Game, Fishery Data Series No. 92-26, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds92-26.pdf

Rutz, D. S. 1993. Age and size statistics for rainbow trout collected in the Susitna River drainage during 1992. Alaska Department of Fish and Game, Fishery Data Series No. 93-55, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds93-55.pdf

Rutz, D. S. 1999. Movements, food availability and stomach contents of northern pike in selected Susitna River drainages, 1996-1997. Alaska Department of Fish and Game, Fishery Data Series No. 99-5, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds99-05.pdf

Shields, P. 2007. Upper Cook Inlet commercial fisheries annual management report, 2006. Alaska Department of Fish and Game, Fishery Management Report No. 07-36, Anchorage. http://www.sf.adfg.state.ak.us/FedAidpdfs/Fmr07-36.pdf

Shields, P., and M. Willette. 2005. An estimate of the migratory timing and abundance of sockeye salmon into Upper Cook Inlet, Alaska, 2004. Alaska Department of Fish and Game, Fishery Data Series No. 05-64, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds05-64.pdf

Sweet, D., S. Ivey, and D. Rutz. 2003. Area management report for the recreational fisheries of Northern Cook Inlet, 2001 and 2002. Alaska Department of Fish and Game, Fishery Management Report No. 03-10, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr03-10.pdf

Sweet, D., S. Ivey, and D. Rutz. 2004. Area management report for the recreational fisheries of Northern Cook Inlet, 2003. Alaska Department of Fish and Game, Fishery Management Report No. 04-05, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr04-05.pdf

Sweet, D., and D. Rutz. 2001. Area management report for the recreational fisheries of Northern Cook Inlet, 2000. Alaska Department of Fish and Game, Fishery Management Report No. 01-09, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr01-09.pdf

Sweet, D. E. 1999. Performance of the Chinook salmon enhancement program in Willow Creek, Alaska, through 1996. Alaska Department of Fish and Game, Fishery Manuscript No. 99-2, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fms99-02.pdf

REFERENCES CITED (Continued)

Sweet, D. E., A. E. Bingham, and K. A. Webster. 1991. Estimates of effort and harvest for selected sport fisheries for Chinook salmon in Northern Cook Inlet, Alaska, 1990. Alaska Department of Fish and Game, Fishery Data Series No. 91-61, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds91-61.pdf

Sweet, D. E., and L. R. Peltz. 1994. Performance of the Chinook salmon enhancement program in Willow Creek, Alaska, 1985-1993. Alaska Department of Fish and Game, Fishery Manuscript No. 94-3, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fms94-03.pdf

Sweet, D. E., and K. A. Webster. 1990. Estimates of effort and harvest for selected sport fisheries for Chinook salmon in northern Cook Inlet, Alaska, 1989. Alaska Department of Fish and Game, Fishery Data Series No. 90-32, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds90-32.pdf

Tarbox, K. E., B. E. King, and D. L. Waltemyer. 1983. Cook Inlet sockeye salmon studies. Alaska Department of Fish and Game, Division of Commercial Fisheries, Anadromous Fish Conservation Act Project Report No AFC-62, Anchorage.

Tobias, T. M., and T. M. Willette. 2008a. Abundance, age, sex and size of Chinook, sockeye, coho and chum salmon returning to Upper Cook Inlet, Alaska, 2005. Alaska Department of Fish and Game, Fishery Data Series No. 08-10, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds08-10.pdf

Tobias, T. M., and T. M. Willette. 2008b. Abundance, age, sex and size of Chinook, sockeye, coho and chum salmon returning to Upper Cook Inlet, Alaska, 2006. Alaska Department of Fish and Game, Fishery Data Series No. 08-11, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds08-11.pdf

Vincent-Lang, D., M. Alexandersdottir, and D. McBride. 1993. Mortality of coho salmon caught and released using sport tackle in the Little Susitna River, Alaska. Fisheries Research 15:339-356

Vincent-Lang, D., and K. Hepler. 1989. Estimates of sport effort and catch and harvest of rainbow trout and coho salmon in Lake Creek, Alaska, during 1988. Alaska Department of Fish and Game, Fishery Data Series No. 81, Juneau. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds-081.pdf

Walker, R. J., C. Olnes, K. Sundet, A. L. Howe, and A. E. Bingham. 2003. Participation, catch, and harvest in Alaska sport fisheries during 2000. Alaska Department of Fish and Game, Fishery Data Series No. 03-05, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds03-05.pdf

Watsjold, D. A. 1978. Inventory, cataloging and population sampling of the sport fish and sport fish waters in upper Cook Inlet. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1977-1978, Project F-9-10, 19 (G-I-D), Juneau.

Watsjold, D. A. 1980. Inventory and cataloging of the sport fish and sport fish waters in upper Cook Inlet. Alaska Department of Fish and Game, Sport Fish Division. Federal Aid in Fish Restoration, Annual Performance Report, 1980-1981, Project F-9-12(21)G-I-D, Juneau. http://www.sf.adfg.state.ak.us/FedAidpdfs/FREDf-9-12(21)G-I-D.pdf

Watsjold, D. A. 1981. Inventory and cataloging of the sport fish and sport fish waters in upper Cook Inlet. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1980-1981, Project F-9-13, 22 (G-I-D),. Juneau.

Westerman, D. L., and T. M. Willette. 2007a. Upper Cook Inlet salmon studies, 2006. Alaska Department of Fish and Game, Fishery Data Series No. 07-82, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds07-82.pdf

Westerman, D. L., and T. M. Willette. 2007b. Upper Cook Inlet salmon escapement studies, 2005. Alaska Department of Fish and Game, Fishery Data Series No. 07-43, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fds07-43.pdf

Whitmore, C., and D. Sweet. 1997. Area management report for the recreational fisheries of Northern Cook Inlet, 1996. Alaska Department of Fish and Game, Fishery Management Report No. 97-3, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr97-03.pdf

REFERENCES CITED (Continued)

Whitmore, C., and D. Sweet. 1998. Area management report for the recreational fisheries of Northern Cook Inlet, 1997. Alaska Department of Fish and Game, Fishery Management Report No. 98-4, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr98-04.pdf

Whitmore, C., and D. Sweet. 1999. Area management report for the recreational fisheries of Northern Cook Inlet, 1998. Alaska Department of Fish and Game, Fishery Management Report No. 99-1, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr99-01.pdf

Whitmore, C., D. Sweet, and L. Bartlett. 1996. Area management report for the recreational fisheries of Northern Cook Inlet, 1995. Alaska Department of Fish and Game, Fishery Management Report No. 96-2, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr96-02.pdf

Whitmore, C., D. Sweet, L. Bartlett, A. Havens, and L. Restad. 1994. 1993 Area management report for the recreational fisheries of northern Cook Inlet. Alaska Department of Fish and Game, Fishery Management Report No. 94-6, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr94-06.pdf

Whitmore, C., D. E. Sweet, and L. D. Bartlett. 1995. Area management report for the recreational fisheries of Northern Cook Inlet, 1994. Alaska Department of Fish and Game, Fishery Management Report No. 95-6, Anchorage. http://www.sf.adfg.state.ak.us/FedAidPDFs/fmr95-06.pdf

TABLES

Table 1.-Number of angler-days of sport fishing effort expended by recreational anglers fishing Northern Cook Inlet Management Area waters, 1977-2006.

	Knik Arm		Eastside Susitna		Westside Susitna		West Cook Inlet [a]		NCIMA	Alaska	% by	Region II	% by
Year	Effort	% NCIMA	Effort	% NCIMA	Effort	% NCIMA	Effort	% NCIMA	Total	Total	NCIMA	Total	NCIMA
1977	81,949	48	56,651	33	29,211	17	2,735	2	170,546	1,198,486	14	828,351	21
1978	75,540	38	86,010	43	35,709	18	2,262	1	199,521	1,285,063	16	913,417	22
1979	78,411	38	78,222	38	48,362	23	2,012	1	207,007	1,364,739	15	1,014,018	20
1980	102,530	42	91,277	38	46,768	19	1,357	1	241,932	1,488,962	16	1,072,384	23
1981	105,052	52	59,854	30	35,072	17	2,263	1	202,241	1,420,172	14	1,016,731	20
1982	91,713	41	80,745	36	50,738	23	1,126	1	224,322	1,623,090	14	1,131,358	20
1983	138,389	50	67,471	24	63,919	23	6,237	2	276,016	1,732,528	16	1,212,680	23
1984	130,727	46	81,758	29	61,263	22	7,512	3	281,260	1,866,837	15	1,341,658	21
1985	122,626	43	67,764	24	77,092	27	16,455	6	283,937	1,943,069	15	1,406,419	20
1986	131,606	40	92,289	28	87,736	27	13,537	4	325,168	2,071,412	16	1,518,712	21
1987	140,167	44	77,817	24	84,448	26	16,247	5	318,679	2,152,886	15	1,556,050	20
1988	183,029	46	107,977	27	95,339	24	11,875	3	398,220	2,311,291	17	1,679,939	24
1989	146,912	41	96,864	27	96,308	27	14,851	4	354,935	2,264,079	16	1,583,381	22
1990	142,884	41	101,917	29	92,435	26	14,392	4	351,628	2,453,284	14	1,745,110	20
1991	146,605	39	113,178	30	104,072	28	13,336	4	377,191	2,456,328	15	1,782,055	21
1992	141,825	35	149,484	37	101,496	25	11,000	3	403,805	2,540,374	16	1,889,930	21
1993	118,214	32	128,382	35	106,724	29	17,993	5	371,313	2,559,408	15	1,867,233	20
1994	143,372	38	114,533	30	106,112	28	15,950	4	379,967	2,719,911	14	1,966,985	19
1995	126,154	42	102,686	34	60,177	20	12,557	4	301,574	2,787,670	11	1,985,539	15
1996	90,990	40	83,227	36	42,717	19	12,146	5	229,080	2,006,528	11	1,434,943	16
1997	95,730	39	85,228	35	50,366	21	11,218	5	242,542	2,079,514	12	1,400,983	17
1998	78,218	35	89,014	40	44,931	20	10,019	5	222,182	1,856,976	12	1,258,482	18
1999	112,642	34	133,310	40	74,374	22	14,402	4	334,728	2,499,152	13	1,659,966	20
2000	121,601	33	141,609	38	88,503	24	18,483	5	370,196	2,627,805	14	1,844,824	20
2001	111,027	35	121,039	38	73,885	23	14,205	4	320,156	2,261,941	14	1,560,562	21
2002	126,194	39	116,254	36	63,286	20	16,335	5	322,069	2,259,091	14	1,569,513	21
2003	103,978	35	112,061	37	66,882	22	16,927	6	299,848	2,219,398	14	1,535,501	20
2004	113,528	36	107,689	35	72,721	23	17,809	6	311,747	2,473,961	13	1,709,671	18
1977-2004 Mean	117,915	40	98,011	33	70,023	24	11,259	4	297,208	2,090,141	14	1,481,657	20
1995-2004 Mean	108,006	37	109,212	37	63,784	22	14,410	5	295,412	2,307,204	13	1,595,998	19
2000-2004 Mean	115,266	35	119,730	37	73,055	22	16,752	5	324,803	2,368,439	14	1,644,014	20
2005	115,763	39	87,893	29	73,971	25	20,459	7	298,086	2,463,929	12	1,712,610	17
2006	119,795	41	85,029	29	73,700	25	15,771	5	294,295	2,298,092	13	1,605,983	18

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Data include saltwater effort from outside the NCIMA as reported in the SWHS.

Table 2.-Angler-days of sport fishing effort for the Knik Arm drainage by fishery, 1977-2006.

Year	Marine	Little Susitna River	Knik River[a]	Eklutna Tailrace	Wasilla Creek	Cottonwood Creek	Big Lake drainage streams	Finger Lake	Kepler Lk Complex	Big Lake	Nancy Lk Complex	Other Lakes[b]	Other Streams	Total
1977		11,063			2,805			14,864	7,962	11,869	7,259	26,127		81,949
1978		12,127			3,446			11,502	5,730	9,865	7,647	25,223		75,540
1979		21,301			4,024	5,345		4,433	5,439	8,300	7,011	22,558		78,411
1980		22,420			5,726	9,268		6,483	8,597	12,195	9,153	28,688		102,530
1981		26,162	4,904		4,019	8,663		5,267	8,227	14,568	8,488	24,754		105,052
1982		24,020	6,653		6,261	5,186		3,514	6,943	15,371	8,615	15,150		91,713
1983	17,127	35,477	9,183		3,239	5,944		8,512	9,149	15,989	10,907	19,571	3,291	138,389
1984	4,316	48,517	9,369	3,413	3,547	7,144		6,843	9,770	12,916	7,194	15,892	1,806	130,727
1985	692	41,643	8,970	2,995	3,115	4,560	903	4,259	9,226	16,299	5,960	22,243	1,761	122,626
1986	983	45,770	13,015	8,549	3,387	5,653	2,641	5,589	9,544	14,559	6,520	13,147	2,249	131,606
1987	1,974	35,659	6,990	11,663	2,173	2,934	2,898	10,830	14,379	17,693	15,125	16,187	1,662	140,167
1988	1,239	49,731	23,229	13,188	2,228	4,056	3,110	8,240	18,245	10,077	12,099	35,159	2,428	183,029
1989	2,352	54,798	11,141	10,342	2,406	3,069	4,204	4,840	12,821	12,748	8,349	19,024	818	146,912
1990	2,494	40,159	17,878	7,618	2,679	3,056	3,936	6,737	13,644	11,798	9,973	19,949	2,963	142,884
1991	3,147	50,838	13,736	5,892	2,893	1,623	3,693	5,998	11,337	13,759	10,239	20,043	3,407	146,605
1992	1,540	49,304	8,856	4,279	1,110	1,974	4,534	5,506	15,556	11,545	12,299	24,723	599	141,825
1993	2,116	42,249	6,824	4,523	1,774	3,077	2,976	7,843	7,461	8,446	9,393	20,606	926	118,214
1994	1,244	45,149	9,658	8,974	2,226	3,230	3,496	9,434	11,832	9,987	10,197	25,063	2,882	143,372
1995	940	41,119	10,893	11,453	1,373	2,598	2,256	7,814	10,885	6,979	9,723	18,928	1,193	126,154
1996	966	24,575	7,561	6,448	1,386	1,783	934	8,962	7,431	7,290	5,140	17,464	1,050	90,990
1997	672	27,883	5,349	3,835	1,188	2,070	1,104	7,242	8,139	9,644	7,275	19,944	1,385	95,730
1998	952	22,108	5,272	5,100	1,171	3,454	2,256	4,286	6,500	6,143	4,861	15,729	386	78,218
1999	250	30,437	6,860	6,150	990	3,506	2,182	8,076	9,149	8,418	7,899	26,981	1,744	112,642
2000	447	39,556	10,975	7,938	328	1,265	1,408	7,786	8,708	7,587	8,670	25,519	1,414	121,601
2001	622	33,521	13,028	10,166	419	2,627	1,670	6,902	8,439	5,555	6,789	20,831	458	111,027
2002	1,218	40,346	17,989	11,767	1,037	1,534	2,776	7,094	6,108	5,176	5,659	24,612	878	126,194
2003	435	31,993	13,474	8,423	757	2,238	1,182	5,096	6,470	5,226	6,653	21,267	764	103,978
2004	184	33,819	19,342	9,588	1,079	3,282	2,029	4,713	6,958	4,430	5,501	21,954	649	113,528
1977-2004 Mean	2,087	35,062	10,881	7,729	2,385	3,813	2,509	7,095	9,452	10,515	8,379	21,691	1,578	117,915
1995-2004 Mean	669	32,536	11,074	8,087	973	2,436	1,780	6,797	7,879	6,645	6,817	21,323	992	108,006
2000-2004 Mean	581	35,847	14,962	9,576	724	2,189	1,813	6,318	7,337	5,595	6,654	22,837	833	115,266
2005	802	27,490	19,605	19,339	684	1,484	1,461	5,514	4,719	6,481	4,391	22,989	804	115,763
2006	323	28,547	25,271	20,465	869	3,867	948	6,055	5,684	5,616	7,279	14,225	646	119,795

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Knik River and tributaries including Jim Creek.

[b] Includes effort for lakes and streams, 1977-1982.

Table 3.-Angler-days of sport fishing effort for the Eastside Susitna River drainage by fishery, 1977-2006.

Year	Willow Creek	Little Willow	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River[a]	Other Streams	Lakes[b]	Total
1977	14,024	4,583			8,112		14,268			3,163		12,501	56,651
1978	22,682	5,687			11,869		25,762			5,040		14,970	86,010
1979	18,911	5,171		3,710	6,728		22,621		3,317	5,125		12,639	78,222
1980	29,011	8,190		4,963	8,014		19,287		5,208	4,388		12,216	91,277
1981	14,060	3,845		3,860	6,936		16,657		3,062	3,584		7,850	59,854
1982	19,704	5,579		5,101	9,093		23,645		3,787	3,856		9,980	80,745
1983	13,405	2,791	1,344	5,048	6,237		17,109		3,429	7,564	5,460	5,084	67,471
1984	21,649	5,872	2,995	4,952	6,106	1,305	19,239		3,229	9,252	4,417	2,742	81,758
1985	16,282	5,705		5,289	2,844		20,028		4,144	7,213	4,162	2,097	67,764
1986	10,733	4,490	2,908	4,362	10,091	1,993	20,268	2,010	8,124	8,638	10,566	8,106	92,289
1987	13,583	5,850	2,717	3,332	9,019	1,865	13,745	2,046	3,912	17,096	2,101	2,551	77,817
1988	27,758	10,768	1,454	4,529	18,699	2,947	16,498	2,074	4,129	12,733	3,648	2,740	107,977
1989	23,811	5,285	6,320	4,029	13,010	3,058	16,179	767	4,592	15,218	1,907	2,688	96,864
1990	32,200	6,505	2,313	6,103	11,392	3,714	11,284		4,485	18,299	3,287	2,335	101,917
1991	32,520	7,792	1,981	7,816	14,872	2,811	10,745	1,056	5,788	18,466	6,172	3,159	113,178
1992	50,958	9,240	2,177	6,391	17,509	4,908	18,437	1,366	4,833	21,478	6,347	5,840	149,484
1993	41,218	6,422	1,600	5,033	12,636	3,423	21,615	655	4,094	22,580	5,161	3,945	128,382
1994	34,362	6,744	1,957	5,842	11,526	3,300	16,220	1,092	4,265	18,642	6,134	4,449	114,533
1995	29,392	6,386	1,460	3,912	9,758	1,993	16,303	826	2,756	19,358	6,019	4,523	102,686
1996	23,508	5,890	1,140	1,473	8,112	1,796	13,485	506	3,028	18,386	2,907	2,996	83,227
1997	21,511	5,829	1,916	1,317	9,172	3,151	14,111	525	1,585	18,133	3,765	4,213	85,228
1998	23,920	4,987	1,663	2,983	9,716	2,510	14,952	1,063	2,374	16,713	5,130	3,003	89,014
1999	37,384	8,596	2,004	2,764	17,188	3,561	22,382	1,226	3,805	21,988	7,299	5,113	133,310
2000	44,648	9,028	2,331	4,385	12,660	3,266	26,070	1,426	5,487	21,324	5,744	5,240	141,609
2001	34,979	7,059	2,320	2,637	11,742	2,339	22,454	1,065	1,955	21,590	8,440	4,459	121,039
2002	31,997	7,189	2,648	2,562	12,853	2,845	22,008	446	3,192	21,548	4,870	4,096	116,254
2003	29,668	4,815	5,028	3,018	12,878	2,965	20,794	666	3,616	19,335	4,387	4,891	112,061
2004	26,722	5,031	1,906	902	10,310	2,645	22,860	881	2,820	19,632	8,161	5,819	107,689
1977-2004 Mean	26,450	6,262	2,390	4,089	10,682	2,820	18,537	1,094	3,885	14,298	5,277	5,723	98,011
1995-2004 Mean	30,373	6,481	2,242	2,595	11,439	2,707	19,542	863	3,062	19,801	5,672	4,435	109,212
2000-2004 Mean	33,603	6,624	2,847	2,701	12,089	2,812	22,837	897	3,414	20,686	6,320	4,901	119,730
2005	24,181	6,566	1,626	2,395	8,521	2,039	16,083	1,356	4,089	16,172	1,902	2,963	87,893
2006	21,927	4,536	2,489	1,767	9,437	2,593	19,657	779	3,732	13,043	2,800	2,269	85,029

Source Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Talkeetna River and tributaries including Clear Creek.

[b] Includes effort for lakes and streams, 1977-1982.

Table 4.-Angler-days of sport fishing effort for the Westside Susitna River drainage by fishery, 1977-2006.

Year	Alexander Creek	Deshka River	Rabideux Creek	Moose Creek	Yentna River	Peters Creek	Lake Creek	Fish Creek[a]	Talachulitna River	Judd Lake	Shell Lake	Whiskey Lake	Hewitt Lake	Other Streams[b]	Other Lakes[b]	Total
1977	5,991	3,852					6,946		1,342	317	566	287	436	7,269	2,205	29,211
1978	6,914	9,111					8,767		732	151	302	129	172	6,011	3,420	35,709
1979	8,284	13,236					13,881		2,185	519	263	189	613	7,577	1,615	48,362
1980	6,812	19,364					8,325		2,542	814	414	29	471	4,998	2,999	46,768
1981	6,892	13,248					6,471		1,378					4,963	2,120	35,072
1982	10,748	18,391					8,649		1,911		444	171		7,012	3,412	50,738
1983	9,425	23,174					14,749		4,566	155	913			6,284	4,653	63,919
1984	7,261	20,561				786	14,739		3,848	1,255				9,652	3,161	61,263
1985	12,884	29,322					14,323		1,682					13,159	5,722	77,092
1986	19,113	29,739		1,193			15,626	3,838	2,186	963				13,753	1,325	87,736
1987	13,220	30,008					16,842	6,918	3,242	2,698				9,571	1,949	84,448
1988	19,591	32,160				2,001	16,007	5,784	8,040	588				8,047	3,121	95,339
1989	14,651	39,432	550	345	656	914	14,061	8,035	8,698	400				5,565	3,001	96,308
1990	19,863	32,082	1,024		849	1,318	17,914	4,857	5,184					5,430	3,914	92,435
1991	26,235	38,011	459		1,003	2,466	14,726	3,820	6,589	544				6,560	3,659	104,072
1992	18,085	37,056	992		1,985	2,198	16,869	3,873	5,153				800	9,586	4,899	101,496
1993	21,660	30,643			2,110	1,263	26,113	6,454	5,613					10,587	2,281	106,724
1994	25,608	19,267			3,936	1,195	27,958	7,011	7,292					10,113	3,732	106,112
1995	10,648	4,808			2,728	1,465	15,808	4,729	6,354					10,790	2,847	60,177
1996	6,062	5,246			1,293	981	12,091	2,158	5,151					9,735		42,717
1997	7,514	5,110			1,760	606	16,033	3,028	5,651					10,664		50,366
1998	6,538	11,574			889		11,260	2,618	3,224					8,828		44,931
1999	11,187	20,088			3,259	536	17,991	5,107	7,680					8,526		74,374
2000	11,733	30,997			5,474	1,057	21,671	3,850	6,415					7,306		88,503
2001	9,360	23,734	417		5,035	396	20,559	4,026	5,813					4,429	116	73,885
2002	10,169	20,362	737		4,091	853	14,933	3,672	3,995					4,010	464	63,286
2003	6,855	24,904	520		1,866	681	19,857	3,320	4,391					3,614	874	66,882
2004	5,679	28,653	894	355	3,319	606	20,898	3,594	3,631	344	744		110	626	3,268	72,721
1977-2004 Mean	12,107	21,933	699	631	2,516	1,137	15,502	4,563	4,446	729	521	161	434	7,667	2,816	70,023
1995-2004 Mean	8,575	17,548	642	355	2,971	798	17,110	3,610	5,231	344	744		110	6,853	1,514	63,784
2000-2004 Mean	8,759	25,730	642	355	3,957	719	19,584	3,692	4,849	344	744		110	3,997	1,181	73,055
2005	3,907	26,638	365	19	5,524	961	21,844	3,438	4,740		1,082		539	3,720	1,194	73,971
2006	4,337	31,015	727	271	6,679	620	19,801	2,084	4,455	52		53	112	2,530	964	73,700

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Fish Lake drainage (Yentna River drainage).

[b] May include effort from West Cook Inlet drainage waters.

Table 5.-Angler-days of sport fishing effort for the West Cook Inlet drainage by fishery, 1977-2006.

Year	Chuitna River	Beluga River	Theodore River	Lewis River	Kustatan River	Polly Creek	Susitna R.-N. Foreland	South of N. Foreland	Big River Lakes [a]	Polly Cr., Crescent R. Beach	Other	Total
1977	1,355		1,037	343								2,735
1978	1,185		905	172								2,262
1979	1,069		912	31								2,012
1980	614		700	43								1,357
1981	1,364		899									2,263
1982	751		375									1,126
1983	4,290		448		1,499							6,237
1984	2,342		3,497		1,673							7,512
1985	3,381		5,601	1,023	4,335					2,115		16,455
1986	3,532		4,786		2,737					2,482		13,537
1987	3,169		6,194	1,231	3,622					2,031		16,247
1988	1,637		4,056	837	3,674					1,671		11,875
1989	2,666	866	4,113	1,114	3,522				370	962	1,238	14,851
1990	4,443		3,626	1,285	3,724					1,314		14,392
1991	2,454		2,841	496	6,674					871		13,336
1992	2,817	512	2,091		4,150	747				683		11,000
1993	2,966		2,528	400	5,403			2,379	535	1,117	2,665	17,993
1994	2,236		3,492		3,972			1,283	653	604	3,710	15,950
1995	2,205		2,425		3,684	688		845	659	617	1,434	12,557
1996	2,505		1,811		2,699	342	1,075	855	1,251	541	1,067	12,146
1997	2,210		521		2,684		1,738	882	976	572	1,635	11,218
1998	3,221		280		2,749		1,139	862	729	329	710	10,019
1999	2,440		488		3,234		2,333	2,623	1,341	677	1,266	14,402
2000	4,104		1,452		4,393		2,593	2,450	2,504	987		18,483
2001	3,580		1,347		3,336		2,027	2,615	902	398		14,205
2002	2,864		1,450	237	5,254		2,340	1,686	678	499	1,327	16,335
2003	2,422		618	310	3,915		945	2,517	3,497	386	2,317	16,927
2004	2,165	777	828	428	2,854	233	2,135	1,482	3,322	608	2,977	17,809
1977-2004 Mean	2,500	718	2,119	568	3,627	503	1,814	1,707	1,340	973	1,850	11,259
1995-2004 Mean	2,772	777	1,122	325	3,480	421	1,814	1,682	1,586	561	1,592	14,410
2000-2004 Mean	3,027	777	1,139	325	3,950	233	2,008	2,150	2,181	576	2,207	16,752
2005	2,053	233	669	310	2,649		2,423	1,194	5,365	2,000	3,563	20,459
2006	1,279	1040	337	228	2,515	78	3,155	1,955	4,957		227	15,771

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b). 2006 SWHS estimates from ADF&G, SFD, RTS, Anchorage. Unpublished database of survey estimates, accessed 7/24/2008. Project leader Gretchen Jennings.

[a] Big River drainage, including Wolverine Creek.

Table 6.-Northern Cook Inlet Management Area sport fish harvest by management unit, 1977-2006.

	Knik Arm		Eastside Susitna		Westside Susitna		West Cook Inlet		NCIMA	Alaska	% by	Region II	% by
Year	Harvest	% NCIMA	Harvest	% NCIMA	Harvest	% NCIMA	Harvest	% NCIMA	Total	Total	NCIMA	Total	NCIMA
1977	67,979	43	49,274	31	36,096	23	3,510	2	156,859	2,300,332	7	1,929,407	8
1978	66,419	31	96,469	46	45,208	21	3,070	1	211,166	2,399,472	9	1,992,212	11
1979	68,658	41	50,476	30	46,939	28	2,453	1	168,526	2,502,213	7	2,044,813	8
1980	102,015	41	93,271	38	50,474	20	1,798	1	247,558	2,627,312	9	2,118,543	12
1981	109,824	57	46,558	24	32,153	17	3,631	2	192,166	2,528,056	8	2,052,719	9
1982	82,976	44	58,998	31	46,189	24	1,814	1	189,977	2,828,706	7	2,222,354	9
1983	92,689	50	45,330	24	41,855	23	5,596	3	185,470	3,086,280	6	2,409,876	8
1984	94,974	45	62,071	29	48,947	23	6,145	3	212,137	3,115,966	7	2,517,185	8
1985	104,136	51	39,684	20	47,868	24	10,853	5	202,541	3,096,044	7	2,469,836	8
1986	90,264	39	73,083	32	59,300	26	8,031	3	230,678	3,163,433	7	2,609,304	9
1987	98,373	46	47,548	22	57,252	27	11,400	5	214,573	3,207,138	7	2,584,420	8
1988	156,784	53	62,693	21	67,567	23	10,954	4	297,998	3,483,306	9	2,841,033	10
1989	115,070	49	51,426	22	55,361	24	11,592	5	233,449	3,213,867	7	2,519,404	9
1990	90,035	46	44,360	23	52,846	27	9,713	5	196,954	3,033,301	6	2,428,172	8
1991	103,384	44	51,068	22	66,514	29	11,492	5	232,458	3,311,513	7	2,633,148	9
1992	88,267	37	76,569	32	62,768	26	9,275	4	236,879	3,234,048	7	2,675,940	9
1993	90,017	39	67,907	30	55,215	24	15,384	7	228,523	2,989,720	8	2,387,224	10
1994	87,547	44	51,984	26	47,891	24	13,583	7	201,005	3,349,821	6	2,689,718	7
1995	57,182	39	42,845	29	37,688	25	10,741	7	148,456	2,909,979	5	2,396,666	6
1996	88,461	45	53,672	27	35,940	18	17,522	9	195,595	2,988,024	7	2,276,839	9
1997	69,199	45	37,909	24	36,110	23	11,755	8	154,973	2,873,020	5	2,167,689	7
1998	64,060	38	51,514	30	40,329	24	14,604	9	170,507	2,678,120	6	1,984,330	9
1999	70,384	32	66,153	30	70,806	32	15,120	7	222,463	3,093,608	7	2,163,862	10
2000	102,831	40	75,496	29	61,252	24	19,202	7	258,781	3,338,071	8	2,547,285	10
2001	79,920	37	59,205	27	57,173	26	19,582	9	215,880	3,078,100	7	2,228,839	10
2002	102,112	48	53,912	25	40,031	19	17,752	8	213,807	3,216,432	7	2,401,826	9
2003	68,332	37	41,764	23	52,462	29	21,416	12	183,974	3,052,136	6	2,177,555	8
2004	77,563	38	42,991	21	61,552	30	21,884	11	203,990	3,332,948	6	2,350,240	9
1977-2004 Mean	88,909	43	56,937	27	50,492	24	11,067	5	207,405	3,001,106	7	2,350,730	9
1995-2004 Mean	78,004	40	52,546	27	49,334	25	16,958	9	196,843	3,056,044	6	2,269,513	9
2000-2004 Mean	86,152	40	54,674	25	54,494	25	19,967	9	215,286	3,203,537	7	2,341,149	9
2005	65,193	38	36,909	22	49,444	29	17,936	11	169,482	3,235,176	5	2,173,207	8
2006	75,229	41	41,868	23	45,933	25	18,662	10	181,692	2,710,560	7	1,944,024	9

Source: Statewide Harvest Survey (SWHS) estimates for all species (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 7.-Northern Cook Inlet Management Area sport fish harvest by species, 1977-2006.

Year	Chinook salmon	Coho salmon	Sockeye salmon	Pink salmon	Chum salmon	Land-locked salmon	Rainbow trout	Dolly Varden	Arctic grayling	Lake trout	Burbot	Northern pike	Whitefish	Smelt	Other	Total
1977	4,674	17,206	7,962	30,136	2,062	27,429	32,270	13,365	15,799	3,231	1,024	132	0	0	1,569	156,859
1978	3,543	27,019	3,140	58,808	17,969	21,252	42,087	17,130	15,728	1,980	876	316	0	0	1,318	211,166
1979	7,964	24,076	6,193	13,925	5,599	12,144	47,924	17,718	27,949	1,789	1,172	382	0	0	1,691	168,526
1980	8,198	39,167	7,658	61,985	5,577	21,163	49,428	18,255	29,720	2,833	1,383	232	0	0	1,959	247,558
1981	8,602	23,621	8,369	9,627	4,820	24,533	63,592	20,310	24,506	2,375	518	125	0	0	1,168	192,166
1982	12,449	35,246	9,067	19,045	8,111	11,841	49,948	19,723	19,196	1,560	1,656	607	0	0	1,528	189,977
1983	14,860	17,477	21,533	5,686	6,032	23,854	46,184	20,362	21,332	3,532	2,305	944	0	0	1,369	185,470
1984	20,424	49,537	15,609	14,763	8,115	15,428	42,901	14,440	21,148	2,843	2,778	1,821	1,058	0	1,272	212,137
1985	21,904	38,971	9,840	4,018	3,053	15,345	63,319	18,626	18,554	622	1,855	1,404	2,477	2,240	313	202,541
1986	25,873	45,890	14,203	15,992	9,354	16,405	42,642	20,268	20,109	2,286	2,899	1,977	2,105	10,651	24	230,678
1987	25,906	54,109	13,530	4,634	6,358	15,032	39,909	16,421	16,405	2,046	5,140	2,464	2,861	9,265	493	214,573
1988	29,720	83,241	14,573	8,693	13,408	17,207	74,962	17,645	18,735	2,529	1,835	3,473	3,128	8,849	0	297,998
1989	35,792	66,833	14,403	5,191	9,043	11,577	54,962	12,860	12,238	2,397	978	3,120	1,716	2,324	15	233,449
1990	30,967	50,404	11,839	6,005	2,557	16,101	40,139	13,792	8,187	1,656	3,141	2,842	3,516	5,591	217	196,954
1991	33,958	70,425	11,713	3,495	3,240	15,754	52,513	13,859	10,084	1,527	981	6,640	2,057	6,132	80	232,458
1992	45,226	82,859	11,921	8,225	2,858	11,961	34,161	7,496	6,385	1,698	1,412	5,382	862	15,523	910	236,879
1993	49,387	87,606	14,579	4,827	2,536	14,567	27,950	5,978	5,175	765	1,655	5,721	878	6,596	303	228,523
1994	31,104	73,017	12,479	3,878	2,937	14,198	28,855	5,163	8,044	411	2,276	3,893	1,193	13,135	422	201,005
1995	16,537	65,145	11,441	3,081	7,967	7,318	19,884	4,167	3,199	456	858	3,546	227	4,549	81	148,456
1996	19,839	77,853	11,048	5,430	4,841	23,350	26,653	9,096	5,724	471	898	7,934	176	2,181	101	195,595
1997	22,620	35,685	15,229	3,620	4,267	11,721	30,089	6,594	4,425	520	1,874	9,024	214	8,853	238	154,973
1998	22,912	68,231	16,343	7,889	3,451	5,377	19,931	3,736	3,752	338	1,358	8,180	566	8,376	67	170,507
1999	32,803	65,055	16,535	3,819	4,222	9,377	28,425	5,906	4,135	402	1,271	10,824	134	39,555	0	222,463
2000	33,102	105,252	23,235	14,627	5,166	12,064	31,703	6,116	2,923	385	2,177	9,577	311	11,827	316	258,781
2001	30,395	89,893	20,565	5,229	5,026	7,556	23,202	4,560	2,864	439	689	12,739	797	11,630	296	215,880
2002	26,474	99,155	11,946	5,177	5,461	9,137	31,521	4,150	2,532	643	1,371	12,318	331	3,298	293	213,807
2003	28,220	73,479	22,708	2,276	4,402	5,905	21,887	4,375	1,942	858	1,346	8,024	283	7,498	771	183,974
2004	27,543	88,746	16,936	6,629	3,959	5,940	21,468	3,965	2,148	734	729	12,171	327	12,573	122	203,990
1977-2004 Mean	23,964	59,114	13,378	12,025	5,800	14,412	38,875	11,646	11,891	1,476	1,659	4,850	901	6,809	605	207,405
% of Total Mean	12	29	6	6	3	7	19	6	6	1	1	2	<1	3	<1	100
2000-2004 Mean	29,147	91,305	19,078	6,788	4,803	8,120	25,956	4,633	2,482	612	1,262	10,966	410	9,365	360	215,286
2005	28,682	75,309	11,381	3,460	3,364	6,685	15,695	2,999	1,119	404	1,357	11,306	807	3,068	3,846	169,482
2006	28,644	95,086	11,653	5,009	2,227	3,688	16,311	2,486	1,418	157	1,082	11,404	330	71	1,410	180,976

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 8.-Knik Arm drainage sport fish harvest by species, 1977-2006.

Year	Chinook salmon	Coho salmon	Sockeye salmon	Pink salmon	Chum salmon	Land-locked salmon	Rainbow trout	Dolly Varden	Arctic grayling	Lake trout	Burbot	Northern pike	Whitefish	Smelt	Other	Total
1977	207	4,366	1,576	1,661	250	26,917	18,615	7,541	3,916	2,260	290				380	67,979
1978	140	7,895	1,239	1,842	1,131	18,884	23,139	7,982	2,413	507	452				795	66,419
1979	800	7,139	3,616	818	654	11,853	24,843	8,582	8,371	1,254	291				437	68,658
1980	646	16,030	5,674	4,701	534	19,500	29,368	12,484	9,514	2,118	310				1,136	102,015
1981	1,466	10,484	6,080	834	431	24,255	41,749	14,475	7,396	1,791	87				776	109,824
1982	1,666	13,676	4,621	1,425	1,174	10,845	30,549	13,540	2,924	1,058	681				817	82,976
1983	1,255	6,139	14,297	1,009	642	22,805	26,421	13,391	4,425	1,279	597				429	92,689
1984	2,057	23,429	9,240	2,743	2,032	14,768	26,418	9,103	2,480	1,919	336				449	94,974
1985	1,889	14,339	5,612	787	514	14,461	46,431	13,336	4,768	277	210	156	587	560	209	104,136
1986	1,524	12,361	6,009	1,800	3,770	14,299	27,690	13,048	4,233	313	804	458	580	3,351	24	90,264
1987	2,476	25,787	8,785	886	2,574	14,887	24,663	11,425	3,893	906	325	924	380	0	462	98,373
1988	2,916	40,037	8,076	1,927	5,221	16,588	58,609	11,314	8,367	1,911	291	364	1,163	0	0	156,784
1989	4,341	23,846	9,040	1,321	4,477	11,041	44,518	8,143	5,429	835	372	863	844	0	0	115,070
1990	2,022	18,762	6,588	650	746	15,950	30,699	8,746	3,068	1,067	262	754	622	0	99	90,035
1991	2,277	22,186	4,968	926	1,099	15,740	39,636	9,138	2,816	512	477	2,709	900	0	0	103,384
1992	3,969	25,814	5,349	1,044	510	11,875	27,995	4,186	2,511	840	500	2,605	257	0	812	88,267
1993	3,602	35,763	5,926	230	885	13,829	21,565	3,686	1,343	201	482	2,102	227	0	176	90,017
1994	4,303	28,539	5,082	635	1,356	14,153	22,446	3,532	2,898	66	512	1,328	242	2,292	163	87,547
1995	1,707	20,650	4,349	409	4,115	7,285	14,878	2,109	818	118	151	522	71	0	0	57,182
1996	1,579	24,874	4,307	961	1,681	21,364	21,780	5,606	1,940	76	218	4,021	16	0	38	88,461
1997	2,938	11,773	4,095	377	393	11,599	25,695	4,639	1,938	20	709	4,858	96	0	69	69,199
1998	2,031	23,750	5,499	646	797	5,057	17,693	2,425	1,300	68	121	4,272	356	0	45	64,060
1999	2,724	14,429	3,658	119	738	8,674	24,527	3,798	1,740	108	369	6,785	7	2,708	0	70,384
2000	2,824	32,530	7,536	954	1,254	11,233	28,745	3,393	1,194	116	805	5,698	113	6,131	305	102,831
2001	2,255	30,106	4,328	404	1,155	7,556	21,061	2,662	1,215	162	230	6,544	551	1,574	117	79,920
2002	3,195	44,448	4,619	466	1,685	9,137	28,325	1,822	881	533	1,069	5,716	190	0	26	102,112
2003	2,562	24,583	6,606	52	1,124	5,800	17,617	2,247	1,222	339	438	4,026	108	1,578	30	68,332
2004	2,556	34,298	7,148	859	808	5,915	17,738	2,380	703	0	171	4,961	15	11	0	77,563
1977-2004 Mean	2,212	21,358	5,854	1,089	1,491	13,795	27,979	7,312	3,347	738	413	2,983	366	910	278	90,126
% of Total Mean	2	24	6	1	2	15	31	8	4	1	<1	3	<1	1	<1	100
2000-2004 Mean	2,678	33,193	6,047	547	1,205	7,928	22,697	2,501	1,043	230	543	5,389	195	1,859	96	86,152
2005	3,692	27,000	3,460	270	747	6,685	14,367	2,040	507	220	805	4,317	710	0	373	65,193
2006	3,813	39,953	4,622	698	780	3,680	13,524	1,525	972	40	550	4,839	162	71	0	75,229

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 9.-Eastside Susitna River drainage sport fish harvest by species, 1977-2006.

Year	Chinook salmon	Coho salmon	Sockeye salmon	Pink salmon	Chum salmon	Land-locked salmon	Rainbow trout	Dolly Varden	Arctic grayling	Lake trout	Burbot	Whitefish	Northern pike	Smelt	Other	Total
1977	1,056	5,709	3,594	19,663	1,382	512	5,225	2,726	7,469	693	619				626	49,274
1978	886	8,573	267	50,711	14,203	2,368	5,930	5,640	6,590	877	271				153	96,469
1979	1,298	7,564	1,020	11,189	3,791	291	9,463	3,699	10,489	472	427				773	50,476
1980	1,370	10,368	873	52,746	4,552	1,663	6,715	2,671	10,959	267	367				720	93,271
1981	2,202	6,593	833	8,143	4,149	278	8,813	2,874	11,860	287	220				306	46,558
1982	2,063	10,167	1,555	15,345	6,644	996	7,536	4,066	9,747	335	199				345	58,998
1983	2,852	5,176	3,221	3,954	4,982	1,049	9,639	4,205	7,478	1,404	901				469	45,330
1984	4,428	13,916	2,705	9,491	5,211	660	7,656	4,004	11,222	362	1,133	1,058			225	62,071
1985	4,342	7,042	1,465	2,510	2,142	884	7,872	3,138	7,822	17	1,085	1,365			0	39,684
1986	8,569	16,190	4,029	10,527	4,756	2,106	8,061	4,213	10,346	1,816	1,380	1,090			0	73,083
1987	8,603	11,028	2,046	2,209	3,042	145	6,647	3,946	7,568	343	1,175	796			0	47,548
1988	9,139	19,518	2,857	4,129	6,604	619	7,622	4,748	6,020	291	600	546			0	62,693
1989	9,783	17,078	2,527	2,715	4,151	536	4,972	3,040	4,562	1,210	395	442			15	51,426
1990	9,423	11,743	2,677	4,093	1,565	151	5,008	3,613	2,910	387	1,345	1,378			67	44,360
1991	9,083	19,479	2,897	2,001	1,950	14	7,854	2,140	3,875	726	407	626			16	51,068
1992	21,307	33,790	3,468	5,899	2,044	86	3,948	2,394	2,189	495	608	265			76	76,569
1993	22,688	26,063	4,137	3,941	1,480	738	3,713	1,413	2,401	288	909	87	0		49	67,907
1994	14,970	20,870	3,443	1,968	1,269	45	3,658	1,033	3,484	232	674	172	0		166	51,984
1995	7,872	19,165	3,682	2,311	3,234	33	3,138	1,012	1,486	254	517	80	0		61	42,845
1996	11,023	24,174	2,675	3,890	2,808	1,986	2,510	2,027	1,913	308	284	0	11		63	53,672
1997	10,989	10,297	5,851	2,477	2,852	122	2,324	906	1,387	189	304	32	95		84	37,909
1998	10,472	23,086	5,859	5,579	2,260	320	968	889	1,413	217	208	96	130		17	51,514
1999	16,875	23,292	4,608	2,887	2,941	703	1,755	918	1,614	222	230	32	260	9,816	0	66,153
2000	11,774	37,748	6,509	11,483	3,279	831	1,521	823	979	154	242	52	101	0	0	75,496
2001	13,504	26,617	6,776	3,650	3,180	0	1,112	1,172	1,036	226	214	135	55	1,349	179	59,205
2002	10,695	27,183	3,427	3,760	3,389	0	1,751	1,512	1,165	103	211	67	618	0	31	53,912
2003	9,499	18,585	2,734	1,775	2,725	105	2,581	1,694	393	339	511	82	0	0	741	41,764
2004	8,498	20,484	3,107	3,321	2,547	25	1,924	1,093	975	594	238	94	91	0	0	42,991
1977-2004 Mean	8,759	17,196	3,173	9,013	3,683	617	4,997	2,557	4,977	468	560	405	113	1,861	185	56,937
% of Total Mean	15	30	6	16	6	1	9	4	9	1	1	1	<1	3	<1	100
2000-2004 Mean	10,794	26,123	4,511	4,798	3,024	192	1,778	1,259	910	283	283	86	173	270	190	54,674
2005	8,453	17,471	1,677	2,625	2,506	0	793	482	404	32	260	0	1,947	0	259	36,909
2006	7,339	22,719	1,412	3,918	1,321	8	1,590	619	427	111	406	0	1,962	0	36	41,868

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 10.-Westside Susitna River drainage sport fish harvest by species, 1977-2006.

Year	Chinook salmon	Coho salmon	Sockeye salmon	Pink salmon	Chum salmon	Rainbow trout	Dolly Varden	Arctic grayling	Lake trout	Burbot	Northern pike	Whitefish	Smelt	Other	Total
1977	2,938	6,599	2,786	8,142	423	7,472	2,246	4,414	278	115	132			551	36,096
1978	2,039	10,173	1,634	5,605	2,635	12,295	2,667	6,725	596	153	316			370	45,208
1979	5,768	9,036	1,557	1,854	1,154	12,555	4,591	9,089	63	454	382			436	46,939
1980	6,148	12,141	1,111	4,237	491	12,785	2,825	9,247	448	706	232			103	50,474
1981	4,742	5,940	1,408	555	240	11,296	2,003	5,250	297	211	125			86	32,153
1982	8,573	10,658	2,881	2,065	293	11,465	1,813	6,525	167	776	607			366	46,189
1983	9,568	3,610	3,549	702	398	9,253	2,400	9,314	849	807	944			461	41,855
1984	12,106	9,511	3,415	2,467	872	8,079	798	7,409	562	1,309	1,821			598	48,947
1985	13,644	11,270	2,302	584	347	8,114	1,267	5,895	328	560	1,248	525	1,680	104	47,868
1986	13,402	13,117	4,076	3,385	615	6,668	2,470	5,441	157	715	1,519	435	7,300	0	59,300
1987	13,350	8,746	2,427	1,467	688	8,020	688	4,908	797	3,640	1,540	1,685	9,265	31	57,252
1988	15,970	16,283	3,167	2,582	1,474	8,058	1,401	4,275	327	944	2,818	1,419	8,849	0	67,567
1989	19,343	18,226	2,307	1,045	415	4,928	1,486	2,104	352	192	2,257	382	2,324	0	55,361
1990	17,425	13,883	1,938	1,238	234	3,960	1,163	2,158	202	1,534	2,088	1,381	5,591	51	52,846
1991	21,836	20,507	3,083	524	191	4,526	1,436	3,367	289	97	3,931	531	6,132	64	66,514
1992	18,737	16,218	2,916	1,264	304	2,028	400	1,572	363	304	2,777	340	15,523	22	62,768
1993	21,142	15,454	2,161	586	147	2,481	463	1,422	276	264	3,619	555	6,596	49	55,215
1994	10,248	15,361	1,919	1,259	312	2,526	507	1,654	113	1,090	2,556	779	9,483	84	47,891
1995	6,265	17,148	2,106	361	591	1,757	622	895	84	190	3,024	76	4,549	20	37,688
1996	5,879	17,375	1,115	558	297	1,924	693	1,736	87	396	3,902	160	1,818	0	35,940
1997	7,799	7,123	3,109	729	989	1,452	249	844	311	861	4,026	18	8,515	85	36,110
1998	9,716	13,235	2,463	1,589	394	1,081	122	987	46	1,029	3,753	114	5,795	5	40,329
1999	12,131	17,995	5,279	577	421	1,866	266	715	72	672	3,686	95	27,031	0	70,806
2000	17,341	23,262	4,946	2,159	594	1,226	534	666	60	1,130	3,692	139	5,492	11	61,252
2001	13,914	19,221	6,311	1,074	439	759	304	575	34	245	5,479	111	8,707	0	57,173
2002	11,357	14,144	1,881	700	377	1,209	320	479	0	91	5,865	74	3,298	236	40,031
2003	15,035	16,072	8,660	449	476	1,425	78	327	169	397	3,816	93	5,465	0	52,462
2004	15,694	17,785	3,358	2,292	520	1,629	124	291	109	320	6,626	218	12,562	24	61,552
1977-2004 Mean	11,861	13,575	2,995	1,787	583	5,387	1,212	3,510	266	686	2,599	457	7,799	134	50,492
% of Total Mean	23	27	6	4	1	11	2	7	1	1	5	1	15	<1	100
2000-2004 Mean	14,668	18,097	5,031	1,335	481	1,250	272	468	74	437	5,096	127	7,105	54	54,494
2005	15,945	18,266	2,219	519	111	339	151	208	152	292	4,889	71	3,068	3,214	49,444
2006	16,454	20,474	626	338	113	1,027	209	716	0	126	4,318	168	0	1,364	45,933

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 11.-West Cook Inlet drainage sport fish harvest by species, 1977-2006.

Year	Chinook salmon	Coho salmon	Sockeye salmon	Pink salmon	Chum salmon	Rainbow trout	Dolly Varden	Arctic grayling	Lake trout	Burbot	Whitefish	Smelt	Northern pike	Other	Total
1977	473	532	6	670	7	958	852	0		0		0	0	12	3,510
1978	478	378	0	650	0	723	841	0		0		0	0	0	3,070
1979	98	337	0	64	0	1,063	846	0		0		0	0	45	2,453
1980	34	628	0	301	0	560	275	0		0		0	0	0	1,798
1981	192	604	48	95	0	1,734	958	0		0		0	0	0	3,631
1982	147	745	10	210	0	398	304	0		0		0	0	0	1,814
1983	1,185	2,552	466	21	10	871	366	115		0		0	0	10	5,596
1984	1,833	2,681	249	62	0	748	535	37		0		0	0	0	6,145
1985	2,029	6,320	461	137	50	902	885	69		0	0	0	0	0	10,853
1986	2,378	4,222	89	280	213	223	537	89		0	0	0	0	0	8,031
1987	1,477	8,548	272	72	54	579	362	36		0	0	0	0	0	11,400
1988	1,695	7,403	473	55	109	673	182	73		0	0	0	291	0	10,954
1989	2,325	7,683	529	110	0	544	191	143		19	48	0	0	0	11,592
1990	2,097	6,016	636	24	12	472	270	51		0	135	0	0	0	9,713
1991	762	8,253	765	44	0	497	1,145	26		0	0	0	0	0	11,492
1992	1,213	7,037	188	18	0	190	516	113		0	0	0	0	0	9,275
1993	1,955	10,326	2,355	70	24	191	416	9		0	9	0	0	29	15,384
1994	1,583	8,247	2,035	16	0	225	91	8	0	0	0	1,360	9	9	13,583
1995	693	8,182	1,304	0	27	111	424	0	0	0	0	0	0	0	10,741
1996	1,358	11,430	2,951	21	55	439	770	135	0	0	0	363	0	0	17,522
1997	894	6,492	2,174	37	33	618	800	256	0	0	68	338	45	0	11,755
1998	693	8,160	2,522	75	0	189	300	52	7	0	0	2,581	25	0	14,604
1999	1,073	9,339	2,990	236	122	277	924	66	0	0	0	0	93	0	15,120
2000	1,163	11,712	4,244	31	39	211	1,366	84	55	0	7	204	86	0	19,202
2001	722	13,949	3,150	101	252	270	422	38	17	0	0	0	661	0	19,582
2002	1,227	13,380	2,019	251	10	236	496	7	7	0	0	0	119	0	17,752
2003	1,124	14,239	4,708	0	77	264	356	0	11	0	0	455	182	0	21,416
2004	795	16,179	3,323	157	84	177	368	179	31	0	0	0	493	98	21,884
1977-2004 Mean	1,132	6,985	1,356	136	42	512	564	57	12	1	13	189	72	7	11,067
% of Total Mean	10	63	12	1	<1	5	5	1	<1	<1	<1	2	1	<1	100
2000-2004 Mean	1,006	13,892	3,489	108	92	232	602	62	24	0	1	132	308	20	19,967
2005	592	12,572	4,025	46	0	196	326	0	0	0	26	0	153	0	17,936
2006	1,038	11,940	4,993	55	13	170	133	19	6	0	0	0	285	10	18,662

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 12.-Sport fish catch and percent of fish released by species in Northern Cook Inlet Management Area, 1995-2006.

	1995		1996		1997		1998		1999		2000		2001	
	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released
Chinook salmon	35,622	53.6	63,335	68.7	81,933	72.4	66,800	65.7	100,386	67.3	96,545	65.7	90,706	66.5
Coho salmon	102,138	36.2	123,040	36.7	65,609	45.6	104,429	34.7	109,679	40.7	201,431	47.7	174,916	48.6
Sockeye salmon	20,168	43.3	25,491	56.7	33,844	55.0	30,791	46.9	33,032	49.9	45,860	49.3	42,639	51.8
Pink salmon	38,575	92.0	61,982	91.2	35,170	89.7	98,040	92.0	36,144	89.4	220,593	93.4	71,872	92.7
Chum salmon	55,194	85.6	47,440	89.8	37,868	88.7	50,081	93.1	47,519	91.1	71,557	92.8	65,219	92.3
Landlocked salmon	12,287	40.4	31,625	26.2	30,473	61.5	14,345	62.5	17,176	45.4	32,245	62.6	24,228	68.8
Lake trout	1,823	75.0	1,628	71.1	1,780	70.8	758	55.4	2,617	84.6	1,098	64.9	2,088	79.0
Dolly Varden	14,012	70.3	27,312	66.7	23,411	71.8	22,325	83.3	23,415	74.8	31,070	80.3	24,458	81.4
Rainbow trout	96,125	79.3	140,864	81.1	152,608	80.3	112,024	82.2	164,925	82.8	188,807	83.2	134,763	82.8
Arctic grayling	23,190	86.2	35,783	84.0	40,252	89.0	31,308	88.0	29,839	86.1	38,950	92.5	32,641	91.2
Whitefish	1,255	81.9	726	75.8	835	74.4	1,596	64.5	862	84.5	1,673	81.4	2,435	67.3
Northern pike	16,239	78.2	30,245	73.8	26,273	65.7	28,602	71.4	29,354	63.1	44,640	78.5	42,422	70.0
Burbot	1,444	40.6	1,801	50.1	4,778	60.8	2,155	37.0	2,179	41.7	3,367	35.3	1,121	38.5
Smelt	4,600	1.1	13,669	84.0	11,218	21.1	12,121	30.9	41,609	4.9	12,754	7.3	12,552	7.3
Other	1,126	92.8	193	47.7	840	71.7	274	75.5	276	100.0	2,067	84.7	1,636	81.9
Total	423,798	65.0	605,134	67.7	546,892	71.7	575,649	70.4	639,012	65.2	992,657	73.9	723,696	70.2

	2002		2003		2004		2005		2006		1995-2004 Mean
	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Percent released
Chinook salmon	78,534	66.3	93,627	69.9	77,865	64.6	151,901	81.1	83,071	65.5	66.1
Coho salmon	205,927	51.8	141,407	48.0	188,606	52.9	184,758	59.2	174,139	45.4	44.3
Sockeye salmon	31,661	62.3	48,540	53.2	38,286	55.8	29,771	61.8	27,002	56.8	52.4
Pink salmon	92,105	94.4	62,963	96.4	126,574	94.8	64,022	94.6	83,821	94.0	92.6
Chum salmon	89,862	93.9	82,645	94.7	58,706	93.3	48,532	93.1	45,155	95.1	91.5
Landlocked salmon	17,879	48.9	13,454	56.1	15,538	61.8	17,526	61.9	11,042	66.6	53.4
Lake trout	5,280	87.8	3,714	76.9	2,300	68.1	8,661	95.3	1,119	86.0	73.4
Dolly Varden	25,653	83.8	43,851	90.0	35,519	88.8	47,603	93.7	26,933	90.8	79.1
Rainbow trout	206,537	84.7	169,677	87.1	161,254	86.7	143,424	89.1	132,482	87.7	83.0
Arctic grayling	44,056	94.3	32,216	94.0	30,204	92.9	21,572	94.8	20,571	93.1	89.8
Whitefish	1,426	76.8	2,919	90.3	3,492	90.6	6,151	86.9	1,480	77.7	78.7
Northern pike	32,460	62.1	29,278	72.6	33,880	64.1	37,894	70.2	31,523	63.8	69.9
Burbot	2,473	44.6	2,122	36.6	1,354	46.2	3,672	63.0	4,065	73.4	43.1
Smelt	4,667	29.3	7,498	0.0	12,640	0.5	3,068	0.0	900	92.1	18.7
Other	921	68.2	1,360	43.3	422	71.1	8,423	54.3	1,626	13.3	73.7
Total	839,441	74.5	735,271	75.0	786,640	74.1	776,978	78.2	644,929	71.9	70.8

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1993-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 13.-Sport fish catch and percent of fish released by species in the Knik Arm and Eastside Susitna River management units, 2001-2006.

	2001		2002		2003		2004		2005		2006	
Knik Arm Area	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released
Chinook salmon	4,738	52.4	6,854	53.4	5,927	56.8	5,488	53.4	7,882	53.2	8,580	55.6
Coho salmon	42,991	30.0	67,185	33.8	37,944	35.2	55,870	38.6	37,006	27.0	60,738	34.2
Sockeye salmon	9,387	53.9	7,301	36.7	15,066	56.2	13,124	45.5	5,318	34.9	8,740	47.1
Pink salmon	4,184	90.3	5,857	92.0	2,031	97.4	8,292	89.6	1,912	85.9	5,941	88.3
Chum salmon	9,014	87.2	10,280	83.6	10,395	89.2	9,992	91.9	5,901	87.3	8,009	90.3
Landlocked salmon	24,228	68.8	17,839	48.8	13,349	56.6	15,487	61.8	17,220	61.2	11,009	66.6
Lake trout	696	76.7	3,082	82.7	2,022	83.2	553	100.0	657	66.5	502	92.0
Dolly Varden	8,401	68.3	7,449	75.5	15,413	85.4	14,317	83.4	8,311	75.5	9,082	83.2
Rainbow trout	70,821	70.3	93,520	69.7	68,212	74.2	70,897	75.0	59,870	76.0	48,064	71.9
Arctic grayling	4,470	72.8	4,628	81.0	4,731	74.2	1,798	60.9	1,641	69.1	4,060	76.1
Whitefish	1,198	54.0	388	51.0	579	81.3	211	92.9	1,231	42.3	542	70.1
Northern pike	15,457	57.7	13,079	56.3	14,094	71.4	11,179	55.6	9,388	34.4	9,010	46.3
Burbot	393	41.5	1,681	36.4	756	42.1	321	46.7	1,393	42.2	3,091	82.2
Smelt	1,574	0.0	0		1,578	0.0	68	83.8	0		71	0.0
Other	1,161	89.9	216	88.0	199	84.9	16	100.0	868	57.0	92	100.0
Total	198,713	59.8	239,359	57.3	192,296	64.5	207,613	62.6	158,598	57.7	177,531	57.6
East Susitna Area												
Chinook salmon	38,590	65.0	35,594	70.0	38,199	75.1	28,873	70.6	27,710	69.5	24,380	69.9
Coho salmon	58,508	54.5	64,557	57.9	37,438	50.4	41,631	50.8	32,689	46.6	39,991	43.2
Sockeye salmon	13,226	48.8	13,014	73.7	7,371	62.9	7,339	57.7	4,083	58.9	3,370	58.1
Pink salmon	55,156	93.4	63,903	94.1	43,846	96.0	72,483	95.4	38,734	93.2	52,773	92.6
Chum salmon	49,112	93.5	65,232	94.8	59,165	95.4	37,475	93.2	30,629	91.8	30,329	95.6
Landlocked salmon	0		40	100.0	105	0.0	51	51.0	306	100.0	33	75.8
Lake trout	992	77.2	1,497	93.1	1,302	74.0	1,158	48.7	518	93.8	233	52.4
Dolly Varden	9,205	87.3	11,123	86.4	19,158	91.2	11,064	90.1	7,211	93.3	10,328	94.0
Rainbow trout	32,904	96.6	80,190	97.8	59,440	95.7	46,130	95.8	36,188	97.8	38,862	95.9
Arctic grayling	13,785	92.5	23,520	95.0	11,905	96.7	11,030	91.2	9,301	95.7	10,587	96.0
Whitefish	482	72.0	655	89.8	857	90.4	466	79.8	1,439	100.0	389	100.0
Northern pike	776	92.9	647	4.5	11	100.0	119	23.5	2,472	95.8	6,056	67.6
Burbot	357	40.1	351	39.9	716	28.6	403	40.9	705	63.1	630	35.6
Smelt	2,249	40.0	0		0		0		0		0	
Other	453	60.5	397	92.2	835	11.3	32	100.0	852	69.6	52	30.8
Total	275,795	78.5	360,720	85.1	280,348	85.1	258,254	83.4	192,837	81.8	218,013	80.8

Source: Statewide Harvest Survey (SWHS) estimates (Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 14.-Sport fish catch and percent of fish released by species in the Westside Susitna River and West Cook Inlet management units, 2001-2006.

	2001		2002		2003		2004		2005		2006	
West Susitna River	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released	Catch	Percent released
Chinook salmon	43,972	68.4	29,920	62.0	43,487	65.4	40,663	61.4	55,729	71.4	47,645	65.5
Coho salmon	48,740	60.6	41,669	66.1	33,601	52.2	48,083	63.0	40,454	54.8	44,966	54.5
Sockeye salmon	13,549	53.4	6,881	72.7	16,846	48.6	9,617	65.1	5,331	58.4	4,451	85.9
Pink salmon	10,926	90.2	21,009	96.7	16,506	97.3	43,500	94.7	10,926	95.2	23,473	98.6
Chum salmon	4,988	91.2	13,253	97.2	10,800	95.6	9,004	94.2	4,847	97.7	5,047	97.8
Landlocked salmon	0		0		0		0		0		0	
Lake trout	314	89.2	694	100.0	339	50.1	477	77.1	425	64.2	362	100.0
Dolly Varden	3,353	90.9	3,416	90.6	1,895	95.9	4,743	97.4	12,872	98.8	2,264	90.8
Rainbow trout	27,697	97.3	29,745	95.9	40,327	96.5	42,969	96.2	46,575	99.3	44,018	97.7
Arctic grayling	13,216	95.6	15,802	97.0	15,432	97.9	16,644	98.3	16,696	98.8	5,773	87.6
Whitefish	740	85.0	365	79.7	1,409	93.4	2,579	91.5	1,128	93.7	533	68.5
Northern pike	25,147	78.2	18,450	68.2	14,818	74.2	21,878	69.7	25,704	81.0	15,658	72.4
Burbot	371	34.0	441	79.4	650	38.9	630	49.2	664	56.0	344	63.4
Smelt	8,729	0.3	4,667	29.3	5,465	0.0	12,572	0.1	3,068	0.0	790	100.0
Other	0		308	23.4	326	100.0	24	0.0	3,214	0.0	1,380	1.2
Total	201,742	71.7	186,620	78.5	201,901	74.0	253,383	75.7	227,633	78.3	196,704	76.6
West Cook Inlet												
Chinook salmon	3,406	78.8	6,166	80.1	6,014	81.3	2,841	72.0	3,395	82.6	2,466	57.9
Coho salmon	24,677	43.5	32,516	58.9	32,424	56.1	43,022	62.4	33,176	62.1	28,444	58.0
Sockeye salmon	6,477	51.4	4,465	54.8	9,257	49.1	8,206	59.5	9,444	57.4	10,441	52.2
Pink salmon	1,606	93.7	1,336	81.2	580	100.0	2,299	93.2	846	94.6	1,634	96.6
Chum salmon	2,105	88.0	1,097	99.1	2,285	96.6	2,235	96.2	1,172	100.0	1,770	99.3
Landlocked salmon	0		0		0		0		0		0	
Lake trout	86	80.2	7	0.0	51	78.4	112	72.3	67	100.0	22	72.7
Dolly Varden	3,499	87.9	3,665	86.5	7,385	95.2	5,395	93.2	5,549	94.1	5,259	97.5
Rainbow trout	3,341	91.9	3,082	92.3	1,698	84.5	1,258	85.9	791	75.2	1,538	88.9
Arctic grayling	1,170	96.8	106	93.4	148	100.0	732	75.5	161	100.0	151	87.4
Whitefish	15	100.0	18	100.0	74	100.0	236	100.0	386	93.3	16	100.0
Northern pike	1,042	36.6	284	58.1	355	48.7	704	30.0	330	53.6	799	64.3
Burbot	0		0		0		0		0		0	
Smelt	0		0		455	0.0	0		0		39	100.0
Other	22	100.0	0		0		350	72.0	275	100.0	102	90.2
Total	47,446	58.7	52,742	66.3	60,726	64.7	67,390	67.5	55,592	67.7	52,681	64.6

Source: Statewide Harvest Survey (SWHS) estimates (Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 15.-Estimated harvests of Chinook salmon of Northern Cook Inlet origin, by all user groups, 1893-2005.

Year	Harvest	Year	Harvest	Year	Harvest
1893	24,000	1946	51,425	1999	37,621
1894	12,400	1947	85,443	2000	37,325
1895	20,159	1948	84,797	2001	33,894
1896	14,461	1949	89,025	2002	29,888
1897	11,266	1950	130,274	2003	31,308
1898	13,111	1951	150,010	2004	31,363
1899	13,682	1952	59,600	2005	33,078
1900	21,346	1953	71,544	2006	34,077
1901	27,455	1954	52,260		
1902	39,210	1955	37,199		
1903	52,818	1956	52,248		
1904	24,058	1957	34,214		
1905	14,134	1958	18,278		
1906	17,936	1959 [c]	26,226		
1907	50,355	1960	22,031		
1908	27,019	1961	15,822		
1909	47,699	1962	16,216		
1910	39,222	1963	14,106		
1911	44,676	1964	3,698		
1912	38,293	1965	7,801		
1913	50,922	1966	815		
1914 [a]	38,043	1967	623		
1915 [a]	67,034	1968	1,163		
1916 [a]	50,316	1969	3,927		
1917 [a]	52,399	1970	1,853		
1918 [a]	27,909	1971	10,494		
1919	19,041	1972	5,748		
1920	31,650	1973	246		
1921	11,157	1974	238		
1922	24,824	1975	301		
1923	23,929	1976	692		
1924	21,610	1977	5,446		
1925	40,826	1978	4,430		
1926	60,496	1979	9,837		
1927	69,923	1980	11,301		
1928	55,908	1981	11,372		
1929	54,155	1982	17,121		
1930	57,854	1983	18,706		
1931	41,122	1984	23,996		
1932	56,745	1985	25,842		
1933	47,425	1986	43,192		
1934	57,903	1987	40,335		
1935	60,060	1988	44,153		
1936	64,850	1989	50,981		
1937	68,786	1990	42,430		
1938	46,130	1991	43,397		
1939 [b]	42,181	1992	52,788		
1940 [b]	50,413	1993	54,335		
1941 [b]	83,858	1994	36,189		
1942 [b]	76,144	1995	22,963		
1943 [b]	89,105	1996	22,981		
1944 [b]	68,168	1997	24,505		
1945 [b]	55,362	1998	26,569		
1893-2004 Mean	NA		NA		36,626
1893-1918 Mean	32,305		NA		NA
1919-1945 Mean	51,097		NA		NA
1946-1958 Mean	NA		70,486		NA
1959-2004 Mean	NA		NA		21,006
1995-2004 Mean	NA		NA		29,842
2000-2004 Mean	NA		NA		32,756

Note: "all user groups" - includes commercial, sport fish, and subsistence fisheries. NA = not applicable. Data sources: 1893-1968 (Delaney and Vincent-Lang *Unpublished*[1]), 1969-2006 (Shields 2007; Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] World War I - 1914 to 1918.

[b] World War II - 1939 to 1945.

[c] Statehood for Alaska - 1959.

[1] Delaney, K. and D. Vincent-Lang. *Unpublished*. Current status and recommendations for the future management of Chinook salmon stocks of Northern Cook Inlet. Report to the Alaska Board of Fisheries, November 1992. Alaska Department of Fish and Game, Division of Sport Fish, Anchorage.

Table 16.-Estimated harvests of Chinook salmon originating from the Northern Cook Inlet Management Area, 1977-2006.

	Commercial[ab]			Recreational[b]						
Year	NCI[c]	Kustatan	Total	Knik Arm Drainages	Eastside Susitna	Westside Susitna	West Cook Inlet	Total	Subsistence[d]	Grand Total
1977	565	207	772	207	1,056	2,938	473	4,674		5,446
1978	666	221	887	140	886	2,039	478	3,543		4,430
1979	1,714	159	1,873	800	1,298	5,768	98	7,964		9,837
1980	993	174	1,167	646	1,370	6,148	34	8,198	1,936	11,301
1981	725	43	768	1,466	2,202	4,742	192	8,602	2,002	11,372
1982	2,716	391	3,107	1,666	2,063	8,573	147	12,449	1,565	17,121
1983	933	163	1,096	1,255	2,852	9,568	1,185	14,860	2,750	18,706
1984	1,004	214	1,218	2,057	4,428	12,106	1,833	20,424	2,354	23,996
1985	1,890	211	2,101	1,889	4,342	13,644	2,029	21,904	1,837	25,842
1986	15,488	308	15,796	1,524	8,569	13,402	2,378	25,873	1,523	43,192
1987	12,701	176	12,877	2,476	8,603	13,350	1,477	25,906	1,552	40,335
1988	12,836	123	12,959	2,916	9,139	15,970	1,695	29,720	1,474	44,153
1989	12,731	1,144	13,875	4,341	9,783	19,343	2,325	35,792	1,314	50,981
1990	9,582	1,084	10,666	2,022	9,423	17,425	2,097	30,967	797	42,430
1991	6,859	925	7,784	2,277	9,083	21,836	762	33,958	1,655	43,397
1992	4,554	964	5,518	3,969	21,307	18,737	1,213	45,226	2,044	52,788
1993	3,277	424	3,701	3,602	22,688	21,142	1,955	49,387	1,247	54,335
1994	3,185	449	3,634	4,303	14,970	10,248	1,583	31,104	1,451	36,189
1995	4,130	198	4,328	1,707	7,872	6,265	693	16,537	2,098	22,963
1996	1,958	145	2,103	1,579	11,023	5,879	1,358	19,839	1,039	22,981
1997	1,133	113	1,246	2,938	10,989	7,799	894	22,620	639	24,505
1998	2,547	83	2,630	2,031	10,472	9,716	693	22,912	1,027	26,569
1999	2,812	776	3,588	2,724	16,875	12,131	1,073	32,803	1,230	37,621
2000	2,307	759	3,066	2,824	11,774	17,341	1,163	33,102	1,157	37,325
2001	1,811	712	2,523	2,255	13,504	13,914	722	30,395	976	33,894
2002	1,895	439	2,334	3,195	10,695	11,357	1,227	26,474	1,080	29,888
2003	1,670	445	2,115	2,562	9,499	15,035	1,124	28,220	973	31,308
2004	2,058	430	2,488[e]	2,451	8,254	15,648	782	27,135	1,345	30,968
2005	3,373	87	3,460	3,692	8,453	15,945	592	28,682	982	33,124
2006	2,916	244	3,160	Data not available					836[e]	

[a] Fox and Shields (2005).

[b] Source: (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[c] Northern District total.

[d] Includes Tyonek subsistence fishery (1980-2006) and Northern/Central districts subsistence fisheries 1985 and 1991-1993. 1994-1995 data includes Northern districts.

[e] Preliminary data.

Table 17.-Chinook salmon escapement goals for Northern Cook Inlet Management Area waters.

Management Unit	Drainage	Escapement goal Type [a]	Escapement goal Range [b]	Survey method
Knik Arm	Little Susitna River	SEG	900-1,800	Aerial
Eastside Susitna	Chulitna River	SEG	1,800-5,100	Aerial
	Clear Creek	SEG	950-3,400	Aerial
	Goose Creek	SEG	250-650	Aerial
	Little Willow Creek	SEG	450-1,800	Aerial
	Montana Creek	SEG	1,100-3,100	Aerial
	Prairie Creek	SEG	3,100-9,200	Aerial
	Sheep Creek	SEG	600-1,200	Aerial
	Willow Creek	SEG	1,600-2,800	Aerial
	Deception Creek		No goal	
Westside Susitna	Alexander Creek	SEG	2,100-6,000	Aerial
	Deshka River	BEG	13,000-28,000	Weir
	Lake Creek	SEG	2,500-7,100	Aerial
	Peters Creek	SEG	1,000-2,600	Aerial
	Talachulitna River	SEG	2,200-5,000	Aerial
West Cook Inlet	Chuitna River	SEG	1,200-2,900	Aerial
	Lewis River	SEG	250-800	Aerial
	Theodore River	SEG	500-1,700	Aerial

[a] SEG = sustainable escapement goal; BEG = biological escapement goal.

[b] Units = number of Chinook salmon.

Table 18.-Estimated sport harvest of Chinook salmon in the Knik Arm Management Unit, 1977-2006.

Year	Little Susitna River	Eklutna Tailrace	Other	Total
1977	191	ND	16	207
1978	93	ND	47	140
1979	800	ND	0	800
1980	646	ND	0	646
1981	1,418	ND	48	1,466
1982	1,467	ND	199	1,666
1983	1,187	ND	68	1,255
1984	1,883	ND	174	2,057
1985	1,845	ND	44	1,889
1986	1,457	ND	67	1,524
1987	2,282	ND	194	2,476
1988	2,822	ND	94	2,916
1989	4,204	ND	137	4,341
1990	1,965	ND	57	2,022
1991	2,102	ND	175	2,277
1992	3,920	ND	49	3,969
1993	3,441	ND	161	3,602
1994	4,204	ND	99	4,303
1995	1,698	ND	9	1,707
1996	1,484	ND	95	1,579
1997	2,938	ND	0	2,938
1998	2,031	ND	0	2,031
1999	2,713	ND	11	2,724
2000	2,802	ND	22	2,824
2001	2,243	ND [a]	12	2,255
2002	3,144	0	51	3,195
2003	2,138	399	25	2,562
2004	2,362	23	66	2,451
1977-2004 Mean	2,124	-	69	2,208
1995-2004 Mean	2,355	-	29	2,427
2000-2004 Mean	2,538	141	35	2,657
2005	2,724	941	27	3,692
2006	3,303	484	26	3,813

Note: ND = no data, no Chinook salmon harvested at Eklutna Tailrace prior to 2003. "-" = value can't be computed due to limitations of the data. Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Eklutna Tailrace terminal Chinook fishery created in 2001.

Table 19.-Escapement of Chinook salmon to the Knik Arm Management Unit, 1979-2006.

	Little Susitna River		
Year	Weir	Aerial	Moose Creek [a]
1979	ND	ND [b]	253
1980	ND	ND [b]	ND [b]
1981	ND	ND [b]	238
1982	ND	ND [b]	406
1983	ND	929	452
1984	ND	558	541
1985	ND	1,005	475
1986	ND	ND [b]	419
1987	ND	1,386	957
1988	7,374	3,197	1,072
1989	4,367	ND [b]	999
1990	ND	922	545
1991	ND	892	704
1992	ND	1,441	959
1993	ND	ND [bc]	175 [d]
1994	2,981	1,221 [c]	894
1995	2,809	1,714 [c]	488
1996	ND	1,079 [c]	652
1997	ND	ND [bc]	652
1998	ND	1,091 [c]	214
1999	ND	ND [bc]	744
2000	ND	1,094 [c]	198
2001	ND	1,238 [c]	275
2002	ND	1,660 [e]	310
2003	ND	1,114 [e]	471
2004	ND	1,694 [e]	197
1983-2004 Mean		1,308	563
1995-2004 Mean		1,336	420
2000-2004 Mean		1,360	290
2005	ND	2,095 [e]	254
2006	ND	1,855 [e]	216

Note: ND = no data

[a] Foot survey (1977-1994); helicopter survey (1995-2006).

[b] No count conducted, water too turbid.

[c] Biological Escapement Goal (BEG) = 850 fish.

[d] Late count.

[e] Sustainable Escapement Goal (SEG) = 900 to 1,800 fish.

Table 20.-Chinook salmon smolt stocked and the adult harvest at Eklutna Tailrace, 2002-2006.

Year	Brood Year	Total Smolt Released	Mark Type [a]	Mean Weight (g)	Release Date	Brood Stock	Hatchery	Harvest [b]
2002	2001	106,991	TM	11.3	5/20	Ship Creek	Elmendorf	0
2003	2002	218,492	TM	12.8 (50.05%) 12.0 (49.95%)	6/3, 6/4	Ship Creek	Fort Richardson	399
2004	2002 [c]	215,165	TM	13.4	5/19	Ship Creek	Fort Richardson	23
2005	2003	164,586	TM	14.0	6/1	Ship Creek	Fort Richardson	941
2006	2004	213,250	TM	10.6	5/31, 6/1	Ship Creek	Fort Richardson	484

[a] TM = thermal mark.

[b] Harvest estimates from Statewide Harvest Survey (Jennings et al. 2006a-b; Jennings et al. 2007, *In prep* a-b).

[c] Cold water rearing conditions required two winters growth to reach optimal release size.

Table 21.-Number of Chinook salmon stocked in Willow Creek drainage, 1985-2004.

Brood Year	Release location[a]	Total smolt release	Number coded wire tagged	Mean Weight (g)	Release Date
1983	Deception	101,256	8,152	18.0	6/13/1985
1984	Deception	214,384	11,038	13.8	6/11-12/1985
	Deception	218,743	10,708	14.0	6/20/1985
1985	Deception	49,668	9,933	16.7	5/1/1986
	Deception	127,904	18,400	12.2	5/10/1986
	Deception	147,877		11.4	5/10/1986
		325,449	28,333		
1987	Deception	201,091	20,936	10.9	7/12/1988
1988	Deception	240,885	19,851	13.0	5/31/1989
1989	Deception	219,362	41,570	14.4	5/24/1990
	Deception	219,432	40,575	13.4	5/24/1990
	Deception	216,697	40,438	13.9	5/24/1990
		655,491	122,583		
1990	Deception	168,777		11.2	5/21/1991
	Deception	70,258	31,167	12.3	5/31/1991
	Willow	73,756		12.3	5/28/1991
	Willow	78,878	31,167	12.3	5/30/1991
		391,669	62,334		
1991	Deception	179,724	33,464	13.5	5/29/1992
	Deception	35,752		14.5	6/9/1992
		215,476	33,464		
1992	Deception	160,194	39,420	14.9	6/1/1993
1993	Deception	177,913	45,921	13.3	5/24-25/1994
1994	Deception	184,740	46,256	13.5	5/25/1995
1995	Deception	186,918	47,145	14.4	6/12-17/1996
1996	Deception	209,944	207,973	12.2	6/11-20/1997
1997	Deception	197,392	197,392	11.5	6/17-26/1998
1998	Deception	201,586	199,772	11.5	6/14,16,17/1999
1999[b]	Deception	7,500			
	Deception	198,996			
		206,946	205,051	12.6	6/2,13,14/2000
2000	Deception	207,465	204,560	14.2	6/18,19/2001
2001	Deception	197,277	196,608	12.1	6/21,24/2002
2002	Deception	100,635	101,407	14.5	6/19/2003
	Deception	113,523	104,101	12.2	6/8/2004
		214,158	205,508		
2003	Deception	99,047	97,660	15.7	6/9/2004
	Deception	163,016	162,415	12.6	6/6/2005
		262,063	260,075		
2004	Deception	50,426	50,376	12.5	6/8/2006

[a] Prior to 1996 the Deception Creek release site was at the mouth of Deception Creek. Beginning in 1996 the release site was at the Four Mile Road crossing.

[b] In 2000 the stocking truck got stuck on Four Mile Road. Approximately 7,500 smolt were transported in buckets to Deception Creek at Four Mile Road, the remainder were released at Hatcher Pass Road bridge near the mouth of Deception Creek.

Table 22.-Chinook salmon sport harvest in Northern Cook Inlet Management Area by management unit, 1979-2006.

	Management Unit						
		Eastside Susitna					
Year	Knik Arm	Hatchery	Non-hatchery	Total	Westside Susitna	West Cook Inlet	NCIMA Total
1979	800	ND	ND	1,298	5,768	98	7,964
1980	646	ND	ND	1,370	6,148	34	8,198
1981	1,466	ND	ND	2,202	4,742	192	8,602
1982	1,666	ND	ND	2,063	8,573	147	12,449
1983	1,255	ND	ND	2,852	9,568	1,185	14,860
1984	2,057	ND	ND	4,428	12,106	1,833	20,424
1985	1,889	ND	ND	4,342	13,644	2,029	21,904
1986	1,524	ND	ND	8,569	13,402	2,378	25,873
1987	2,476	ND	ND	8,603	13,350	1,477	25,906
1988	2,916	355	8,784	9,139	15,970	1,695	29,720
1989	4,341	1,079	8,704	9,783	19,343	2,325	35,792
1990	2,022	1,194	8,229	9,423	17,425	2,097	30,967
1991	2,277	844	8,239	9,083	21,836	762	33,958
1992	3,969	4,566	16,741	21,307	18,737	1,213	45,226
1993	3,602	3,977	18,711	22,688	21,142	1,955	49,387
1994	4,303	2,703	12,267	14,970	10,248	1,583	31,104
1995	1,707	1,111	6,761	7,872	6,265	693	16,537
1996	1,579	1,205	9,818	11,023	5,879	1,358	19,839
1997	2,938	1,091	9,898	10,989	7,799	894	22,620
1998	2,031	902	9,570	10,472	9,716	693	22,912
1999	2,724	2,464	14,411	16,875	12,131	1,073	32,803
2000	2,824	1,776	9,998	11,774	17,341	1,163	33,102
2001	2,255	2,057	11,447	13,504	13,914	722	30,395
2002	3,195	1,720	8,975	10,695	11,357	1,227	26,474
2003	2,562	1,605	7,894	9,499	15,035	1,124	28,220
2004	2,451	969	7,529	8,498	15,694	782	27,425
1979-2004 Mean	2,364	-	-	9,359	12,582	1,182	25,487
1988-2004 Mean	2,806	1,742	10,469	12,211	14,108	1,256	30,381
1995-2004 Mean	2,427	1,490	9,630	11,120	11,513	973	26,033
2000-2004 Mean	2,657	1,625	9,169	10,794	14,668	1,004	29,123
2005	3,692	981	7,472	8,453	15,945	546	28,636
2006 [a]	3,813	ND	ND	7,339	16,454	1,038	28,644

Note: NCIMA = Northern Cook Inlet Management Area. "ND" = no data because no attempts were made to collect it. "-" = value can't be computed due to limitations of the data.

[a] Hatchery contribution no longer available. Creel survey program ended in 2005.

Table 23.-Chinook salmon sport harvest from Eastside Susitna River drainages, 1977-2006.

Year	Willow Creek	Lt. Willow Creek	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River [a]	Other [b]	Total
1977	137	16			259		415			25	204	1,056
1978	47	0			256		408			12	163	886
1979	459	0		156	10		312		10	312	39	1,298
1980	289	32		215	45		559		13	172	45	1,370
1981	585	0		249	0		661		57	373	277	2,202
1982	629	0		471	0		241		52	450	220	2,063
1983	534	0	231	272	0		504		105	934	272	2,852
1984	774	37	0	586	0	0	1,522		125	1,272	112	4,428
1985	1,063	25		527	0		979		771	871	106	4,342
1986	1,017	872	73	327	1,778	145	2,796	290	327	908	36	8,569
1987	1,987	711	116	88	1,610	334	1,726	44	319	1,639	29	8,603
1988	2,349	937	0	578	1,847	218	1,070	28	303	1,762	47	9,139
1989	2,846	507	11	357	1,116	385	1,708	28	368	2,372	85	9,783
1990	3,237	387	6	330	1,537	504	478		465	2,358	121	9,423
1991	3,208	684	41	305	1,519	288	575	47	230	2,025	161	9,083
1992	8,884	1,023	16	592	2,663	1,033	3,078	101	365	3,338	214	21,307
1993	8,626	1,200	38	531	2,300	633	4,054	9	280	4,729	288	22,688
1994	5,980	745	78	562	1,349	361	3,111	108	297	2,144	235	14,970
1995	2,742	436	18	397	746	226	1,004	0	132	2,126	45	7,872
1996	2,690	896	21	128	1,397	437	1,612	22	53	3,585	182	11,023
1997	3,135	699	10	30	550	298	2,181	30	53	3,800	203	10,989
1998	2,793	546	15	226	700	348	1,471	83	116	3,846	328	10,472
1999	4,988	1,344	83	142	2,558	371	3,279	134	11	3,701	264	16,875
2000	3,782	578	160	561	851	258	1,728	223	472	2,740	421	11,774
2001	4,573	941	74	238	1,420	160	2,646	65	93	2,866	428	13,504
2002	3,591	580	217	115	928	403	2,026	35	38	2,616	146	10,695
2003	3,922	510	373	26	1,284	350	1,242	167	154	1,276	195	9,499
2004	2,818	445	125	23	914	335	1,071	0	25	2,473	25	8,254
1977-2004 Mean	2,774	505	81	309	987	354	1,516	79	201	1,954	175	8,751
1995-2004 Mean	3,503	698	110	189	1,135	319	1,826	76	115	2,903	224	11,096
2000-2004 Mean	3,737	611	190	193	1,079	301	1,743	98	156	2,394	243	10,745
2005	2,466	621	112	394	878	150	1,328	287	205	1,960	52	8,453
2006	2,141	449	210	264	707	27	1,672	97	211	1,561	0	7,339

Source: Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Talkeetna River and tributaries including Clear Creek.

[b] Includes lakes and streams.

Table 24.-Northern Cook Inlet Management Area Chinook salmon escapement index counts (aerial), 1977-2006.

Year	Susitna River			Knik Arm[a]	West Cook Inlet	Total NCIMA
	Eastside	Westside	Total			
1979	5,082	39,552	44,634		2,540	47,174
1980						
1981	7,419	2,025	9,444		3,601	13,045
1982	10,700	25,224	35,924		7,384	43,308
1983	17,859	42,850	60,709	929	5,562	67,200
1984	25,678	27,974	53,652	558	5,043	59,253
1985	18,177	38,932	57,109	1,005	4,619	62,733
1986	15,828	32,330	48,158		6,114	54,272
1987	26,535	23,936	50,471	1,386	2,423	54,280
1988	26,255	40,963	67,218	3,197	5,546	75,961
1989	23,117	4,818	27,935		2,468	30,403
1990	25,040	28,042	53,082	922	1,329	55,333
1991	21,773	19,425	41,198	892	1,348	43,438
1992	15,782	18,899	34,681	1,441	2,835	38,957
1993	13,066	18,028	31,094		3,882	34,976
1994	11,904	9,423	21,327	1,221	2,121	24,669
1995	21,778	15,828	37,606	1,714	2,223	41,543
1996	22,084	16,802	38,886	1,079	2,392	42,357
1997	35,927	38,437	74,364		5,087	79,451
1998	24,393	32,958	57,351	1,091	4,805	63,247
1999	24,306	30,260	54,566		7,812	62,378
2000	20,161	11,137	31,298	1,094	3,964	36,356
2001	23,047	15,102	38,149	1,238	4,394	43,781
2002	35,137	28,066	63,203	1,660	3,649	68,512
2003	15,341	24,294	39,635	1,114	4,974	45,723
2004	22,567	54,421	76,988	1,694	5,038	83,720
1979-2004 Mean	20,358	25,589	45,947	1,308	4,046	50,883
1995-2004 Mean	24,474	26,731	51,205	1,336	4,434	56,707
2000-2004 Mean	23,251	26,604	49,855	1,360	4,404	55,618
2005	21,780	27,774	49,554	2,095	2,730	54,379
2006	16,934	23,074	40,008	1,855	4,206	46,069

Note: NCIMA = Northern Cook Inlet Management Area.

[a] Knik Arm = Little Susitna River only.

Table 25.-Eastside Susitna River Management Unit Chinook salmon escapement index counts (aerial), 1979-2006.

Year	Willow Creek [a]	Deception Creek		Little Willow Creek	Sheep Creek	Goose Creek	Montana Creek	Clear Creek	Praire Creek	Chulitna River	Portage Creek	Indian River	Kashwitna River	Other [b]	Total
		Total	Nonhatch												
1979	848	239		327	778	[c]	1,094 [d]	864	[c]	[c]	190	285	457	[c]	5,082
1980															0
1981	991	366		459	1,013	262	814	[c]	1,875	[c]	659	422	558	[c]	7,419
1982	592	229 [e]		316	527	140	887 [d]	982	3,844	863	1,111	1,053	156	268	10,700
1983	777	121 [e]		1,042	975	477	1,641 [d]	938	3,200	4,058	3,140	1,193	297	[c]	17,859
1984	2,789	675 [e]			1,028	258	2,309 [d]	1,520	9,000	4,191	2,341	1,456	111	[c]	25,678
1985	1,856	1,044 [e]		1,305	1,634	401	1,767 [d]	2,430	6,500	783	[f]	[f]	457	4,066	18,177
1986	2,059	521 [e]	364	2,133	1,285	630	[c]	[c]	8,500	[c]	[c]	[c]	700	[c]	15,828
1987	2,768	692 [e]	518	1,320	895	416	1,320 [d]	[c]	9,138	5,252	2,616	1,246	872	[c]	26,535
1988	2,496	790 [e]	537	1,515	1,215	1,076	2,016 [d]	4,850	9,280	[c]	1,402	456	1,159	[c]	26,255
1989	5,060	800 [e]	623	1,325	610	835	2,701 [d]	[c]	9,463	[c]	1,309	659	355	[c]	23,117
1990	2,365	700 [e]	420	1,115	634	552	1,269	2,380	9,113	2,681	1,886	1,473	872	[c]	25,040
1991	2,006	747 [e]	515	498	154 [g]	968	1,215	1,974	6,770	4,410	1,223	1,468	340	[c]	21,773
1992	1,660	983 [e]	423	673	[c]	369	1,560	1,530	4,453	2,527	1,078	479	470	[c]	15,782
1993	2,227	1,011 [e]	502	705	[c]	347	1,281	886	3,023	2,070	629	362	525	[c]	13,066
1994	1,479	766	388	712	542	375	1,143	1,204	2,254	1,806	857	336	430	[c]	11,904
1995	3,792	834	445	1,210	1,049	374	2,110	1,928	3,884	3,460	1,505	796	836	[c]	21,778
1996	1,776	1,211	654	1,077	1,028	305	1,841	2,091	5,037	4,172	2,185	579	782	[c]	22,084
1997	4,841	1,340	[c]	2,390	[c]	308	3,073	5,100	7,710	5,618	3,086	1,700	761	[c]	35,927
1998	3,500	1,273	699	1,782	1,160	415	2,936	3,894	4,465	2,586	1,261	502	619	[c]	24,393
1999	2,081	1,000	801	1,837	[c]	268	2,088	2,216	5,871	5,455	1,797	1,049	644	[c]	24,306
2000	2,601	1,563	828	1,121	1,162	348	1,271	2,142	3,790	4,218	1,015	601	329	[c]	20,161
2001	3,188	1,975	943	2,084	[c]	[c]	1,930	2,096	5,191	2,353 [g]	2,334	1,292	604	[c]	23,047
2002	2,758	1,000	123	1,680	854	565	2,357	3,496	7,914	9,002	3,336	1,126	1,049	[c]	35,137
2003	3,964	914	288	879	[c]	175	2,576	[c]	4,095	[c]	827 [d]	1,365	546	[c]	15,341
2004	2,985	480	170	2,227	285	417	2,117	3,417	5,570	2,162	1,972	593	342	652	22,567
1979-2004 Mean	2,458	851	513	1,239	886	447	1,805	2,297	5,831	3,561	1,642	891	571	1,662	19,575
1995-2004 Mean	3,149	1,159	550	1,629	923	353	2,230	2,931	5,353	4,336	1,932	960	651	652	24,474
2000-2004 Mean	3,099	1,186	470	1,598	767	376	2,050	2,788	5,312	4,434	1,897	995	574	652	23,251
2005	2,463	1,806	634	1,784	760	468	2,600	1,924	3,862	2,838	2,151	670	454	83	21,780
2006	2,217	940	368	816	580	306	1,850	1,520	3,570	2,862	942	718	613		16,934
SEG [h]	1,600-2,800		350-700 [i]	450-1,800	600-1,200	250-650	1,100-3,100	950-3,400	3,100-9,200	1,800-5,100					

[a] Includes hatchery fish.

[b] May include Honolulu, Byers, Troublesome, Bunco, Birch, Sunshine, and Larson creeks.

[c] No counts conducted.

[d] Foot survey.

[e] Combination of foot survey and weir counts.

[f] Included with other streams.

[g] Poor count due to timing, poor visibility or weather conditions.

[h] SEG = Sustainable Escapement Goal.

[i] Deception Creek SEG discontinued after 2005.

Table 26.-Contribution of hatchery-reared Chinook salmon to the sport harvest at Willow Creek and the escapements at Willow and Deception creeks, 2005-2006.

		Willow Creek						Deception Creek		
	Brood Year	Harvest [a]			Escapement [b]			Escapement [b]		
Year	(Age)	N	# Recov	Contrib [c]	N	# Recov	Contrib [c]	N	# Recov	Contrib [c]
2005	2000- (0.4)		63	7.0%		0	0.0%		ND	ND
	2001- (0.3)		272	29.9%		2	0.9%		ND	ND
	2002- (0.2)		6	0.7%		0	0.0%		ND	ND
	2002- (1.1)		2	0.2%		0	0.0%		ND	ND
	2003- (0.1)		18	2.0%		0	0.0%		ND	ND
	Total	965	361	39.8% [d]	331	2	0.9% [d]	174	113	64.9% [e]
2006 [f]	2001- (0.4)		ND	ND		1	0.4%		ND	ND
	2002- (0.3)		ND	ND		0	0.0%		ND	ND
	2003- (1.1)		ND	ND		1	0.4%		ND	ND
	2003- (0.1)		ND	ND		1	0.4%		ND	ND
	Total	ND	ND	ND	277	3	1.1% [d]	248	151	60.9% [e]

Note: N = the total number of fish sampled; # Recov = number of adipose finclipped (hatchery reared) fish with coded wire tags recovered at the Tag Lab; Contrib = percent contribution; ND = no data because no attempts were made to collect it.

[a] Creel survey.

[b] Carcass survey.

[c] Percent contribution may differ from the quotient of numbers recovered to number sampled due to head or tag loss.

[d] Sum of contribution by brood year. Tags from the heads of adipose finclipped fish were decoded at the State Mark, Tag, and Age Lab in Juneau, AK.

[e] Ratio of adipose finclipped (marked) fish to total fish inspected during a carcass survey.

[f] The Willow Creek creel survey was discontinued in 2006; no sport fish harvests on this stream were sampled that year.

Table 27.-Sex and age composition and length-at-age of Chinook salmon from Willow Creek sport fishery harvest, 2005.

		2005 [a]					
		Wild			Hatchery		
Sex	Age Class [b]	1.2	1.3	1.4	1.2	1.3	1.4
Male							
	Percent	14.4	24.6	11.9	0.9	38.0	4.6
	SE	1.8	2.1	1.6	0.5	2.7	1.2
	Mean length (mm) [c]	628	815	980	600	810	893
	SE	6.0	7.0	12.4	20.0	4.5	12.7
	Sample size	58	99	48	3	124	15
Female							
	Percent	4.0	19.1	23.8	0.6	35.0	16.3
	SE	1.0	2.0	2.1	0.4	2.6	2.0
	Mean length (mm) [c]	638	835	933	628	801	876
	SE	7.9	5.7	5.1	27.5	3.9	5.6
	Sample Size	16	77	96	2	114	53
Combined							
	Percent	18.4	43.7	35.7	1.5	73.0	20.9
	SE	1.9	2.5	2.4	0.7	2.5	2.3
	Mean length (mm) [c]	630	824	949	611	9	879
	SE	5.0	4.7	5.6	15.5	3.0	5.2
	Sample Size	74	176	144	5	238	68
Total percent male (SE)		53.1 (2.5)			48.2 (2.8)		
Total percent female (SE)		46.9 (2.5)			51.8 (2.8)		
Total sample size		403			326		

[a] 2005 was that last year that age, sex, and length data were collected for Chinook salmon at Willow Creek.

[b] Less than 3% of the population are composed of other age classes (not listed).

[c] Mid eye to fork length.

Table 28.-Chinook salmon sport harvest from Westside Susitna River drainages, 1977-2006.

Year	Alexander Creek	Deshka River	Rabideux Creek	Yentna River	Peters Creek	Lake Creek	Fish Creek [a]	Talachulitna River	Other Streams [b]	Other Lakes [b]	Total
1977	820	1,017				464		224	413	0	2,938
1978	769	850				326		12	82	0	2,039
1979	712	2,811				1,796		293	156	0	5,768
1980	1,438	3,685				775		121	129	0	6,148
1981	1,121	2,769				795		57	0	0	4,742
1982	2,506	4,307				1,645		0	115	0	8,573
1983	1,711	4,889				2,423		336	209	0	9,568
1984	2,107	5,699			112	2,881		424	709	174	12,106
1985	2,761	6,407				2,575		224	1,677	0	13,644
1986	2,937	6,490				2,134	647	201	948	45	13,402
1987	2,224	5,632				3,282	834	116	1,252	10	13,350
1988	4,687	5,474			549	2,784	729	909	829	9	15,970
1989	4,882	8,062	12	215	339	3,554	1,202	403	656	18	19,343
1990	5,119	6,161	55	178	385	3,423	740	709	631	24	17,425
1991	6,548	9,306		301	495	2,712	660	848	942	24	21,836
1992	4,124	7,256	23	652	655	3,668	879	445	867	168	18,737
1993	5,154	5,682		653	283	6,425	1,148	875	922	0	21,142
1994	3,070	624		402	202	3,548	930	927	545	0	10,248
1995	1,217	0		425	252	2,838	545	509	479	0	6,265
1996	1,005	11		320	74	2,587	415	697	770	0	5,879
1997	1,470	42		315	34	3,777	557	778	826	0	7,799
1998	1,275	3,384		350		2,511	840	563	793	0	9,716
1999	2,241	3,496		939	197	3,037	1,188	977	56	0	12,131
2000	2,721	7,076		838	236	4,611	742	695	422	0	17,341
2001	2,313	5,007		648	88	4,067	965	409	417	0	13,914
2002	1,992	4,508		559	52	2,878	761	508	99	0	11,357
2003	2,293	6,605		277	122	4,467	371	587	313	0	15,035
2004	1,294	9,050	12	523	85	3,657	390	344	293	0	15,648
1977-2004 Mean	2,518	4,511	26	475	245	2,844	765	471	555	17	11,859
1995-2004 Mean	1,782	3,918	12	519	127	3,443	677	607	447	0	11,509
2000-2004 Mean	2,123	6,449	12	569	117	3,936	646	509	309	0	14,659
2005	1,052	7,332		963	127	4,508	307	800	788	68	15,945
2006	1,396	7,753	40	1,964	33	4,070	103	452	643	0	16,454

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Fish Lake drainage (Yentna River drainage).

[b] May include harvest from West Cook Inlet waters through 1998.

Table 29.-Westside Susitna River Management Unit Chinook salmon escapement index counts, 1979-2006.

Year	Alexander Creek	Deshka River Aerial index	Deshka River Weir [a]	Peters Creek	Lake Creek	Talachulitna River	Cache Creek	Other Streams [b]	Aerial Total
1979	6,215	27,385	NA	108	4,196	1,648	ND	ND	39,552
1980	ND	ND	NA	ND	ND	ND	ND	ND	ND
1981	ND	ND	NA	ND	ND	2,025	ND	ND	2,025
1982	2,546	16,000	NA	ND	3,577	3,101	ND	ND	25,224
1983	3,755	19,237	NA	2,272	7,075	10,014	497	ND	42,850
1984	4,620	16,892	NA	324	ND	6,138	ND	ND	27,974
1985	6,241	18,151	NA	2,901	5,803	5,145	206	485	38,932
1986	5,225	21,080	NA	1,915	ND	3,686	424	ND	32,330
1987	2,152	15,028	NA	1,302	4,898	ND	556	ND	23,936
1988	6,273	19,200	NA	3,927	6,633	4,112	818	ND	40,963
1989	3,497	ND	NA	959	ND	ND	362	ND	4,818
1990	2,596	18,166	NA	2,027	2,075	2,694	484	ND	28,042
1991	2,727	8,112 [c]	NA	2,458	3,011	2,457	499	161	19,425
1992	3,710	7,736	NA	996	2,322	3,648	487	ND	18,899
1993	2,763	5,769	NA	1,668	2,869	3,269	1,690	ND	18,028
1994	1,514	2,665	NA	573	1,898	1,575	628	570	9,423
1995	2,090	5,150	10,048	1,041	3,017	2,521	1,601	408	15,828
1996	2,319	6,343	14,349	749	3,514	2,748	581	548	16,802
1997	5,598	19,047	35,587	2,637	3,841	4,494	1,774	1,046	38,437
1998	2,807	15,556	15,409 [d]	4,367	5,056	2,759	1,771	642	32,958
1999	3,974	12,904	29,649	3,298	2,877	4,890	1,720	597	30,260
2000	2,331 [c]	ND	35,242	1,648	4,035	2,414	709	ND	11,137
2001	2,282	ND	29,004	4,226	4,661	3,309	624	ND	15,102
2002	1,936	8,749	29,428	2,959	4,852	7,824	671	1,075	28,066
2003	2,012	ND	39,496	3,998	8,153	9,573	558	ND	24,294
2004	2,215	28,778	57,934	3,757	7,598	8,352	212	3,509	54,421
1979-2004 Mean	3,392	14,597	29,615	2,179	4,379	4,278	803	904	25,589
1995-2004 mean	2,756	13,790	29,615	2,868	4,760	4,888	1,022	1,118	26,731
2000-2004 Mean	2,155	18,764	38,221	3,318	5,860	6,294	555	2,292	26,604
2005	2,140	11,495	37,725	1,508	6,345	4,406	1,460	420	27,774
2006	885	6,499 [c]	31,150	1,114	5,300	6,152	1,230	1,894	23,074
Escapement Goal	2,100-6,000 [e]	[f]	13,000- [g]	1,000-2,600 [e]	2,500-7,100 [e]	2,200-5,000 [e]			

Note: NA = not applicable; ND = no data because no attempts were made to collect it.

[a] No weir on the Deshka River prior to 1995. Weir counts, not an actual escapement count.

[b] May include Donkey Creek, Red Creek, Red Salmon Creek, Canyon Creek, and other miscellaneous creeks.

[c] Low count due to timing, poor visibility or weather conditions.

[d] High water delayed the deployment of the weir until June 16, 1998. Therefore, this weir count is low and may represent only half of the return.

[e] Sustainable Escapement Goal (SEG) established in 2001 (Bue and Hasbrouck *Unpublished*).

[f] Aerial escapement goals for Deshka River Chinook salmon: 11,200 fish (1994-1998); 8,750 fish (1999-2001); and discontinued thereafter (2002-2006).

[g] Weir based Biological Escapement Goal (BEG) established in 2001 (Bue and Hasbrouck *Unpublished*[1]).

[1] Bue, B. G., and J. J. Hasbrouck. *Unpublished*. Escapement goal review of salmon stocks of Upper Cook Inlet. Alaska Department of Fish and Game, Report to the Alaska Board of Fisheries, November 2001 (and February 2002), Anchorage

Table 30.-Sex and age composition and length-at-age of Chinook salmon sampled at Deshka River weir, 2005 and 2006.

		2005			2006		
Sex	Age Class[a]	1.2	1.3	1.4	1.2	1.3	1.4
Male							
	Percent	28	19.2	4.7	19.1	19.5	6.2
	SE	2.0	1.8	1.0	1.8	1.8	1.1
	Mean length (mm) [b]	574	785	936	583.3	760	886.7
	SE	4.8	6.6	12.0	6.141	10.21	15.1
	Sample size	137	94	23	93	95	30
Female							
	Percent	1.2	38.6	7.1	3.7	35.7	16.0
	SE	0.5	2.2	1.2	0.9	2.2	1.7
	Mean length (mm) [b]	675	771	866	669.9	767.8	842.3
	SE	16.7	3.4	8.1	24.2	4.3	7.9
	Sample size	6	189	35	18	174	78
Combined							
	Percent	29.2	57.8	11.8	22.8	55.1	22.1
	SE	2.1	2.2	1.5	1.9	2.3	1.9
	Mean length (mm) [b]	579	775	894	597.4	765.1	854.6
	SE	5.0	3.2	8.1	7.0	4.6	7.3
	Sample Size	143	283	58	111	269	108
Total percent male (SE)		53.1	(2.3)		44.7	(2.3)	
Total percent female (SE)		47	(2.3)		55.3	(2.3)	
Total sample size		490			488		

[a] Less than 3% of the population are composed of other age classes (not listed).

[b] Mid eye to fork length.

Table 31.-Chinook salmon sport harvest from West Cook Inlet freshwater drainages, 1977-2006.

Year	Chuitna River	Beluga River	Theodore River	Lewis River	Susitna R to N Foreland	South of . N Foreland	Other Sites	Total
1977	227		237	9				473
1978	408		58	12				478
1979	78		20	0				98
1980	17		17	0				34
1981	115		77					192
1982	105		42					147
1983	1,185		0					1,185
1984	723		1,110					1,833
1985	734		1,195	100				2,029
1986	960		1,418					2,378
1987	146		1,146	185				1,477
1988	312		1,137	246				1,695
1989	581	237	1,317	190				2,325
1990	1,064		748	285				2,097
1991	377		369	16				762
1992	516	175	522					1,213
1993	893		527	27		100	408	1,955
1994	530		581			6	466	1,583
1995	201		360	0		19	113	693
1996	844		183	0	331	0	0	1,358
1997	728		0	0	121	22	23	894
1998	551		0	0	73	63	6	693
1999	561		0	0	301	189	22	1,073
2000	513		0		182	468	0	1,163
2001	457		21		54	64	126	722
2002	629		0	0	502	0	96	1,227
2003	592	51	13	0	194	144	130	1,124
2004	333	276	0	0	102	0	71	782
1977-2004 Mean	514	185	396	56	207	90	122	1,132
1995-2004 Mean	541	164	58	0	207	97	59	973
2000-2004 Mean	505	164	7	0	207	135	85	1,004
2005	294	105	0	0	24	92	31	546
2006	445	66	0	0	94	32	401	1,038

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 32.-West Cook Inlet Management Unit Chinook salmon escapement index counts, 1979-2006.

Year	Chuitna River	Theodore River	Lewis River	Coal Creek	Other Streams[a]	Total WCI
1979	1,246	512	546		236	2,540
1980	ND [b]	ND	ND	ND	ND	ND
1981	1,362	535	560		1,144	3,601
1982	3,438	1,368	606		1,972	7,384
1983	4,043	1,519	ND [b]		ND [b]	5,562
1984	2,845	1,251	947		ND [b]	5,043
1985	1,600	1,458	861		700	4,619
1986	3,946	1,281	722		165	6,114
1987	ND [b]	1,548	875		ND [b]	2,423
1988	3,024	1,906	616		ND [b]	5,546
1989	990	1,026	452		ND [b]	2,468
1990	480	642	207		ND [b]	1,329
1991	537	508	303		ND [b]	1,348
1992	1,337	1,053	445		ND [b]	2,835
1993	2,085	1,110	531		156	3,882
1994	1,012	577	164		368	2,121
1995	1,162	694	146	221		2,223
1996	1,343	368	257	424		2,392
1997	2,232	1,607	777	471		5,087
1998	1,869	1,807	626	503		4,805
1999	3,721	2,221	675	1195		7,812
2000	1,456	1,271	480	757		3,964
2001	1,501	1,237	502	1,154		4,394
2002	1,394	934	439	882		3,649
2003	2,339	1,059	878	698		4,974
2004	2,938	491	1000	609		5,038
1979-2004 Mean	1,996	1,119	567	691	677	4,046
1995-2004 Mean	1,996	1,169	578	691	-	4,434
2000-2004 Mean	1,926	998	660	820	-	4,404
2005	1,307	478	441	504		2,730
2006	1,911	958	341	996		4,206
SEG [c]	1,200-2,900	500-1,700	250-800			

Note: Aerial count unless otherwise indicated. ND = no data because no attempts were made to collect it.

[a] May include Olsen, Nikoli, Coal, Straight, Bishop, Drill, and Scarp creeks.

[b] No count conducted, turbid water.

[c] SEG = sustainable escapement goal.

Table 33.-Northern Cook Inlet Management Area sport harvest of coho salmon by management area, 1977-2006.

	Knik Arm		Eastside Susitna		Westside Susitna		West Cook Inlet		NCIMA	Alaska	% by	Region II	% by
Year	Harvest	%NCIMA	Harvest	%NCIMA	Harvest	%NCIMA	Harvest	%NCIMA	Total	Total	NCIMA	Total	NCIMA
1977	4,366	25	5,709	33	6,599	38	532	3	17,206	105,004	16	67,866	25
1978	7,895	29	8,573	32	10,173	38	378	1	27,019	131,945	20	81,990	33
1979	7,139	30	7,564	31	9,036	38	337	1	24,076	119,329	20	93,234	26
1980	16,030	41	10,368	26	12,141	31	628	2	39,167	164,302	24	127,958	31
1981	10,484	44	6,593	28	5,940	25	604	3	23,621	125,666	19	95,376	25
1982	13,676	39	10,167	29	10,658	30	745	2	35,246	195,644	18	136,153	26
1983	6,139	35	5,176	30	3,610	21	2,552	15	17,477	149,270	12	87,935	20
1984	23,429	47	13,916	28	9,511	19	2,681	5	49,537	238,536	21	166,688	30
1985	14,339	37	7,042	18	11,270	29	6,320	16	38,971	200,773	19	137,671	28
1986	12,361	27	16,190	35	13,117	29	4,222	9	45,890	255,887	18	188,872	24
1987	25,787	48	11,028	20	8,746	16	8,548	16	54,109	235,435	23	176,710	31
1988	40,037	48	19,518	23	16,283	20	7,403	9	83,241	281,450	30	225,812	37
1989	23,846	36	17,078	26	18,226	27	7,683	11	66,833	338,195	20	237,155	28
1990	18,762	37	11,743	23	13,883	28	6,016	12	50,404	325,936	15	214,114	24
1991	22,186	32	19,479	28	20,507	29	8,253	12	70,425	389,569	18	254,961	28
1992	25,814	31	33,790	41	16,218	20	7,037	8	82,859	345,513	24	237,204	35
1993	35,763	41	26,063	30	15,454	18	10,326	12	87,606	412,487	21	283,868	31
1994	28,539	39	20,870	29	15,361	21	8,247	11	73,017	502,948	15	299,849	24
1995	20,650	32	19,165	29	17,148	26	8,182	13	65,145	368,631	18	263,749	25
1996	24,874	32	24,174	31	17,375	22	11,430	15	77,853	503,413	15	328,178	24
1997	11,773	33	10,297	29	7,123	20	6,492	18	35,685	462,931	8	283,311	13
1998	23,750	35	23,086	34	13,235	19	8,160	12	68,231	600,862	11	375,742	18
1999	14,429	22	23,292	36	17,995	28	9,339	14	65,055	632,829	10	309,564	21
2000	32,530	31	37,748	36	23,262	22	11,712	11	105,252	624,327	17	419,835	25
2001	30,106	33	26,617	30	19,221	21	13,949	16	89,893	811,799	11	480,048	19
2002	44,448	45	27,183	27	14,144	14	13,380	13	99,155	776,033	13	488,911	20
2003	24,583	33	18,585	25	16,072	22	14,239	19	73,479	783,328	9	450,231	16
2004	34,298	39	20,484	23	17,785	20	15,769	18	88,746	861,490	10	516,183	17
1977-2004 Mean	21,358	36	17,196	29	13,575	25	6,970	11	59,114	390,840	17	251,042	25
1995-2004 Mean	26,144	33	23,063	30	16,336	22	11,265	15	76,849	642,564	12	391,575	20
2000-2004 Mean	33,193	36	26,123	28	18,097	20	13,810	15	91,305	771,395	12	471,042	20
2005	27,000	36	17,471	23	18,266	24	12,572	17	75,309	937,965	8	514,473	15
2006	39,953	42	22,719	24	20,474	22	11,940	13	95,086	652,953	15	425,981	22

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 34.-Coho salmon harvest and fishing effort from Knik Arm sport fisheries, 1977-2006.

				Other Knik Arm															
	Little Susitna River			Wasilla Creek		Cottonwood Creek		Fish Creek		Eklutna Tailrace		Jim Creek[a]		Total		Other		Total	
Year	Harvest	(Hatchery)[b]	Angler-days[c]	Harvest	Angler days[c]	Harvest	Angler days[c]	Harvest	Angler-days[c]	Harvest	Angler-days[c]	Harvest	Angler-days[c]	Harvest	Angler-days[c]	Harvest	Angler-days[c]	Harvest	Angler-days[c]
1977	3,415		11,063	472	2,805									472	2,805	479	68,081	4,366	81,949
1978	4,865		12,127	2,112	3,446									2,112	3,446	918	59,967	7,895	75,540
1979	3,382		21,301	1,211	4,024	1,198	5,345							2,409	9,369	1,348	47,741	7,139	78,411
1980	6,302		22,420	3,555	5,726	3,375	9,268							6,930	14,994	2,798	65,116	16,030	102,530
1981	5,940		26,162	814	4,019	1,373	8,663					1,801	4,904	3,988	17,586	556	61,304	10,484	105,052
1982	7,116		24,020	1,624	6,261	1,886	5,186					2,306	6,653	5,816	18,100	744	49,593	13,676	91,713
1983	2,835		35,477	345	3,239	518	5,944					774	9,183	1,637	18,366	1,667	84,546	6,139	138,389
1984	14,253		48,517	1,920	3,547	1,895	7,144			561	3,413	3,429	9,369	7,805	23,473	1,371	58,737	23,429	130,727
1985	7,764		37,498	1,900	3,115	1,005	4,560	284	903	557	2,995	2,523	8,970	6,269	20,543	306	64,585	14,339	122,626
1986	6,039	(109)	45,776	944	3,387	690	5,653	364	2,641	502	8,549	2,948	13,015	5,448	33,245	874	52,585	12,361	131,606
1987	13,003	(3,407)	35,659	1,195	2,173	1,159	2,934	833	2,898	2,318	11,663	3,676	6,990	9,181	26,658	3,603	77,850	25,787	140,167
1988	19,009	(9,638)	49,731	1,273	2,228	746	4,056	1,637	3,110	3,329	13,188	11,078	23,229	18,063	45,811	2,965	87,487	40,037	183,029
1989	14,129	(10,597)	54,708	975	2,406	876	3,069	784	3,314	1,666	10,342	4,220	11,141	8,521	30,272	1,196	61,932	23,846	146,912
1990	7,497	(2,242)	40,159	1,012	2,679	286	3,056	398	3,936	1,012	7,618	6,184	17,878	8,892	35,167	2,373	67,558	18,762	142,884
1991	16,450	(7,699)	50,838	844	2,893	176	1,623	486	3,693	631	5,892	2,920	13,736	5,057	27,837	679	67,930	22,186	146,605
1992	20,033	(3,406)	49,304	413	1,110	348	1,974	526	3,638	664	4,279	3,409	8,856	5,360	19,857	421	72,664	25,814	141,825
1993	27,610	(7,703)	42,249	1,133	1,774	736	3,077	741	2,341	1,337	4,523	2,878	6,824	6,825	18,539	1,328	57,426	35,763	118,214
1994	17,665	(6,165)	45,149	1,390	2,226	1,100	3,230	492	2,358	3,553	8,974	3,946	9,658	10,481	26,446	393	71,777	28,539	143,372
1995	14,451	(2,991)	41,119	445	1,373	340	2,598	435	2,256	990	11,453	3,549	10,893	5,759	28,573	440	56,462	20,650	126,154
1996	16,753	(3,418)	24,575	872	1,386	762	1,783	607	934	1,217	6,448	3,911	7,561	7,369	18,112	752	48,303	24,874	90,990
1997	7,756		27,883	708	1,188	372	2,070	148	1,104	728	3,835	1,786	5,349	3,742	13,546	275	54,301	11,773	95,730
1998	14,469		22,108	970	1,171	1,098	3,454	1,334	2,256	1,422	5,100	4,197	5,272	9,021	17,253	260	38,857	23,750	78,218
1999	8,864		30,437	313	990	537	3,506	233	2,182	1,453	6,150	2,612	6,860	5,148	19,688	417	62,517	14,429	112,642
2000	20,357		39,556	0	328	282	1,265	470	1,408	5,053	7,938	5,653	10,975	11,458	21,914	715	60,131	32,530	121,601
2001	17,071		33,521	0	419	647	2,627	361	1,670	3,399	10,166	8,374	13,028	12,781	27,910	254	49,596	30,106	111,027
2002	19,278		40,346	664	1,037	561	1,534	1,233	2,776	7,073	11,767	14,707	17,989	24,238	35,103	932	50,745	44,448	126,194
2003	13,672		31,993	261	757	665	2,238	112	758	3,128	8,423	6,415	13,474	10,581	25,650	330	46,335	24,583	103,978
2004	15,307		33,819	488	1,079	532	3,282	774	2,029	5,084	9,588	11,766	19,342	18,644	35,320	347	44,389	34,298	113,528
1977-2004 Mean	12,332		34,911	995	2,385	891	3,813	613	2,310	2,175	7,729	4,794	10,881	8,000	22,699	1,026	60,304	21,358	117,915
1995-2004 Mean	14,798		32,536	472	973	580	2,436	571	1,737	2,955	8,087	6,297	11,074	10,874	24,307	472	51,164	26,144	108,006
2000-2004 Mean	17,137		35,847	283	724	537	2,189	590	1,728	4,747	9,576	9,383	14,962	15,540	29,179	516	50,239	33,193	115,266
2005	10,203		27,490	347	684	668	1,484	535	1,461	4,899	19,339	10,114	19,605	16,563	42,573	234	45,700	27,000	115,763
2006	12,399		28,547	857	869	789	3,867	281	948	6,104	20,465	19,259	25,271	27,290	51,420	264	39,828	39,953	119,795

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Includes other Knik River tributaries.

[b] Sources: (Bartlett and Conrad 1988; Bartlett and Vincent-Lang 1989; Bartlett and Sonnichsen 1990; Bartlett and Bingham 1991; Bartlett 1992-1994, 1996a, b).

[c] Participation directed at coho salmon represents only a portion of the annual effort.

Table 35.-Coho salmon sport harvest from Eastside Susitna River drainages, 1977-2006.

Year	Willow Creek	Little Willow Creek	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River [a]	Other [b]	Total
1977	679	225			438		1,415			1,070	1,882	5,709
1978	905	151			478		2,451			2,200	2,388	8,573
1979	462	262		624	462		1,735		774	1,248	1,997	7,564
1980	1,207	494		1,124	430		2,684		1,534	661	2,234	10,368
1981	747	29		901	326		2,261		968	422	939	6,593
1982	1,069	398		776	367		3,060		1,719	996	1,782	10,167
1983	576	52	52	408	596		1,402		722	836	532	5,176
1984	1,846	1,147	162	1,247	661	449	4,502		1,733	1,509	660	13,916
1985	1,026	528		608	478		1,972		1,205	747	478	7,042
1986	944	363	871	472	1,343	363	1,488	980	4,029	3,376	1,961	16,190
1987	2,898	561	36	453	1,068	145	1,394	163	1,612	2,608	90	11,028
1988	4,875	1,237	327	1,455	3,165	291	2,219	691	2,146	2,929	183	19,518
1989	4,218	1,388	336	834	2,231	190	2,295	281	2,159	2,775	371	17,078
1990	2,711	639	197	2,596	991	180	778		704	2,539	408	11,743
1991	4,154	1,308	167	3,819	1,544	657	1,612	322	1,761	3,435	700	19,479
1992	8,591	1,830	713	5,393	4,049	502	3,595	858	2,259	5,531	469	33,790
1993	5,743	1,213	554	2,385	2,413	428	3,496	535	2,922	5,830	544	26,063
1994	4,504	1,452	328	1,569	1,586	478	2,619	281	1,906	5,476	671	20,870
1995	3,498	992	472	1,687	1,092	152	2,385	198	1,385	6,672	632	19,165
1996	5,176	1,892	360	668	1,896	430	3,118	258	2,612	7,325	439	24,174
1997	2,401	661	202	294	1,198	166	1,692	177	443	2,815	248	10,297
1998	5,908	1,185	670	564	3,417	382	2,720	920	1,589	5,340	382	23,086
1999	5,019	871	260	1,198	3,045	440	3,382	622	1,709	5,814	932	23,292
2000	8,679	2,885	994	1,702	3,348	1,181	5,454	1,160	3,274	7,703	1,368	37,748
2001	6,835	1,936	728	1,408	2,588	683	5,023	146	1,072	5,195	1,003	26,617
2002	6,040	1,513	494	797	2,995	204	4,644	288	3,238	5,640	1,330	27,183
2003	2,918	635	1,090	938	1,908	220	3,361	421	2,508	3,984	602	18,585
2004	2,981	1,290	251	189	2,636	248	4,866	223	2,070	4,454	1,276	20,484
1977-2004 Mean	3,450	969	441	1,312	1,670	389	2,772	474	1,848	3,540	946	17,196
1995-2004 Mean	4,946	1,386	552	945	2,412	411	3,665	441	1,990	5,494	821	23,063
2000-2004 Mean	5,491	1,652	711	1,007	2,695	507	4,670	448	2,432	5,395	1,116	26,123
2005	4,255	1,103	369	340	2,337	267	2,592	288	2,493	3,359	68	17,471
2006	5,031	1,511	1,202	780	3,602	906	2,622	281	3,460	3,224	100	22,719

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Talkeetna River and tributaries including Clear Creek.

[b] Includes lakes and streams.

Table 36.-Coho salmon sport harvest from Westside Susitna River drainages, 1977-2006.

Year	Alexander Creek	Deshka River	Rabideux Creek	Peters Creek	Yentna River	Lake Creek	Fish Creek [a]	Talachulitna River	Other [b]	Total
1977	1,562	559				1,203		346	2,929	6,599
1978	2,401	1,789				2,212		88	3,683	10,173
1979	1,560	973				2,671		125	3,707	9,036
1980	999	2,290				2,351		491	6,010	12,141
1981	891	632				1,035		240	3,142	5,940
1982	1,907	2,463				1,603		524	4,161	10,658
1983	408	1,036				1,392		84	690	3,610
1984	1,509	1,646		12		2,432		486	3,426	9,511
1985	1,455	2,637				4,105		224	2,849	11,270
1986	1,352	4,256				1,575	324	402	5,208	13,177
1987	1,539	2,789				1,358	362	235	2,463	8,746
1988	1,965	7,458		18		2,110	400	418	3,914	16,283
1989	2,207	8,947	409	47	103	1,907	549	688	3,369	18,226
1990	1,973	4,959	540	33	353	2,986	793	276	1,970	13,883
1991	2,296	8,111	32	221	718	4,221	1,081	828	2,999	20,507
1992	834	7,110	543	300	275	2,632	575	405	3,544	16,218
1993	1,719	6,530		67	227	3,101	920	152	2,738	15,454
1994	2,188	5,511		72	556	2,723	714	427	3,170	15,361
1995	2,692	2,275		183	569	4,736	1,058	1,031	4,604	17,148
1996	803	4,615		57	1,198	4,445	618	805	4,834	17,375
1997	1,307	1,169		89	591	1,445	332	793	1,397	7,123
1998	1,158	3,630			299	4,353	785	905	2,105	13,235
1999	1,418	4,034		65	1,093	6,931	2,261	1,453	740	17,995
2000	2,695	8,687		157	1,050	6,297	1,320	1,347	1,709	23,262
2001	1,972	6,556		0	620	5,610	1,958	1,142	1,363	19,221
2002	1,191	3,616		177	705	4,613	1,034	1,447	1,361	14,144
2003	1,071	4,946		155	1,162	5,263	959	1,543	973	16,072
2004	1,827	4,440	586	149	1,283	6,106	1,880	959	555	17,785
1977-2004 Mean	1,604	4,059	422	106	675	3,265	943	638	2,843	13,577
1995-2004 Mean	1,613	4,397	586	115	857	4,980	1,221	1,143	1,964	16,336
2000-2004 Mean	1,751	5,649	586	128	964	5,578	1,430	1,288	1,192	18,097
2005	757	3,616	168	96	774	8,684	2,292	583	1,296	18,266
2006	119	6,042	837	105	3,040	6,330	1,433	1,127	1,441	20,474

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Fish Lake drainage (Yentna River drainage).

[b] May include harvest from West Cook Inlet Management Unit lakes and streams.

Table 37.-Coho salmon sport harvest from West Cook Inlet drainages, 1977-2006.

Year	Chuitna River	Beluga River	Theodore River	Lewis River	Kustatan River	Polly Creek	Big River Lakes [a]	Silver Salmon Creek	Other Susitna R - North Foreland	Other South of North Foreland	Other [b]	Total
1977	316		113	103								532
1978	277		101	0								378
1979	287		50	0								337
1980	258		370	0								628
1981	594		10									604
1982	220		115			410						745
1983	554		10		1,800	188						2,552
1984	898		137		1,646							2,681
1985	1,095		261	75	4,889							6,320
1986	815		168		3,239							4,222
1987	1,684		996	145	5,723							8,548
1988	782		400	0	6,221							7,403
1989	1,228	419	502	112	5,413						9	7,683
1990	1,113		198	33	4,584		88					6,016
1991	1,791		513	181	5,768							8,253
1992	1,547	243	421		4,494	332						7,037
1993	1,313		236	194	6,457		158			751	1,217	10,326
1994	559		521		5,259		25			268	1,615	8,247
1995	1,407		372		4,237	641	75			559	891	8,182
1996	1,263		361		6,266	170	600		741	1,858	171	11,430
1997	1,156		187		3,605		305		574	632	33	6,492
1998	2,348		380		3,999		264		650	382	137	8,160
1999	1,614		290		3,178		463		1,282	2,047	465	9,339
2000	1,872		1,161		5,699		325		1,134	1,521		11,712
2001	3,284		1,029		4,920		508		1,210	2,998		13,949
2002	2,586		1,208	200	5,795		490		1,725	761	615	13,380
2003	1,467	426	225	197	3,967	190	2,830	2,269	429	1,611	628	14,239
2004	1,655	520	645	90	3,984	39	2,648	1,389	225	3,471	1,103	15,769
1977-2004 Mean	1,214	402	392	95	4,597	281	675	1,829	886	1,405	626	6,970
1995-2004 Mean	1,865	473	586	162	4,565	260	851	1,829	886	1,584	505	11,265
2000-2004 Mean	2,173	473	854	162	4,873	115	1,360	1,829	945	2,072	782	13,810
2005	972	120	229	524	3,551		3,916	1,568	491	913	288	12,572
2006	531	313	282	177	3,556	73	3,953	997	237	1,661	160	11,940

Source: Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Wolverine Creek and other tributaries of Big River Lakes.

[b] Includes lakes and streams. Other from 1999-2005 includes saltwater shoreline.

Table 38.-Knik Arm drainage coho salmon escapement counts, 1981-2006.

	Little Susitna River [b]		Fish Creek	Cottonwood Creek		Wasilla Creek drainage					Matanuska River (Yellow Creek)	Jim Creek drainage		
	Stocked					Weir		Index [a]				Index [a]		
Year	fish	Weir	Weir [c]	Weir	Index [a]	Wasilla Creek	Spring Creek	Wasilla Creek (mainstem)	Spring Creek (upper)	Spring Creek (Flats)	Total	Index [a]	McRoberts Creek	Upper Jim Creek	Total
1981			2,382	2,436 [d]	423			238	[e]	64	302	[e]			[e]
1982			5,201	2,064 [d]	737			171	[e]	105	276	[e]			[e]
1983			2,342		506			4	[e]	28	32	[e]			[e]
1984			4,510		935			876		90	966	[e]			[e]
1985			5,089		334			16	150	81	247	65	662		662
1986		6,999 [f]	2,166		121				[e] 141	147	288	20	439		439
1987			3,871		360			251	110	42	403	58	667		667
1988	4,428	20,491	2,162		293				[e] 82	30	112	110	1,911		1,911
1989	6,862	15,232	3,479		147				[e] 67	39	106	226	597		597
1990	3,370	14,310	2,719		167			34	38	12	84	146	599	589	1,188
1991	8,322	37,601	1,297		158			118	16	5	139	136	484	418	902
1992	2,324	20,393	1,705		6			3	11	0	14	57	11	59	70
1993	9,615	33,378	2,328		265				[e] 67	69	136	490	503	535	1,038
1994	5,124	27,820	350		232			282	76	60	418	172	506	2,119	2,625
1995	1,069	11,817	390		242			46	20	38	104	220	702	1,288	1,990
1996		15,803	682		168			84	30	29	143	101	72	439	511
1997		9,894 [f]	2,578	936	386			156	38	35	229	367	701	563	1,264
1998		15,159	5,463	2,114	537	3,614	163	120 [g]	31 [g]	25	176	302	922	560	1,482
1999		3,017 [f]	1,766	478 [h]	131 [i]	1,579 [i]	8	211	40	16	267	88	12	320	332
2000		15,436	5,979 [h]	1,888 [h]	876 [i]	6,154	0	380 [g]	224	50	654	169	657	2,561	3,218
2001		30,587	10,047 [h]	3,525 [h]	983 [i]	6,508	276	453	37	15	505	419	1,019	575	1,594
2002		47,938	15,187 [h]	4,270 [h]	1,191 [i]	12,495	ND	933	188	75	1,196	65	2,473	1,630	4,103
2003		10,877	2,142 [h]	791 [h]	229 [i]	2,962	ND	227	17	50	294	53	1,421	393	1,814
2004		40,199	3,255 [c h]	2,038 [h]	430 [i]	ND [j]	ND [j]	934	114	100	1,148	0	4,652	1,045	5,697
1981-2004 Mean	5,139	20,942	3,629	-	411	-	-	277	75	50	343	163	951	873	1,605
1995-2004 Mean	-	20,073	4,749	-	517	-	-	354	74	43	472	178	1,263	937	2,201
1998-2004 Mean	-	23,316	6,263	2,158	625	5,552	112	465	93	47	606	157	1,594	1,012	2,606
2000-2004 Mean	-	29,007	7,322	2,502	742	7,030	-	585	116	58	759	141	2,044	1,241	3,285
2005		16,839 [f]	3,836 [c h]	ND [j]	619 [i]	ND [j]	ND [j]	ND [e]	ND [e]	130	130	305	1,464	1,883	3,347
2006		8,786 [f]	5,723 [c h]	ND [j]	912 [i]	ND [j]	ND [j]	294 [k]	171	272	737	47	2,389	1,750	4,139
SEG range	10,100-17,700												450-700		

-continued-

Table 38.-Page 2 of 2.

Note: ND = no data collected because no attempts were made to collect it. "-" value can not be computed due to limitations of the data.

[a] Foot surveys unless otherwise noted.

[b] Weir located at River Mile 34 in 1986 and 1988-1995; weir located at RM 71 from 1996-2006.

[c] 1982-1991 weir count plus stream survey; 1992, 1993 weir count; 1994-1996 and 2004-2006 weir was removed on August 15 before the majority of the coho run. In 1997 the weir was out on September 1.

[d] Combination weir and foot survey. Weir was removed prior to completion of coho run.

[e] No survey conducted.

[f] Incomplete or partial count due to weir submersion.

[g] Count conducted late due to high water.

[h] Includes fish counted below weir at close of season.

[i] Beginning in 1999, the highest count of three counts occurred within a 2-week period.

[j] Poor counting conditions.

[k] Poor counting conditions.

Table 39.-Coho salmon harvest, escapement, and total inriver return for Little Susitna River, 1977-2006.

	Little Susitna River		
Year	Harvest[a]	Escapement [b]	Total inriver return
1977	3,415		
1978	4,865		
1979	3,382		
1980	6,302		
1981	5,940		
1982	7,116		
1983	2,835		
1984	14,253		
1985	7,764		
1986	6,039	6,999 [c d]	13,038
1987	13,003		
1988	19,009	20,491 [d]	39,500
1989	14,129	15,232 [d]	29,361
1990	7,497	14,310 [d]	21,807
1991	16,450	37,601 [d]	54,051
1992	20,033	20,393 [d]	40,426
1993	27,610	33,378 [d]	60,988
1994	17,665	27,820 [d]	45,485
1995	14,451	11,817 [d]	26,268
1996	16,753	15,803 [e]	32,556
1997	7,756	9,894 [c e]	17,650
1998	14,469	15,159 [e]	29,628
1999	8,864	3,017 [c e]	11,881
2000	20,357	15,436 [e]	35,793
2001	17,071	30,587 [e]	47,658
2002	19,278	47,938 [e]	67,216
2003	13,672	10,877 [e]	24,549
2004	15,307	40,199 [e]	55,506
1988-2004 Mean	15,904	21,762	37,666
1996-2004 Mean	14,836	20,990	35,826
2000-2004 Mean	17,137	29,007	46,144
2005	10,203	16,839 [c e]	27,042
2006	12,399	8,776 [c e]	21,175

[a] Statewide Harvest Survey (SWHS) estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[b] Escapement = total weir count.

[c] Incomplete or partial count due to weir submersion.

[d] Weir located at river mile 34 in 1986 and 1988-1995.

[e] Weir located at river mile 71 from 1996 to present.

Table 40.-Sex and age composition and length-at-age of coho salmon at Little Susitna River weir, 2005 and 2006.

		2005			2006		
Sex	Age Class	1.1	2.1	3.1	1.1	2.1	3.1
Male							
	Percent	22.9	26.1		14.8	36.3	
	SE	2.0	2.1		0.0	0.0	
	Mean length (mm) [a]	572	596		566	575	590
	SE	5.0	4.1		6.2	3.7	15.4
	Sample size	102	116		62	152	3
Female							
	Percent	19.8	31.0	0.2	12.7	35.6	
	SE	1.9	2.2	0.2	0.0	0.0	
	Mean length (mm) [a]	575	585	565	566	670	
	SE	3.5	2.9		4.3	2.7	
	Sample size	88	138	1	53	149	
Combined							
	Percent	42.7	57.1	0.2	27.5	71.7	0.7
	SE	2.3	2.4	0.2	0.0	0.0	
	Mean length (mm) [a]	573	590	565	566	573	590
	SE	3.1	2.5		3.8	2.3	15.4
	Sample size	190	254	1	115	301	3
Total percent male (SE)		49.0 (2.4)			51.8 (0.0)		
Total percent female (SE)		51.0 (2.4)			48.2 (0.0)		
Total sample size		445			419		

[a] Mid eye to fork length.

Table 41.-Eastside and Westside Susitna River drainage coho salmon escapement counts, 1981-2006.

	Westside Susitna Management Unit				Eastside Susitna Management Unit[a]					
Year	Yentna River[b]	Deshka River[c]	Rabideux Creek index	Total	Birch Creek index	Question Creek index	Answer Creek index	Total	Susitna River[d]	Total
1981	17,017		[e]	17,017	[e]	[e]	[e]	[e]	37,000	54,017
1982	34,089		[e]	34,089	[e]	[e]	[e]	[e]	80,000	114,089
1983	8,867		[e]	8,867	[e]	[e]	[e]	[e]	24,000	32,867
1984	18,172		480	18,652	236	60	57	353	[e]	19,005
1985	9,181		82	9,263	30	89	9	128	[e]	9,391
1986	23,457		[e]	23,457	25	[e]	[e]	25	[e]	23,482
1987	6,279		50 [f]	6,329	46	149	10	205	[e]	6,534
1988	12,173		230	12,403	63	337	160	560	[e]	12,963
1989	25,695		20	25,715	180	31	66	277	[e]	25,992
1990	21,346		20	21,366	36	41	6	83	[e]	21,449
1991	57,275		185	57,460	300	492	51	843	[e]	58,303
1992	29,073		[e]	29,073	167	227	181	575	[e]	29,648
1993	37,752		[e]	37,752	178	370	34	582	[e]	38,334
1994	25,173		105	25,278	224	339	0 [g]	563	[e]	25,841
1995	74,406	12,824	39	87,269	127	155	35	317	[e]	87,586
1996	34,420		[e]	34,420	458	238	43	739	[e]	35,159
1997	13,670	8,063	114	21,847	217	186	57	460	[e]	22,307
1998	24,769	6,773	56	31,598	356	519	45	920	[e]	32,518
1999	37,933	4,563	169	42,665	153	128	470	751	[e]	43,416
2000	40,921	26,387	354	67,662	809	1,040	899	2,748	[e]	70,410
2001	47,077	29,927	656	77,660	1,470	450	371	2,291	[e]	79,951
2002	75,090	24,612	[e]	99,702	1,158	1,010	249	2,417	[e]	102,119
2003	45,222	17,305	344	62,871	[e]	407	131	538	[e]	63,409
2004	92,343	62,940	[e]	155,283	[e]	822	111	933	[e]	156,216
1981-2004 Mean	33,808	21,488 [h]	194	41,987	328	355	149	777	47,000	48,542
1995-2004 Mean	48,585	21,488 [h]	247	68,098	594	496	241	1,211		69,309
2000-2004 Mean	60,131	32,234 [h]	451	92,636	1,146	746	352	1,785		94,421
2005	76,890	47,887	[e]	124,777	1,014	537	35	1,586	[e]	126,363
2006	132,889	59,419	3063	195,371	883	299	270	1,452	[e]	196,823

-continued-

Table 41.-Page 2 of 2.

[a] Survey conducted by walking portions of the creek.

[b] Sonar counts, dates of assessment vary; estimates for 1981-1984 encompass the entire coho salmon migration (Davis 2000). All estimates from 1985-2006 are partial because Yentna River sonar shut down before the end of the coho run. Yentna River 2005 and 2006 coho salmon estimates reported by Westerman and Willette. (2007a-b).

[c] Weir count. Deshka River weir locations - 1995 (rm 17) and 1997-2000 (rm 7). In 1998, 1999, 2002, and 2005 the weir was underwater for an extended time during coho season resulting in incomplete counts.

[d] Mark-recapture estimates of abundance upstream of Susitna River (rm 80). Source - (ADF&G 1981, 1983; Barrett et al. 1984).

[e] No survey conducted.

[f] Poor survey conditions.

[g] Beaver dam downstream of index area blocking passage of fish.

[h] Mean includes only complete counts years at Deshka River weir (rm 7): 1997, 2000-2001, and 2003-2005.

Table 42.-Sex and age composition and length-at-age of coho salmon at Deshka River weir, 2005 and 2006.

		2005			2006		
	Age Class	1.1	2.1	3.1	1.1	2.1	3.1
Male							
	Percent	24.3	24.1	0.2	21.6	34.1	1.3
	SE	1.9	1.9	0.2	0.0	0.0	
	Mean length (mm) [a]	553	563	620	546	551	526
	SE	4.1	4.1		5.4	3.9	37.0
	Sample size	118	117	1	66	104	4
Female							
	Percent	14.6	36.3	0.2	13.4	28.2	1.0
	SE	1.6	2.2	0.2	0.0	0.0	0.0
	Mean length (mm) [a]	562	573	580	575	550	553
	SE	4.2	2.4		4.6	2.7	29.4
	Sample size	71	176	1	41	86	3
Combined							
	Percent	39.0	60.4	0.4	35.1	62.3	2.3
	SE	2.2	2.2	0.3	0.0	0.0	0.0
	Mean length (mm) [a]	557	569	600	546	550	538
	SE	3.0	2.2	20.0	3.7	2.4	21.8
	Sample size	189	293	2	107	190	7
Total percent male (SE)		48.9	(2.3)		57.1	(2.5)	
Total percent female (SE)		51.1	(2.3)		42.9	(2.5)	
Total sample size		485			305		

[a] Mid eye to fork length.

Table 43.-Hatchery-reared sockeye salmon fry released in Big Lake drainage by brood year, 1975-2006.

Brood Year	Hatchery	Eggs incubated	Fry released	Egg/Fry survival (%)	Number marked	Release size (g)
1975	Big Lake	180,300	71,168	39.5	0	0.15
1976	Big Lake	10,034,013	7,686,382	76.6	72,673	0.15
1977	Big Lake	8,748,867	5,739,010	65.6	66,153	0.13
1978	Big Lake	9,832,726	0	0.0	ND	ND
1979	Big Lake	5,053,808	806,047	15.9	0	0.15
1980	Big Lake	4,699,733	3,967,941	84.4	0	0.14
1981	Big Lake	5,662,004	4,263,356	75.3	0	0.17
1982	Big Lake	8,624,662	6,601,409	76.5	0	0.16
1983	Big Lake	9,294,426	7,362,000	79.2	0	0.15
1984	Big Lake	16,210,000	12,430,000	76.7	18,835	0.15
1985	Big Lake	21,550,000	15,000,000	69.6	18,120	0.20
1986	Big Lake	17,500,000	11,866,000	67.8	19,613	0.20
1987	Big Lake	20,300,000	14,492,000	71.4	20,085	0.15
1988	Big Lake	19,700,000	13,205,848	67.0	24,848	0.15
1989	Big Lake	14,835,000	10,815,319	72.9	24,319	0.20
1990	Big Lake	14,734,000	10,037,290	68.1	22,290	0.24
1991	Big Lake	7,357,000	3,111,000	42.3	0	0.25
1992	Big Lake	10,330,000	4,586,000	44.4 [a]	0	0.22
1993	Eklutna	9,000,000	5,000,000 [b]	68.9 [c]	0	0.43
1994	Eklutna	7,700,000	5,000,000 [b]	64.5 [c]	0	0.40
1995	Eklutna	8,000,000	5,000,000 [b]	75.0 [c]	0	0.39
1996	Eklutna	8,000,000	4,000,000 [b]	62.8 [c]	0	0.40
1997	Trail Lakes	8,000,000	5,000,000 [b]	62.5 [c]	0	0.03
1998	Trail Lakes	5,132,000	197,000 [b]	20.3 [c]	197,000 [d]	0.62-0.73
1999	Trail Lakes	1,490,000	845,800	73.6 [c]	845,800 [d]	0.30-0.41
2000	Trail Lakes	3,638,000	0	0.0 [c]	0 [d]	NA
2001	Trail Lakes	6,286,000	4,316,000	65.7 [c]	4,316,000 [d]	0.51-0.57
2002	Trail Lakes	6,342,000	3,588,900	56.6	3,588,900 [d]	0.43-0.55
2003	Trail Lakes	7,046,000	5,004,000	71.0	5,004,000 [d]	0.46
2004	Trail Lakes	2,590,000	1,742,300	67.3	1,742,300 [d]	0.36
2005	Trail Lakes	2,185,000	444,200 [e]		444,200 [d]	0.85
2006	Trail Lakes	6,483,000				

[a] Includes 1,534,000 fry transferred to Eklutna Salmon Hatchery.

[b] Additional fry retained for smolt program.

[c] Source: ADF&G, *Unpublished,* Big Lake sockeye salmon enhancement progress report, 2005. Located at Alaska Department of Fish and Game, Palmer.

[d] 100% thermal marked.

[e] 426,000 presmolt (4.7 g) stocked November 2006.

Table 44.-Northern Cook Inlet Management Area sport harvest of sockeye salmon by management unit, 1977-2006.

Year	Knik Arm	Eastside Susitna	Westside Susitna	West Cook Inlet	Total
1977	1,576	3,594	2,786	6	7,962
1978	1,239	267	1,634	0	3,140
1979	3,616	1,020	1,558	0	6,194
1980	5,674	873	1,111	0	7,658
1981	6,080	833	1,408	48	8,369
1982	4,621	1,555	2,881	10	9,067
1983	14,297	3,221	3,520	466	21,504
1984	9,240	2,705	3,415	249	15,609
1985	5,612	1,465	2,302	461	9,840
1986	6,009	4,029	4,076	89	14,203
1987	8,785	2,046	2,427	272	13,530
1988	8,076	2,857	3,167	473	14,573
1989	9,040	2,527	2,307	529	14,403
1990	6,588	2,677	1,938	636	11,839
1991	4,968	2,897	3,083	765	11,713
1992	5,349	3,468	2,916	188	11,921
1993	5,926	4,137	2,161	2,355	14,579
1994	5,082	3,443	1,919	2,035	12,479
1995	4,349	3,682	2,106	1,304	11,441
1996	4,307	2,675	1,115	2,951	11,048
1997	4,095	5,851	3,109	2,174	15,229
1998	5,499	5,859	2,463	2,522	16,343
1999	3,658	4,608	5,279	2,990	16,535
2000	7,536	6,509	4,946	4,244	23,235
2001	4,328	6,776	6,311	3,150	20,565
2002	4,619	3,427	1,881	2,019	11,946
2003	6,606	2,734	8,660	4,708	22,708
2004	7,148	3,107	3,358	3,323	16,936
1977-2004 Mean	5,854	3,173	2,994	1,356	13,377
1995-2004 Mean	5,215	4,523	3,923	2,939	16,599
2000-2004 Mean	6,047	4,511	5,031	3,489	19,078
2005	3,460	1,677	2,219	4,025	11,381
2006	4,622	1,412	626	4,993	11,653

Source: Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Table 45.-Sockeye salmon sport harvest from Knik Arm drainage fisheries, 1977-2006.

Year	Little Susitna	Knik River[a]	Eklutna Tailrace	Cottonwood Creek	Big Lake[b]	Other	Total
1977	888					688	1,576
1978	859					380	1,239
1979	1,478			1,525		613	3,616
1980	2,127			2,660		887	5,674
1981	1,619	450		3,245		766	6,080
1982	1,865	880		608		1268	4,621
1983	2,787	1,277		1,632		8601	14,297
1984	6,385	823	187	661		1184	9,240
1985	2,894	1,037	142	1,179	109	251	5,612
1986	3,616	905	28	789	39	632	6,009
1987	3,513	1,105	254	869	1,087	1,957	8,785
1988	2,310	1,928	200	346	2,037	1,255	8,076
1989	2,315	1,322	204	683	2,900	1,616	9,040
1990	891	2,219	29	271	2,238	940	6,588
1991	1,722	1,459	19	47	565	1156	4,968
1992	1,274	1,471	173	633	1,241	557	5,349
1993	2,487	1,041	211	453	598	1136	5,926
1994	1,809	1,258	133	807	476	599	5,082
1995	1,116	990	190	895	651	507	4,349
1996	2,286	1,077	84	444	68	348	4,307
1997	1,845	864	100	1,008	122	156	4,095
1998	872	1,220	57	2,906	154	290	5,499
1999	1,282	614	151	1,080	432	99	3,658
2000	3,661	1,543	764	1,118	21	429	7,536
2001	1,959	922	999	314	10	124	4,328
2002	2,133	1,268	529	319	147	223	4,619
2003	3,337	1,554	122	961	57	575	6,606
2004	2,776	2,499	491	719	400	263	7,148
1977-2004 Mean	2,218	1,239	241	1,007	668	982	5,854
1995-2004 Mean	2,127	1,255	349	976	206	301	5,215
2000-2004 Mean	2,773	1,557	581	686	127	323	6,047
2005	1,442	848	362	538	79	191	3,460
2006	1,556	2,173	289	279	0	325	4,622

Source: Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Knik River and tributaries including Jim Creek.

[b] Big Lake drainage streams.

Table 46.-Sockeye salmon sport harvest from Eastside Susitna River drainages, 1977-2006.

Year	Willow Creek	Sheep Creek	Montana Creek	Sunshine Creek	Talkeetna River [a]	Other	Total
1977	831	450	978		334	1,001	3,594
1978	56	14	85		28	84	267
1979	94	31	346	157	31	361	1,020
1980	83	0	257	116	6	411	873
1981	77	105	182	220	29	220	833
1982	94	88	514	189	115	555	1,555
1983	425	370	534	685	534	673	3,221
1984	249	62	561	100	636	1,097	2,705
1985	139	30	279	249	508	260	1,465
1986	290	0	363	290	1,597	1,489	4,029
1987	254	163	163	181	580	705	2,046
1988	564	273	364	18	1,110	528	2,857
1989	414	169	296	363	617	668	2,527
1990	208	149	149	119	1,506	546	2,677
1991	397	168	44	88	1,280	920	2,897
1992	526	189	370	394	1,356	633	3,468
1993	528	39	237	183	2,560	590	4,137
1994	383	102	85	133	2,278	462	3,443
1995	430	98	481	220	2,082	371	3,682
1996	113	8	88	43	2,053	370	2,675
1997	119	190	144	60	4,931	407	5,851
1998	86	103	195	68	4,546	861	5,859
1999	162	112	248	0	3,197	889	4,608
2000	307	122	346	199	4,683	852	6,509
2001	244	269	584	48	4,797	834	6,776
2002	215	122	199	31	2,615	245	3,427
2003	147	74	267	116	1,574	556	2,734
2004	110	20	336	109	2,399	133	3,107
1977-2004 Mean	269	126	311	168	1,714	597	3,173
1995-2004 Mean	193	112	289	89	3,288	552	4,523
2000-2004 Mean	205	121	346	101	3,214	524	4,511
2005	85	84	113	24	1,280	91	1,677
2006	378	18	499	44	110	303	1,352

Source: Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Talkeetna River and tributaries (including Clear Creek and Larson Creek).

Table 47.-Sockeye salmon sport harvest from Westside Susitna River drainages, 1977-2006.

Year	Alexander Creek	Deshka River	Yentna River	Lake Creek	Fish Creek[a]	Talachulitna River	Other[b]	Total
1977	349	0		658		457	1,322	2,786
1978	183	0		254		141	1,056	1,634
1979	79	0		440		47	992	1,558
1980	52	0		267		112	680	1,111
1981	67	0		211		172	958	1,408
1982	335	0		252		63	2,231	2,881
1983	69	0		726		41	2,684	3,520
1984	87	125		374		262	2,567	3,415
1985	261	50		137		50	1,804	2,302
1986	0	11		547	1,273	424	1,821	4,076
1987	72	272		435	398	290	960	2,427
1988	55	146		291	146	800	1,729	3,167
1989	260	217	139	121	165	251	1,154	2,307
1990	30	189	20	358	89	189	1,063	1,938
1991	136	262	0	262	475	78	1,870	3,083
1992	123	82	107	115	189	205	2,095	2,916
1993	45	87	103	489	412	171	854	2,161
1994	38	0	237	430	142	237	835	1,919
1995	94	42	239	392	178	191	970	2,106
1996	0	8	0	137	68	108	794	1,115
1997	61	11	410	1,656	209	335	427	3,109
1998	86	57	232	868	168	181	871	2,463
1999	205	50	324	2,604	865	337	894	5,279
2000	1,440	339	761	1,767	226	162	251	4,946
2001	544	249	397	3,149	714	159	1,099	6,311
2002	257	67	94	526	238	278	421	1,881
2003	138	0	137	6,900	162	233	1,090	8,660
2004	0	154	247	1,977	392	339	249	3,358
1977-2004 Mean	181	86	215	941	343	225	1,205	2,994
1995-2004 Mean	283	98	284	1,998	322	232	707	3,923
2000-2004 Mean	476	162	327	2,864	346	234	622	5,031
2005	0	70	54	1,622	410	34	29	2,219
2006	66	92	48	214	0	195	11	626

Source: Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Yentna River drainage.

[b] May include harvest from West Cook Inlet waters.

Table 48.-Sockeye salmon sport harvest from West Cook Inlet drainages, 1977-2006.

Year	Chuitna River	Kustatan River	Big River Lakes[a]	Susitna River-North Foreland	South of North Foreland	Other[b]	Total
1977	6					0	6
1978	0					0	0
1979	0					0	0
1980	0					0	0
1981	48					0	48
1982	10					0	10
1983	356	110				0	466
1984	62	187				0	249
1985	274	162				25	461
1986	22	0				67	89
1987	272	0				0	272
1988	437	18				18	473
1989	43	165				321	529
1990	139	10	437			50	636
1991	552	203				10	765
1992	8	131				49	188
1993	46	289	976		229	815	2,355
1994	0	285	1,013		114	623	2,035
1995	62	44	998		159	41	1,304
1996	228	102	2,028	127	152	314	2,951
1997	170	274	1,171	150	409	0	2,174
1998	235	314	1,282	266	288	137	2,522
1999	194	186	1,783	76	464	287	2,990
2000	58	210	3,047	210	677	42	4,244
2001	634	293	992	201	1,030	0	3,150
2002	585	232	664	24	160	354	2,019
2003	179	397	3,491	94	372	175	4,708
2004	23	89	2,793	294	23	101	3,323
1977-2004 Mean	166	168	1,590	160	340	122	1,356
1995-2004 Mean	237	214	1,825	160	373	145	2,939
2000-2004 Mean	296	244	2,197	165	452	134	3,489
2005	123	95	3,401	121	139	146	4,025
2006	0	95	3,953	306	458	459	5,271

Source: Statewide Harvest Survey estimates (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Majority of harvest occurs at the mouth of Wolverine Creek.

[b] Includes lakes and streams. Beginning in 1999 includes saltwater shoreline.

Table 49.-Wolverine Creek (including Big River Lakes) sockeye salmon harvest, catch, and effort estimates from Statewide Harvest Survey and guide reports, 1997-2006.

	Statewide Harvest Survey [a]			Guide reports [b]	
Year	Harvest	Catch	Effort [c] (angler-days)	Harvest	Number of anglers
1997	1,171	3,242	976	ND	ND
1998	1,282	3,343	729	ND	ND
1999	1,783	2,922	1,341	ND	ND
2000	3,047	5,966	2,054	ND	ND
2001	992	3,057	902	9,261	7,565
2002	664	1,327	678	11,366	9,090
2003	3,491	6,632	3,497	10,386	8,672
2004	2,793	6,961	3,322	10,032	7,377
2005	3,401	8,486	5,365	11,513	9,203
2006	3,980	7,721	4,957	ND	ND

[a] Howe et al. 2001b, c, d; Walker et al. 2003; Jennings et al. 2004; 2006 a-b; Jennings et al. 2007, *In prep* a-b.

[b] Charter service guide reports. ND = no data collected prior to 2001.

[c] For all species.

Table 50.-Sockeye salmon escapement estimates from Northern Cook Inlet Management Area drainages by management unit, 1969-2006.

	Management Units														
	Knik Arm					Eastside Susitna	Westside Susitna						West Cook Inlet		
Year	Little Susitna R weir [a]	Fish Ck weir [b]	Cottonwood Ck weir	Wasilla Ck weir	Jim Ck weir [c]	Larson Lk weir	Yentna R sonar	Chelatna Lk weir	Judd Lk. weir	Shell Lk weir	Hewitt Lk weir	Byers Lk	Crescent R sonar	Packers Ck weir	Wolverine Ck [d]
1969		12,456													
1970		25,000													
1971		31,470													
1972		6,981													
1973		2,705													
1974		16,225													
1975		29,882													
1976		14,032													
1977		5,183													
1978		3,555					94,000								
1979		68,739 [e]					157,000						87,000		
1980		62,828 [e, f]					191,000						91,000	16,477	
1981		50,479 [e, f]					340,000					ND	41,000	13,024	17,822 [g]
1982		28,164 [f]					216,000					ND	59,000	15,687	32,950 [g]
1983		118,797 [e, f]					112,000					ND	92,000	18,403	18,189 [g]
1984		192,352 [e, f]				35,254 [h]	194,000					ND	118,000	30,684	
1985		68,577 [e, f]				37,874 [h]	228,000					ND	129,000	36,850	
1986		29,800 [e, f]				32,322 [h]	92,000			4,237 [i]		ND	N/C	29,604	
1987		91,215 [e, f]				16,753 [h]	66,000					ND	119,000	35,401	
1988	2,642	71,603 [e, f]					52,347					ND	57,716	18,607	
1989	6,203	67,224 [e, f]					96,269					ND	71,064	22,304	
1990		48,717 [e, f]					140,379				12,943 [j]	ND	52,180	31,868	
1991		50,500 [e, f]					105,000					ND	44,500	41,275	
1992		72,108 [e, f]					66,057					ND	58,227	28,361	
1993		117,619 [e, f]			3,548		141,694	20,235 [k]				ND	37,556	40,869	
1994	16,918	100,638 [e]			5,197		128,032	28,303 [k]				ND	30,355	30,788	
1995	7,129	115,101 [e]					121,479	20,104 [k]				ND	52,250	29,473	
1996		63,164 [e]					90,781	28,684 [k]				ND	28,729	17,767	
1997		55,035 [e]	8,224			40,112	157,797	84,899 [k]				ND	70,768	19,364	
1998		22,865 [e]	27,930	840		63,514	119,623	27,284 [k]	34,416			ND	62,257	17,732	
1999		26,725 [e]	39,572	854		18,943	99,029					ND	68,985	16,860	
2000		19,533 [e]	16,921	245		11,822	123,749					ND	56,599	20,151	
2001		43,498 [e]	15,229	198			83,532					ND	78,081		
2002		90,482 [e]	6,791	1,354			78,430					ND	62,833		
2003		91,952 [e]	4,601	757			181,404					ND	122,909		
2004		22,157 [e]	3,127				71,281					ND	103,183		10,541 [l]
1979-2004 Mean		68,841													
1995-2004 Mean	-	55,051	14,637	698	-	-	112,711	-	34,416	-	-	ND	70,659	-	-
2000-2004 Mean	-	53,524	9,334	639	-	-	107,679	-	-	-	-	ND	84,721	-	10,541
2005		14,215 [e]				9,959	36,921						125,787		15,625 [l, m]
2006		32,562 [e]				56,305	92,045	13,266	40,630	69,747	2,507	3,074	92,533		2,000 [l, m]
SEG		20,000-70,000					160,000						25,000-50,000	15,000-25,000	
OEG							180,000 [n]								

-continued-

Table 50.-Page 2 of 2.

Note: ND = no data because no attempts were made to collect it. "-" = value can't be computed due to limitations of the data. SEG = sustainable escapement goal. OEG = optimum escapement goal.

[a] Sources (Bartlett and Vincent-Lang 1989, Bartlett and Sonnichsen 1990; Bartlett 1996a-b).

[b] Fish Creek weir locations: river mile (rm) 0.6 (1969-1982), about rm 7.5 (1983-1991), and rm 3.0 (1992-2006).

[c] Bartlett (*Unpublished* b-c).

[d] Tributary of Big River Lakes. Weir operated by Cook Inlet Aquaculture Association (CIAA) from 1981 to 1983. Remote camera operated by ADF&G from 2004 to 2006.

[e] Hatchery-reared sockeye salmon contributed to Fish Creek drainage escapements in 1979-1981 and 1983-2007.

[f] Foot survey counts below the Fish Creek weir site included in 1980-1993 data.

[g] CIAA (1981-1982, 1984).

[h] CIAA (1998b).

[i] CIAA (1987).

[j] CIAA (1991).

[k] CIAA (1998a).

[l] Incomplete count. Problems with the video cassette recording (VCR) tapes self-ejecting and the digital video recorder (DVR) camera system was down for 2 weeks in 2005. Problems with the DVR camera system continued in 2006, and it did not operate for most of the season.

[m] Includes 5,000 fish counted at the mouth in 2005 and 2,000 counted in 2006 on the day the camera was pulled.

[n] OEG takes effect when sockeye salmon returns to Kenai River exceed 4,000,000 fish.

Table 51.-Age, sex, and length composition of sockeye salmon escapements at Fish Creek weir, 2005 and 2006.

	2005 [a]								2006 [b]						
Age Class	1.1	0.3	1.2	2.1	1.3	2.2	2.3	Total	1.1	1.2	2.1	1.3	2.2	2.3	Total
Males [c]	2,023	289	3,403	161	739	674	32	7,321	1,868	13,216	335	1,580	766	48	17,813
Percent	14.06	2.01	23.66	1.12	5.14	4.69	0.22	50.89	5.74	40.59	1.03	4.85	2.35	0.15	54.70
Mean length (mm) [d]	354	557	487	373	530	456	535	452	347	483	376	532	457	555	470
SE	2	5	3	9	6	6	-	2	2	3	9	6	6	-	2
Sample size	63	9	106	5	23	21	1	228	39	276	7	33	16	1	372
Females [c]	64	193	4,687	0	771	1,188	161	7,064	0	12,115	0	1,245	1,197	192	14,749
Percent	0.44	1.34	32.58	0.00	5.36	8.26	1.12	49.11	0.00	37.21	0.00	3.82	3.68	0.59	45.30
Mean length (mm) [d]	415	531	488	-	524	479	531	492	-	477	-	515	469	518	480
SE	5	7	2	-	5	4	12	2	-	2	-	5	4	12	2
Sample size	2	6	146	0	24	37	5	220	0	253	0	26	25	4	308
Both sexes combined [c]	2,087	482	8,090	161	1,510	1,862	193	14,385	1,868	25,331	335	2,825	1,963	240	32,562
Percent	14.51	3.35	56.24	1.12	10.50	12.94	1.34	100.00	5.74	77.79	1.03	8.68	6.03	0.74	100.00
Mean length (mm) [d]	356	546	488	373	527	471	532	472	347	480	376	525	465	525	475
SE	2	4	2	9	4	4	12	1	2	2	9	4	4	12	1
Sample size	65	15	252	5	47	58	6	448	39	529	7	59	41	5	680

Note: "-" value can not be computed due to limitations of the data.

[a] Source – Tobias and Willette 2008a. Sampling period: 7 July to 15 August 2005.

[b] Source – Tobias and Willette 2008b. Sampling period: 6 July to 6 August 2006.

[c] Units = number of fish.

[d] Mid eye to fork length.

Table 52.-Bodenburg Creek (Knik River drainage) salmon escapement index surveys, 1968-2006.

			Escapement index	
			Sockeye	Chum
Year	Month	Date	salmon	salmon
1968	Aug	ND	350	0
1969	Sept	ND	125	0
1970	Aug	25	83	0
1971	Sept	5	110	0
1972	Aug	31	464	0
1973	Aug	27	208	0
1974	Sept	6	169	0
1975	Sept	3	148	0
	Sept	19	0	3
1976	Sept	8	111	0
1977	Aug	29	178	0
1978	Aug	29	541	0
1979	Aug	29	321	0
1980	Aug	25	483	0
1981	Aug	19	260	0
1982	Sept	17	722	0
1983	Aug	31	359	0
1984	ND	ND	ND	ND
1985	Sept	5	232	0
1986	Sept	4	119	120
1987	Sept	3	77	1
1988	ND	ND	ND	ND
1989	Aug	31	190	6
1990	Sept	7	195	3
1991	Aug	27	0	1
	Sept	6	160	0
1992	Aug	29	54	0
	Sept	2	66	4
1993	Aug	24	212	14
1994	Aug	25	220	0
	Sept	6	0	93
1995	Aug	28	156	219
1996	Sept	4	111	0
1997	Aug	28	142	4
1998	Aug	21	156	13
1999	Aug	30	257	21
2000	Aug	28	228	5
2001	Aug	29	232	8
2002	Aug	30	320	25
2003	Aug	22	402	3
2004	Aug	26	283	0
1968-2004 Mean			217	14
1995-2004 Mean			229	30
2000-2004 Mean			293	8
2005	Aug	29	269	0
2006	Aug	28	367	6

Note: ND = no data because no attempts were made to collect it.

Table 53.-Smelt personal use harvest from Knik Arm and Westside Susitna management units, 1985-2006.

	Knik Arm Management Unit				Westside Susitna Management Unit						
Year	Marine Fish Creek	Other Marine	Fresh Water	Subtotal	Alexander Creek	Deshka River	Yentna River	Lake Creek	Susitna River	Subtotal	Total
1985	0	560	0	560	0	0		0	1,680	1,680	2,240
1986	0	3,351	0	3,351	0	7,300		0	0	7,300	10,651
1987	0	0	0	0	0	0		0	9,265	9,265	9,265
1988	0	0	0	0	1,547	0		1,083	6,219	8,849	8,849
1989	0	0	0	0	0	0	0	785	1,539	2,324	2,324
1990	0	0	0	0	707	842	3,368	674	0	5,591	5,591
1991	0	0	0	0	3,774	245	0	0	2,113	6,132	6,132
1992	0	0	0	0	379	0	1,082	0	14,062	15,523	15,523
1993	0	0	0	0	0	2,236	0	0	4,360	6,596	6,596
1994	0	2,292	0	2,292	0	458	3,438	235	5,352	9,483	11,775
1995	0	0	0	0	0	0	1,382	0	3,167	4,549	4,549
1996	0	0	0	0	364	0	364	0	1,455	2,183	2,183
1997	0	0	0	0	0	0	2,703	0	5,812	8,515	8,515
1998	0	0	0	0	0	0	2,050	0	3,745	5,795	5,795
1999	2,708	0	0	2,708	571	6,499	3,038	0	16,923	27,031	29,739
2000	0	2,725	3,406	6,131	7	1,363	2,725	0	1,397	5,492	11,623
2001	0	675	899	1,574	0	0	3,935	0	4,772	8,707	10,281
2002	0	0	0	0	0	2,228	1,061	0	9	3,298	3,298
2003	0	1,214	364	1,578	911	0	0	0	4,554	5,465	7,043
2004	0	0	11	11	0	2,550	2,252	0	7,760	12,562	12,573
1985-2004 Mean	135	541	234	910	413	1,186	1,712	139	4,709	7,817	8,727
1995-2004 Mean	271	461	468	1,200	185	1,264	1,951	0	4,959	8,360	9,560
2000-2004 Mean	0	923	936	1,859	184	1,228	1,995	0	3,698	7,105	8,964
2005	0	0	0	0	0	1,979	0	0	1,089	3,068	3,068
2006	0	0	71 [a]	71	0	0	0	0	0	0	71

Note: Harvest estimates from Statewide Harvest Survey (Mills 1986-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b). Smelt harvest tabulated under "other" (fish species) prior to 1985.

[a] Little Susitna River.

Table 54.-Upper Yentna River personal use and subsistence fish wheel salmon harvest, 1996-2006.

		Number of permits		Salmon harvest (number of fish)					
Fishery	Year	Returned	Issued	Sockeye	Coho	Pink	Chum	Total	Harvest/ permit
Personal use									
	1996	14	NR	191	36	88	40	355	25
	1997	21	NR	492	61	21	8	582	28
Subsistence									
	1998	21	28	473	147	33	20	673	32
	1999	21	NR	455	43	15	11	524	25
	2000	20	NR	379	92	4	7	482	24
	2001	16	NR	514	47	9	4	574	36
	2002	25	NR	414	116	14	28	572	23
	2003	15	NR	433	76	2	13	524	35
	2004	22	NR	391	132	0	2	525	24
	1996-2004 Mean	19	28	416	83	21	15	535	28
	2000-2004 Mean	20	-	426	93	6	11	535	28
	2005	21	NR	177	42	24	25	268	13
	2006	23	26	388	178	15	27	608	26

Note: NR = not reported. "-" = value can't be computed due to limitations of the data.

Table 55.-Tyonek River subsistence gillnet salmon harvest, 1980-2006.

	Number of permits		Salmon harvest (number of fish)						
Year	Returned	Issued	Chinook	Sockeye	Coho	Pink	Chum	Other	Total
1980	67	NR	1,757	235	0	0	0	NA	1,992
1981	70	NR	2,002	269	64	15	32	NA	2,382
1982	69	NR	1,590	310	113	14	4	NA	2,031
1983	75	NR	2,665	187	59	0	6	NA	2,917
1984	75	NR	2,200	266	79	3	23	NA	2,571
1985	76	NR	1,472	164	91	0	10	NA	1,737
1986	65	NR	1,676	203	223	50	46	NA	2,198
1987	61	64	1,610	166	149	10	24	NA	1,959
1988	42	47	1,587	91	253	8	12	NA	1,951
1989	47	49	1,250	85	115	0	1	NA	1,451
1990	37	42	781	66	352	20	12	NA	1,231
1991	54	57	902	20	58	0	0	NA	980
1992	44	57	907	75	234	7	19	NA	1,242
1993	54	62	1,370	57	77	19	17	NA	1,540
1994	49	58	770	85	101	0	22	NA	978
1995	55	70	1,317	45	153	0	15	NA	1,530
1996	49	73	1,039	68	137	21	7	NA	1,272
1997	42	70	639	101	137	0	8	NA	885
1998	49	74	1,027	163	64	1	2	NA	1,257
1999	54	77	1,230	144	94	32	11	NA	1,511
2000	59	60	1,157	63	87	6	0	NA	1,313
2001	58	84	976	172	49	4	6	NA	1,207
2002	71	101	1,080	209	115	9	4	1	1,418
2003	56	91	973	89	29	5	10	NA	1,106
2004	75	97	1,345	93	130	0	0	2	1,570
1980-2004 Mean	58	69	1,333	137	119	9	12	2	1,609
1995-2004 Mean	57	80	1,078	115	100	8	6	2	1,307
2000-2004 Mean	64	87	1,106	125	82	5	4	2	1,323
2005	66	78	982	61	139	0	2	0	1,184
2006	41	80	836	19	14	0	0	0	869

Note: NR = not reported. NA = not applicable.

Table 56.-Salmon harvests by education fishery permit holders in Northern Cook Inlet Management Area, 1994-2006.

Educational fishery permit holder	Year	Dates of operation	Salmon harvest (number of fish)					
			Chinook	Coho	Sockeye	Pink	Chum	Total
Knik Tribal Council	1994	ND	ND	ND	ND	ND	ND	29
	1995	ND	5	1	21	0	1	28
	1996	Jun 17-Jul 20	5	45	163	3	62	278
	1997	May 29-Aug 10	19	34	153	0	15	221
	1998	May 14-Aug 15	31	153	186	0	85	455
	1999	May 27-Aug 14	42	120	177	0	55	394
	2000	May 26-Aug 06	65	63	34	0	18	180
	2001	May 13-Aug 10	32	34	71	0	0	137
	2002	May 20-Aug 08	55	99	136	5	36	331
	2003	May 24-Aug 15	34	87	654	3	45	823
	2004	May 15-Aug 06	105	207	142	20	29	503
	1994-2004 Mean		39	84	174	3	35	307
	2000-2004 Mean		58	98	207	6	26	395
	2005	May 17-Aug 15	25	80	200	9	16	330
	2006	May 15-Sep 30	24	75	197	12	7	315
Eklutna Village	1994	ND	ND	7	ND	ND	ND	172
	1995	ND	14	37	55	6	42	154
	1996	ND	ND	ND	ND	ND	ND	ND
	1997	May 01-Sep 30	7	14	39	16	7	83
	1998	May 01-Sep 30	32	116	104	6	51	309
	1999	May 01-Sep 30	11	25	80	3	20	139
	2000	May 01-Sep 30	17	85	76	21	51	250
	2001	May 01-Sep 30	58	95	52	56	34	295
	2002	May 01-Sep 30	58	156	220	40	76	550
	2003	May 01-Sep 30	69	49	160	14	21	313
	2004	May 01-Sep 30	50	297	311	4	71	733
	1994-2004 Mean		35	88	122	18	41	300
	2000-2004 Mean		50	136	164	27	51	428
	2005	May 01-Sep 30	72	242	166	8	29	517
	2006	May 01-Sep 30	43	199	59	11	7	319
Tyonek Village	1998	Aug 12-Aug 14	0	41	11	3	1	56
	1999	Jul 07-Jul 10	0	0	100	0	0	100
	2000	Jul 06-Jul 09	0	0	97	0	0	97
	1998-2000 Mean		0	14	69	1	0	84
Big Lake Cultural Outreach	2005	May 15-Sep 30	61	99	98	56	34	348
	2006	Jun 07-Jul 31	8	12	68	1	3	92
	2005-2006 Mean		35	56	83	29	19	220
Intertribal Native Leadership	2006	May 15-Sep 30	12	95	135	85	21	348

Note: ND = no data because no attempt was made to collect it.

Table 57.-Northern Cook Inlet Management Area lake stocking summary for nonanadromous fish, 2005-2006.

LAKE STOCKED	SURFACE ACRES	DATE STOCKED	NUMBER STOCKED	BROODSTOCK (TREATMENT) [a]	HATCHERY	STOCKING SIZE	STOCKING METHOD[b]
Rainbow Trout				Swanson R. Mixed			
Barley	19	08/31/05	1,463	05 Swanson R	Ft. Richardson	1.4g	T/BU
Bearpaw	45	08/08/05	2,299	05 Swanson R	Ft. Richardson	0.84g	T/BU
Bench	52	08/11/05	1,699	05 Swanson R(TAF)	Ft. Richardson	0.9g	A
Benka	123	08/18/05	4,500	05 Swanson R	Ft. Richardson	1.14g	T
Beverly	42	08/08/05	4,200	05 Swanson R(TAF)	Ft. Richardson	0.75g	T/BU
Big Beaver	161	08/24/05	12,075	05 Swanson R(TAF)	Ft. Richardson	1.2g	T
Boot	34	08/29/05	2,400	05 Swanson R	Ft. Richardson	1.45g	T/BU
Brocker	44	08/31/05	1,640	05 Swanson R(TAF)	Ft. Richardson	1.4g	T/BU
Bruce	27	05/25/05	750	04 Swanson R	Elmendorf	120g	T
Butterfly	50	08/31/05	7,504	05 Swanson R(TAF)	Ft. Richardson	1.4g	T/BU
Canoe	21	04/29/05	1,470	04 Swanson R	Elmendorf	112g	T
Carpenter	176	08/01/05	21,743	05 Swanson R	Ft. Richardson	0.74g	T
Caswell #3	33	08/18/05	2,250	05 Swanson R	Ft. Richardson	1.14g	T
Christiansen	179	08/18/05	3,889	05 Swanson R(TAF)	Ft. Richardson	1.14g	T
		08/18/05	4,810	05 Swanson R	Ft. Richardson	1.25g	T
Coyote	2	05/24/05	216	04 Swanson R(TAF)	Elmendorf	125g	T
Crooked	250	08/24/05	7,230	05 Swanson R(TAF)	Ft. Richardson	1.2g	T
Crystal	132	08/29/05	12,975	05 Swanson R(TAF)	Ft. Richardson	1.46g	T
Dawn	12	08/24/05	1,800	05 Swanson R(TAF)	Ft. Richardson	1.2g	T/BU
Diamond	139	08/01/05	13,125	05 Swanson R(TAF)	Ft. Richardson	0.72g	T
Echo	23	06/03/05	1,129	04 Swanson R	Elmendorf	122g	T
Farmer	21	08/31/05	2,359	05 Swanson R(TAF)	Ft. Richardson	1.4g	T/BU
Finger	362	08/19/05	11,939	05 Swanson R(TAF)	Ft. Richardson	1.22g	T
		08/19/05	9,170	05 Swanson R	Ft. Richardson	1.19g	T
		09/08/05	4,768	05 Swanson R	Ft. Richardson	2.11g	T
Florence	55	08/29/05	4,125	05 Swanson R	Ft. Richardson	1.45g	T/BU
Gate	10	06/09/05	295	04 Swanson R(TAF)	Elmendorf	128g	T
Golden	13	08/08/05	1,499	05 Swanson R	Ft. Richardson	0.84g	T
Homestead	17	08/24/05	1,275	05 Swanson R(TAF)	Ft. Richardson	1.2g	T/BU
Honeybee	58	08/29/05	5,100	05 Swanson R	Ft. Richardson	1.45g	T/BU
Ida	46	08/11/05	6,588	05 Swanson R(TAF)	Ft. Richardson	0.9g	T/BU
Irene	18	04/29/05	1,325	04 Swanson R	Ft. Richardson	112g	T/BU
		06/09/05	752	04 Swanson R	Ft. Richardson	122g	T/BU
Kalmbach	125	08/08/05	1,499	05 Swanson R	Ft. Richardson	0.84g	T
Kashwitna	160	05/18/05	2,388	04 Swanson R(TAF)	Ft. Richardson	123g	T
Kepler-Bradley	58	04/29/05	3,591	04 Swanson R	Elmendorf	112g	T
		06/06/05	2,633	04 Swanson R	Elmendorf	122g	T
Knik	50	05/25/05	1,372	04 Swanson R	Elmendorf	120g	T
Knob	52	08/16/05	1,982	04 Swanson R	Elmendorf	143g	T
Lalen	92	08/08/05	8,500	05 Swanson R(TAF)	Ft. Richardson	0.75g	T
Little Beaver	44	08/24/05	3,300	05 Swanson R(TAF)	Ft. Richardson	1.2g	T
Loberg	11	05/25/05	750	04 Swanson R	Ft. Richardson	120g	T
Long [K/B]	74	08/19/05	5,260	05 Swanson R(TAF)	Ft. Richardson	1.22g	T/BU
Long (Mi. 86)	106	05/24/05	6,039	04 Swanson R	Elmendorf	114g	T
		08/04/05	2,550	04 Swanson R	Elmendorf	115.6g	T
Loon	108	08/08/05	13,000	05 Swanson R(TAF)	Ft. Richardson	0.75g	T
Lorraine	132	08/31/05	6,692	05 Swanson R(TAF)	Ft. Richardson	1.4g	T/BU
		08/31/05	3,222	05 Swanson R	Ft. Richardson	1.9g	T/BU
Lucille	362	05/18/05	4,058	04 Swanson R(TAF)	Elmendorf	123g	T
Lynne	70	08/29/05	8,250	05 Swanson R	Ft. Richardson	1.45g	T

-continued-

Table 57.-Page 2 of 6.

LAKE STOCKED	SURFACE ACRES	DATE STOCKED	NUMBER STOCKED	BROODSTOCK (TREATMENT) [a]	HATCHERY	STOCKING SIZE	STOCKING METHOD[b]
Rainbow Trout (continued)							
Marion	113	08/01/05	10,932	05 Swanson R	Ft. Richardson	0.74g	T/BU
		08/01/05	18	04 Swanson R	Elmendorf	128.99g	T
Matanuska	62	05/10/05	4,050	04 Swanson R	Elmendorf	120g	T
Meirs	17	06/03/05	959	04 Swanson R	Elmendorf	122g	T
Memory	84	05/25/05	1,732	04 Swanson R	Elmendorf	120g	T
Mile 180	31	06/09/05	1,244	04 Swanson R(TAF)	Ft. Richardson	128g	T
North Friend	81	08/18/05	6,075	05 Swanson R(TAF)	Ft. Richardson	1.1g	T/BU
North Rolly	122	08/29/05	9,150	05 Swanson R(TAF)	Ft. Richardson	1.46g	T/BU
Prator	98	08/28/05	188	04 Swanson R	Elmendorf	161.9g	T
Ravine	12	06/03/05	1,065	04 Swanson R	Elmendorf	122g	T/BU
Reed	20	08/19/05	1,486	05 Swanson R(TAF)	Ft. Richardson	1.22g	T/BU
Rhein	84	08/29/05	5,250	05 Swanson R(TAF)	Ft. Richardson	1.46g	T/BU
Rocky	59	05/25/05	773	04 Swanson R	Elmendorf	120g	T
Seventeenmile	100	08/11/05	7,010	05 Swanson R(TAF)	Ft. Richardson	0.9g	T
Seymour	229	08/08/05	20,007	05 Swanson R	Ft. Richardson	0.84g	T
Slipper (Eska)	9	05/24/05	864	04 Swanson R(TAF)	Ft. Richardson	125g	T
South Friend	56	08/18/05	6,600	05 Swanson R(TAF)	Ft. Richardson	1.1g	T/BU
South Rolly	108	05/06/05	2,940	04 Swanson R(TAF)	Ft. Richardson	122g	T
Tanaina	109	05/18/05	2,430	04 Swanson R(TAF)	Ft. Richardson	123g	T/BU
Tigger	19	08/18/05	1,875	05 Swanson R(TAF)	Ft. Richardson	1.1g	T/BU
Twin Island	151	08/31/05	22,822	05 Swanson R(TAF)	Ft. Richardson	1.4g	T/BU
Vera	111	08/29/05	8,325	05 Swanson R(TAF)	Ft. Richardson	1.46g	T/BU
Visnaw	131	08/08/05	10,436	05 Swanson R(TAF)	Ft. Richardson	0.75g	T
Walby	54	05/24/05	712	04 Swanson R(TAF)	Ft. Richardson	125g	T
Weiner	21	05/24/05	821	04 Swanson R(TAF)	Elmendorf	125g	T
West Beaver	103	08/24/05	6,608	05 Swanson R(TAF)	Ft. Richardson	1.2g	T
Willow	143	05/18/05	2,430	04 Swanson R(TAF)	Ft. Richardson	123g	T
Wolf	62	08/19/05	6,971	05 Swanson R(TAF)	Ft. Richardson	1.22g	T/BU
"Y"	40	08/18/05	3,000	05 Swanson R	Ft. Richardson	1.1g	T/BU
Total 71 Lakes	5,837						

	Diploid	Triploid	Total
Catchables	33,423	18,103	51,526
Fingerling	111,037	217,658	328,695
Total:	144,460	235,761	380,221

Coho Salmon (nonanadromous)				Bear Lake Diploid			
Barley	19	05/25/05	1,900	04 Bear Lake	Ft. Richardson	2.3g	T/BU
Bearpaw	45	05/25/05	4,500	04 Bear Lake	Ft. Richardson	2.3g	T
Carpenter	176	05/25/05	15,000	04 Bear Lake	Ft. Richardson	2.3g	T
		08/01/05	6,437	04 Bear Lake	Ft. Richardson	3.1g	T
Christiansen	179	05/25/05	13,078	04 Bear Lake	Ft. Richardson	2.3g	T
Diamond	139	05/25/05	11,000	04 Bear Lake	Ft. Richardson	2.3g	T
Echo	23	05/25/05	2,300	04 Bear Lake	Ft. Richardson	2.3g	T
Johnson	40	05/25/05	1,000	04 Bear Lake	Ft. Richardson	2.3g	T
Kalmbach	125	05/25/05	10,000	04 Bear Lake	Ft. Richardson	2.3g	T
Klaire	7	05/25/05	900	04 Bear Lake	Ft. Richardson	2.3g	T/BU
Loberg	11	05/25/05	1,100	04 Bear Lake	Ft. Richardson	2.3g	T
Victor	14	05/25/05	2,700	04 Bear Lake	Ft. Richardson	2.3g	T/BU
Total 11 Lakes	778		69,915				

-continued-

Table 57.-Page 3 of 6.

LAKE STOCKED	SURFACE ACRES	DATE STOCKED	NUMBER STOCKED	BROODSTOCK (TREATMENT) [a]	HATCHERY	STOCKING SIZE	STOCKING METHOD[b]
Chinook Salmon							
Finger	362	09/28/05	14,656	2004 Willow Ck.	Ft. Richardson	113g	T
		09/29/05	19,269	2004 Willow Ck.	Ft. Richardson	107g	T
Knik	50	09/28/05	3,705	2004 Willow Ck.	Ft. Richardson	102g	T
Matanuska	62	09/28/05	2,197	2004 Willow Ck.	Ft. Richardson	102g	T
Memory	84	09/28/05	1,800	2004 Willow Ck.	Ft. Richardson	102g	T
Total 4 Lakes	558		41,627				
Arctic Grayling							
Canoe	21	08/19/05	2,000	2005 Moose Lk.	Ft. Richardson	1.5g	T
Florence	55	08/29/05	1,000	2005 Moose Lk.	Ft. Richardson	4.22g	T/BU
Ida	46	08/11/05	1,000	2005 Moose Lk.	Ft. Richardson	1.6g	T
Kepler/Bradley	58	08/19/05	3,000	2005 Moose Lk.	Ft. Richardson	1.5g	T
Lorraine	132	08/31/05	725	2005 Moose Lk.	Ft. Richardson	4.22g	T
Reed	20	08/19/05	1,000	2005 Moose Lk.	Ft. Richardson	1.5g	T/BU
Total 6 Lakes	332		8,725				
Arctic Char							
Benka	123	6/02/05	1,425	2004 Aleknagik Lk.	Ft. Richardson	140g	T
Carpenter	176	6/22/05	13,473	2005 Aleknagik Lk	Ft. Richardson	1.45g	T
Finger	362	5/05/05	3,668	2004 Aleknagik Lk.	Ft. Richardson	120g	T
		9/08/05	5,550	2005 Aleknagik Lk.	Ft. Richardson	6.9g	T
		10/27/05	90	2002 Aleknagik Lk.	Ft. Richardson	3.3kg	T
Long (Mi. 86)	106	4/26/05	130,000	2005 Aleknagik Lk.	Ft. Richardson	0.16g	T
		9/08/05	6,014	2005 Aleknagik Lk.	Ft. Richardson	6.9g	T
		12/2/05	318	2003 Aleknagik Lk.	Ft. Richardson	265g	T
Lynne	70	6/22/05	9,868	2005 Aleknagik Lk.	Ft. Richardson	1.45g	T
Marion	113	06/19/05	863	2004 Aleknagik Lk.	Ft. Richardson	122g	T
		08/01/05	6	2003 Aleknagik Lk.	Ft. Richardson	756g	T
		08/01/05	6	2002 Aleknagik Lk.	Ft. Richardson	2,100g	T
Matanuska	62	5/05/05	1,328	2004 Aleknagik Lk.	Ft. Richardson	120g	T
Seventeenmile	100	06/02/05	570	2004 Aleknagik Lk.	Ft. Richardson	140g	T
Total 8 Lakes	1,112						
Broodstock			420				
Catchables			7,852				
Fingerling			34,905				
Emergent Fry			130,000				
Total			173,177				
Grand Total 74 Lakes			673,665				

-continued-

Table 57.-Page 4 of 6.

LAKE STOCKED	SURFACE ACRES	DATE STOCKED	NUMBER STOCKED	BROODSTOCK (TREATMENT) [a]	HATCHERY	STOCKING SIZE	STOCKING METHOD[b]
Rainbow Trout				Swanson R. Mixed			
Barley	19	08/18/06	1,901	06 Swanson R	Ft. Richardson	1.02g	T/BU
Bearpaw	45	08/19/06	126	05 Swanson R	Elmendorf	226.5g	T/BU
		09/13/06	1,000	06 Swanson R	Ft. Richardson	1.56g	T/BU
Benka	123	08/23/06	5,648	06 Swanson R	Ft. Richardson	1.08g	T
Beverly	42	08/13/06	1,000	06 Swanson R(TAF)	Ft. Richardson	1.65g	T/BU
Big Beaver	161	08/25/06	10,208	06 Swanson R(TAF)	Ft. Richardson	0.96g	T
Boot	34	08/22/06	2,852	06 Swanson R	Ft. Richardson	2.14g	T/BU
Bruce	27	06/07/06	330	05 Swanson R	Elmendorf	215.0g	T
Butterfly	50	08/18/06	6,000	06 Swanson R(TAF)	Ft. Richardson	0.85g	T/BU
Canoe	21	05/16/06	1,055	05 Swanson R	Elmendorf	138.0g	T
Carpenter	176	08/18/06	16,656	06 Swanson R	Ft. Richardson	1.02g	T
Christiansen	179	08/23/06	9,907	06 Swanson R	Ft. Richardson	1.08g	T
		08/23/06	3,077	06 Swanson R(TAF)	Ft. Richardson	0.91g	T
Crooked	250	08/25/06	6,770	06 Swanson R(TAF)	Ft. Richardson	0.96g	T
Dawn	12	08/25/06	1,666	06 Swanson R(TAF)	Ft. Richardson	0.96g	T/BU
Diamond	139	08/25/06	11,816	06 Swanson R	Ft. Richardson	1.09g	T
Echo	23	05/11/06	500	05 Swanson R	Elmendorf	220g	T
Farmer	21	08/18/06	2,196	06 Swanson R	Ft. Richardson	2.0g	T/BU
Finger	362	08/24/06	28,212	06 Swanson R	Ft. Richardson	1.08g	T
Florence	55	08/22/06	3,999	06 Swanson R	Ft. Richardson	1.08g	T/BU
Golden	13	08/13/06	1,000	06 Swanson R	Ft. Richardson	1.56g	T
Homestead	17	08/25/06	1,458	06 Swanson R(TAF)	Ft. Richardson	0.96g	T/BU
Honeybee	58	08/22/06	5,792	06 Swanson R	Ft. Richardson	1.06g	T/BU
Ida	46	08/17/06	4,601	06 Swanson R	Ft. Richardson	1.13g	T/BU
Irene	18	05/16/06	999	05 Swanson R	Elmendorf	138.0g	T/BU
Kalmbach	125	09/13/06	7,900	06 Swanson R	Ft. Richardson	1.56g	T
Kashwitna	160	05/25/06	1,862	05 Swanson R(TAF)	Elmendorf	229.0g	T
Kepler-Bradley	58	05/11/06	1,353	05 Swanson R	Elmendorf	242.0g	T
Knik	50	06/07/06	628	05 Swanson R	Elmendorf	215.0g	T
Knob	52	06/15/06	1,468	05 Swanson R	Elmendorf	136.0g	T
Lalen	92	09/13/06	2,000	06 Swanson R(TAF)	Ft. Richardson	1.65g	T
Little Beaver	44	08/25/06	3,750	06 Swanson R(TAF)	Ft. Richardson	0.96g	T
Loberg	11	05/10/06	330	05 Swanson R	Elmendorf	242.0g	T
Long [K/B]	74	08/24/06	5,398	06 Swanson R	Ft. Richardson	1.08g	T/BU
Long (Mi. 86)	106	06/15/06	1,667	05 Swanson R	Elmendorf	136.0g	T
Loon	108	09/13/06	4,000	06 Swanson R(TAF)	Ft. Richardson	1.65g	T
Lorraine	132	08/18/06	11,215	06 Swanson R	Ft. Richardson	1.0g	T/BU
Lucille	362	05/11/06	2,406	05 Swanson R(TAF)	Elmendorf	269.0g	T
Lynne	70	08/22/06	5,826	06 Swanson R	Ft. Richardson	1.08g	T
Marion	113	08/25/06	9,605	06 Swanson R	Ft. Richardson	1.09g	T/BU
Matanuska	62	05/09/06	1,900	05 Swanson R	Elmendorf	135.0g	T
Meirs	17	05/10/06	397	05 Swanson R	Elmendorf	242.0g	T
North Friend	81	08/23/06	5,495	06 Swanson R(TAF)	Ft. Richardson	0.91g	T/BU
North Rolly	122	08/22/06	5,005	06 Swanson R(TAF)	Ft. Richardson	0.91g	T/BU
Ravine	12	06/13/06	426	05 Swanson R	Elmendorf	136.0g	T/BU
Reed	20	08/24/06	2,000	06 Swanson R	Ft. Richardson	1.08g	T/BU
Rhein	84	08/22/06	5,005	06 Swanson R(TAF)	Ft. Richardson	0.91g	T/BU
Rocky	59	06/07/06	396	05 Swanson R	Elmendorf	215.0g	T
Ruby	24	8/17/06	2,000	06 Swanson R(TAF)	Ft. Richardson	0.85g	T
Seventeenmile	100	08/17/06	8,496	06 Swanson R	Ft. Richardson	1.13g	T

-continued-

Table 57.-Page 5 of 6.

LAKE STOCKED	SURFACE ACRES	DATE STOCKED	NUMBER STOCKED	BROODSTOCK (TREATMENT) [a]	HATCHERY	STOCKING SIZE	STOCKING METHOD[b]
Rainbow Trout (continued)							
Seymour	229	09/13/06	8,000	06 Swanson R(TAF)	Ft. Richardson	1.65g	T
South Friend	56	08/23/06	5,714	06 Swanson R(TAF)	Ft. Richardson	0.91g	T/BU
South Rolly	108	05/25/06	2,702	05 Swanson R(TAF)	Elmendorf	229.0g	T
Tigger	19	08/23/06	2,500	06 Swanson R	Ft. Richardson	1.08g	T/BU
Twin Island	151	08/18/06	5,000	06 Swanson R(TAF)	Ft. Richardson	0.85g	T/BU
Vera	111	08/22/06	9,000	06 Swanson R(TAF)	Ft. Richardson	0.91g	T/BU
Visnaw	131	08/13/06	5,779	06 Swanson R(TAF)	Ft. Richardson	1.65g	T
Walby	54	05/11/06	503	05 Swanson R(TAF)	Elmendorf	269.0g	T
Weiner	21	06/06/06	1,144	05 Swanson R(TAF)	Elmendorf	250.0g	T
West Beaver	103	08/25/06	4,583	06 Swanson R(TAF)	Ft. Richardson	0.96g	T
Willow	143	06/20/06	633	05 Swanson R	Elmendorf	209.0g	T
Wolf	62	08/24/06	9,340	06 Swanson R(TAF)	Ft. Richardson	0.91g	T/BU
"X"	101	08/23/06	5,185	06 Swanson R	Ft. Richardson	1.08g	T/BU
"Y"	40	08/23/06	3,518	06 Swanson R	Ft. Richardson	1.08g	T/BU
Total 62 Lakes	5,358						

	Diploid	Triploid	Total
Catchables	12,711	8,114	20,825
Fingerling	157,259	104,850	262,109
Total:	169,970	112,964	282,934

Coho Salmon (nonanadromous)				Bear Lake Diploid			
Barley	19	06/08/06	1,908	05 Bear Lake	Ft. Richardson	0.87g	T/BU
Bearpaw	45	06/09/06	4,500	05 Bear Lake	Ft. Richardson	0.87g	T
Carpenter	176	06/08/06	15,022	05 Bear Lake	Ft. Richardson	0.87g	T
Christiansen	179	06/09/06	15,230	05 Bear Lake	Ft. Richardson	0.87g	T
Diamond	139	06/08/06	11,000	05 Bear Lake	Ft. Richardson	0.87g	T
Echo	23	06/06/06	2,303	05 Bear Lake	Ft. Richardson	0.87g	T
		07/28/06	15,144	05 Bear Lake	Ft. Richardson	2.8g	T
		07/28/06	8,043	05 Bear Lake	Ft. Richardson	3.5g	T
Johnson	40	06/06/06	1,005	05 Bear Lake	Ft. Richardson	0.87g	T
Kalmbach	125	06/08/06	10,000	05 Bear Lake	Ft. Richardson	0.87g	T
Klaire	7	06/06/06	907	05 Bear Lake	Ft. Richardson	0.87g	T/BU
Loberg	11	06/09/06	1,100	05 Bear Lake	Ft. Richardson	0.87g	T
Victor	14	06/06/06	2,722	05 Bear Lake	Ft. Richardson	0.87g	T/BU
Total 11 Lakes	778		88,884				
Chinook Salmon (nonanadromous)							
Finger	362	06/09/06	52,843	2005 Willow Ck.	Ft. Richardson	11.6g	T
Knik	50	06/09/06	17,931	2005 Willow Ck.	Ft. Richardson	11.6g	T
		07/11/06	41,464	2005 Willow Ck.	Ft. Richardson	3.2g	T
Matanuska	62	06/09/06	19,724	2005 Willow Ck.	Ft. Richardson	11.6g	T
Victor	14	06/06/06	2,000	2005 Willow Ck.	Ft. Richardson	11.6g	T
Total 5 Lakes	488		133,962				
Arctic Grayling							
Canoe	21	08/10/06	3,505	2006 Moose Lk.	Ft. Richardson	0.9g	T
		11/28/06	10,000	2006 Moose Lk.	Ft. Richardson	13.0g	T

-continued-

Table 57.-Page 6 of 6.

LAKE STOCKED	SURFACE ACRES	DATE STOCKED	NUMBER STOCKED	BROODSTOCK (TREATMENT) [a]	HATCHERY	STOCKING SIZE	STOCKING METHOD[b]
Arctic Grayling (continued)							
Finger	362	08/10/06	4,009	2006 Moose Lk.	Ft. Richardson	0.9g	T
		11/29/06	20,000	2006 Moose Lk.	Ft. Richardson	13.0g	T
Florence	55	08/22/06	1,000	2006 Moose Lk.	Ft. Richardson	2.2g	T/BU
Knik	50	08/18/06	1,008	2006 Moose Lk.	Ft. Richardson	1.1g	T
Lorraine	132	08/18/06	3,803	2006 Moose Lk.	Ft. Richardson	1.1g	T
Meirs	17	08/10/06	2,003	2006 Moose Lk.	Ft. Richardson	0.9g	T
		11/28/06	10,000	2006 Moose Lk.	Ft. Richardson	13.0g	T
Reed	20	08/10/06	1,281	2006 Moose Lk.	Ft. Richardson	0.9g	T/BU
Total 7 Lakes	657		56,609				
Arctic Char							
Carpenter	176	06/07/06	1,552	2005 Aleknagik Lk	Ft. Richardson	121.0g	T
Echo	23	05/11/06	500	2005 Aleknagik Lk	Ft. Richardson	83.0g	T
Finger	362	06/07/06	255	2005 Aleknagik Lk.	Ft. Richardson	122.8g	T
		06/20/06	5,262	2005 Aleknagik Lk.	Ft. Richardson	118.7g	T
		11/22/06	129	2004 Aleknagik Lk.	Ft. Richardson	3,500g	T
Irene	18	06/13/06	11,050	2006 Aleknagik Lk.	Ft. Richardson	1.1g	T/BU
Johnson	40	07/12/06	5,000	2006 Aleknagik Lk.	Ft. Richardson	1.94g	T/BU
Long (Mi. 86)	106	06/08/06	2,181	2005 Aleknagik Lk.	Ft. Richardson	121.0g	T
		07/12/06	20,000	2006 Aleknagik Lk.	Ft. Richardson	1.94g	T
Lynne	70	06/07/06	863	2005 Aleknagik Lk.	Ft. Richardson	121.0g	T
Matanuska	62	06/13/06	11,050	2006 Aleknagik Lk.	Ft. Richardson	1.1g	T
		11/21/06	11,787	2006 Aleknagik Lk.	Ft. Richardson	15.0g	T
Memory	84	06/07/06	356	2005 Aleknagik Lk.	Ft. Richardson	121.0g	T
Prator	98	06/07/06	432	2005 Aleknagik Lk.	Ft. Richardson	121.0g	T
Rush	245	06/10/06	150	2005 Aleknagik Lk.	Ft. Richardson	121.0g	A
Seventeenmile	100	06/21/06	82,859	2006 Aleknagik Lk.	Ft. Richardson	0.48g	T
Total 12 Lakes	1,384						
Catchables			11,680				
Fingerling			141,746				
Total			153,426				
Grand Total 68 Lakes	5,846		715,815				

[a] Treatment: TAF = triploid all-female.

[b] Stocking Method: T = tank truck; T/BU = carried in buckets to lake; T/4W = transported by 4-wheeler; A = airplane

Table 58.-Sport fish catch and harvest from stocked lakes in Northern Cook Inlet Management Area, 2005.

SWHS 55 fishing sites	Days fished[a]	% of effort	Landlocked salmon Catch	Harvest	% harvest	Arctic char Catch	Harvest	% harvest	Rainbow trout Catch	Harvest	% harvest	Arctic grayling Catch	Harvest	% harvest	Northern pike Catch	Harvest	% harvest	TOTAL Catch	Harvest	% harvest
Barley	18	0.1%																0	0	0%
Bench (Glenn Hwy, fly-in)	731	2.8%							398	342	86%							398	342	86%
Benka	424	1.6%				706	118	17%	641	177	28%							1,347	295	22%
Beverly	278	1.1%							221	0	0%							221	0	0%
Big Beaver	876	3.3%							859	81	9%							859	81	9%
Bradley (Kepler Lk complex)	93	0.4%							249	0	0%							249	0	0%
Brocker	278	1.1%							66	33	50%							66	33	50%
Bruce	360	1.4%							197	72	37%	52	0	0%				249	72	29%
Canoe (Kepler Lk complex)	576	2.2%							1,974	529	27%	129	0	0%				2,103	529	25%
Carpenter	44	0.2%				24	24	100%	376	44	12%							400	68	17%
Christiansen	139	0.5%	219	0	0%				242	66	27%							461	66	14%
Coyote	18	0.1%																0	0	0%
Crooked	88	0.3%							33	0	0%							33	0	0%
Crystal (near Willow)	336	1.3%							121	0	0%							121	0	0%
Diamond	120	0.5%							89	45	51%							89	45	51%
Echo (Kepler Lk complex)	497	1.9%				212	165	78%	287	177	62%							499	342	69%
Eska (also Slipper Lk)	278	1.1%							376	110	29%							376	110	29%
Farmer	18	0.1%							55	55	100%							55	55	100%
Finger	5,514	20.9%	14,056	5,374	38%	511	264	52%	4,833	1,358	28%	48	16	33%				19,448	7,012	36%
Florence	219	0.8%							66	0	0%							66	0	0%
Golden (Rainbow Pk Est/Pittman Rd)	88	0.3%							497	0	0%							497	0	0%
Honeybee	234	0.9%							895	265	30%							895	265	30%
Ida (Thirtymile Lk)	73	0.3%							442	0	0%							442	0	0%
Irene (Kepler Lk complex)	628	2.4%							1,901	891	47%							1,901	891	47%
Kalmbach (also Baptist Lk)	512	1.9%	678	153	23%				464	155	33%							1,142	308	27%
Kepler	160	0.6%							617	0	0%							617	0	0%
Knik	457	1.7%	631	399	63%				199	66	33%							830	465	56%
Little Lonely	88	0.3%							155	22	14%							155	22	14%

-continued-

Table 58.-Page 2 of 2.

SWHS 55 fishing sites	Days fished[a]	% of effort	Landlocked salmon Catch	Landlocked salmon Harvest	Landlocked salmon % harvest	Arctic char Catch	Arctic char Harvest	Arctic char % harvest	Rainbow trout Catch	Rainbow trout Harvest	Rainbow trout % harvest	Arctic grayling Catch	Arctic grayling Harvest	Arctic grayling % harvest	Northern pike Catch	Northern pike Harvest	Northern pike % harvest	TOTAL Catch	TOTAL Harvest	TOTAL % harvest
Loberg (Junction)	146	0.6%	86	26	30%				156	62	40%							242	88	36%
Long (Kepler Lk complex)	249	0.9%							663	0	0%							663	0	0%
Long (Mile 85 Glenn Hwy)	1,251	4.7%				2,036	412	20%	2,495	552	22%							4,531	964	21%
Loon	102	0.4%							166	0	0%							166	0	0%
Lorraine	570	2.2%							1,127	442	39%	112	80	71%				1,239	522	42%
Lucille	881	3.3%							1,727	391	23%							1,727	391	23%
Lynne	238	0.9%				188	12	6%	1,012	77	8%							1,200	89	7%
Marion	439	1.7%							1,866	309	17%							1,866	309	17%
Matanuska (Kepler Lk complex)	955	3.6%	947	383	40%	282	188	67%	2,472	1,073	43%	48	0	0%				3,749	1,644	44%
Meirs (in Palmer)	827	3.1%							2,110	910	43%	421	195	46%				2,531	1,105	44%
Memory	2,535	9.6%	769	328	43%	109	50	46%	1,828	395	22%				449	383	85%	3,155	1,156	37%
Morvro	585	2.2%							663	166	25%							663	166	25%
North Friend (also Montana Lk)	88	0.3%							276	0	0%							276	0	0%
Ravine	101	0.4%							318	0	0%							318	0	0%
Ruby	365	1.4%							1,425	546	38%							1,425	546	38%
Seventeenmile	760	2.9%				741	271	37%	718	99	14%							1,459	370	25%
Seymour (was Herring Lk)	599	2.3%							364	144	40%							364	144	40%
South Friend (also Montana Lk)	18	0.1%	87	0	0%				22	0	0%							109	0	0%
South Rolly (Nancy Lk Rec system)	826	3.1%							1,208	552	46%				153	129	84%	1,361	681	50%
Tigger (Talkeetna Lks)	35	0.1%							442	0	0%							442	0	0%
Vera	58	0.2%							66	0	0%							66	0	0%
Visnaw	18	0.1%							22	11	50%							22	11	50%
Walby	776	2.9%							996	89	9%							996	89	9%
Weiner	292	1.1%							1,251	475	38%	419	216	52%				1,670	691	41%
Willow	249	0.9%							1,469	121	8%							1,469	121	8%
Wolf	229	0.9%							311	41	13%							311	41	13%
X & Y (Talkeetna Lks)	35	0.1%							11	0	0%							11	0	0%
TOTALS	26,372	100%	17,473	6,663	38%	4,809	1,504	31%	41,437	10,943	26%	1,229	507	41%	602	512	85%	65,550	20,129	31%

Note: *Catch* = fish harvested plus fish released; *Harvest* = fish kept; Catch and harvest estimates from Statewide Harvest Survey (SWHS; Alaska Department of Fish and Game, Division of Sport Fish, Research and Technical Services, Anchorage, *Unpublished* database of survey estimates, accessed 7/7/2008. Project leader Gretchen Jennings).

[a] *Days fished* are not species-specific, but rather days fished for all species combined (including species not listed in this table).

Table 59.-Sport fish catch and harvest from stocked lakes in Northern Cook Inlet Management Area, 2006.

SWHS 55 fishing sites	Days fished[a]	% of effort	Landlocked salmon Catch	Landlocked salmon Harvest	Landlocked salmon % harvest	Arctic char Catch	Arctic char Harvest	Arctic char % harvest	Rainbow trout Catch	Rainbow trout Harvest	Rainbow trout % harvest	Arctic grayling Catch	Arctic grayling Harvest	Arctic grayling % harvest	Northern pike Catch	Northern pike Harvest	Northern pike % harvest	TOTAL Catch	TOTAL Harvest	TOTAL % harvest
Barley	35	0.2%							108	72	67%							108	72	67%
Bench (Glenn Hwy, fly-in)	0	0.0%																0	0	0%
Benka	447	2.0%				822	283	34%	552	192	35%							1,374	475	35%
Beverly	0	0.0%																0	0	0%
Big Beaver	406	1.8%	405	135	33%				148	15	10%							553	150	27%
Bradley (Kepler Lk complex)	260	1.1%							313	158	50%							313	158	50%
Brocker	0	0.0%																0	0	0%
Bruce	29	0.1%							22	0	0%							22	0	0%
Canoe (Kepler Lk complex)	784	3.4%							1,698	339	20%	162	14	9%				1,860	353	19%
Carpenter	217	0.9%	142	0	0%	51	38	75%	271	24	9%							464	62	13%
Christiansen	71	0.3%	25	0	0%				263	11	4%							288	11	4%
Coyote	0	0.0%																0	0	0%
Crooked	209	0.9%							300	12	4%							300	12	4%
Crystal (near Willow)	98	0.4%							54	54	100%							54	54	100%
Diamond	293	1.3%	92	8	9%				1,798	240	13%							1,890	248	13%
Echo (Kepler Lk complex)	576	2.5%							541	449	83%							541	449	83%
Eska (also Slipper Lk)	56	0.2%							60	60	100%							60	60	100%
Farmer	0	0.0%																0	0	0%
Finger	6,055	26.5%	8,300	2,363	28%	641	246	38%	5,221	1,566	30%				6	6	100%	14,168	4,181	30%
Florence	0	0.0%																0	0	0%
Golden (Rainbow Pk Est/Pittman Rd)	0	0.0%																0	0	0%
Honeybee	418	1.8%							1,199	120	10%							1,199	120	10%
Ida (Thirtymile Lk)	92	0.4%							179	40	22%	23	23	100%				202	63	31%
Irene (Kepler Lk complex)	530	2.3%							830	422	51%							830	422	51%
Kalmbach (also Baptist Lk)	265	1.2%	685	518	76%				360	60	17%							1,045	578	55%
Kepler	241	1.1%							251	24	10%							251	24	10%
Knik	487	2.1%	224	141	63%				576	521	90%	11	0	0%				811	662	82%
Little Lonely	157	0.7%							405	382	94%							405	382	94%
Loberg (Junction)	142	0.6%							196	88	45%							196	88	45%

-continued-

Table 59.-Page 2 of 2.

SWHS 55 fishing sites	Days fished[a]	% of effort	Landlocked salmon Catch	Landlocked salmon Harvest	Landlocked salmon % harvest	Arctic char Catch	Arctic char Harvest	Arctic char % harvest	Rainbow trout Catch	Rainbow trout Harvest	Rainbow trout % harvest	Arctic grayling Catch	Arctic grayling Harvest	Arctic grayling % harvest	Northern pike Catch	Northern pike Harvest	Northern pike % harvest	TOTAL Catch	TOTAL Harvest	TOTAL % harvest
Long (Kepler Lk complex)	825	3.6%							4,640	0	0%							4,640	0	0%
Long (Mile 85 Glenn Hwy)	2,024	8.9%				1,337	204	15%	1,666	748	45%	405	62	15%				3,408	1,014	30%
Loon	255	1.1%	192	159	83%				59	0	0%							251	159	63%
Lorraine	112	0.5%							192	96	50%							192	96	50%
Lucille	2,179	9.5%							2,896	996	34%							2,896	996	34%
Lynne	167	0.7%				280	51	18%	168	48	29%							448	99	22%
Marion	125	0.5%				51	51	100%	168	96	57%							219	147	67%
Matanuska (Kepler Lk complex)	1,016	4.4%	121	81	67%	117	92	79%	1,148	552	48%							1,386	725	52%
Meirs (in Palmer)	646	2.8%							1,015	691	68%	80	80	100%				1,095	771	70%
Memory	488	2.1%	92	25	27%				827	132	16%				77	77	100%	996	234	23%
Morvro	0	0.0%																0	0	0%
North Friend (also Montana Lk)	35	0.2%	8	8	100%													8	8	100%
Ravine	101	0.4%							251	56	22%							251	56	22%
Ruby	0	0.0%																0	0	0%
Seventeenmile	352	1.5%				186	131	70%	581	275	47%							767	406	53%
Seymour (was Herring Lk)	138	0.6%							202	147	73%							202	147	73%
South Friend (also Montana Lk)	0	0.0%																0	0	0%
South Rolly (Nancy Lk Rec system)	777	3.4%							1,063	364	34%				168	140	83%	1,231	504	41%
Tigger (Talkeetna Lks)	78	0.3%							274	60	22%							274	60	22%
Vera	0	0.0%																0	0	0%
Visnaw	173	0.8%							394	72	18%							394	72	18%
Walby	783	3.4%							1,319	132	10%	14	0	0%				1,333	132	10%
Weiner	595	2.6%							1,039	847	82%	1,061	462	44%				2,100	1,309	62%
Willow	98	0.4%							288	120	42%							288	120	42%
Wolf	17	0.1%							24	0	0%							24	0	0%
X & Y (Talkeetna Lks)	17	0.1%							48	0	0%							48	0	0%
TOTALS	22,869	100%	10,286	3,438	33%	3,485	1,096	31%	33,607	10,281	31%	1,756	641	37%	251	223	89%	49,385	15,679	32%

Note: *Catch* = fish harvested plus fish released; *Harvest* = fish kept; Catch and harvest estimates from Statewide Harvest Survey (SWHS; Alaska Department of Fish and Game, Division of Sport Fish, Research and Technical Services, Anchorage, *Unpublished* database of survey estimates, accessed 7/7/2008. Project leader Gretchen Jennings).

[a] *Days fished* are not species-specific, but rather days fished for all species combined (including species not listed on this table).

Table 60.-Northern Cook Inlet Management Area sport catch and harvest of rainbow trout by management unit, 1977-2006.

	Northern Cook Inlet Management Area													
	Knik Arm		Eastside Susitna		Westside Susitna		West Cook Inlet		Total		Southcentral Region		Statewide	
Year	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Harvest	% NCIMA	Number	% NCIMA
1977	ND	18,615	ND	5,225	ND	7,472	ND	958	ND	32,270	80,345	40.2	94,307	34.2
1978	ND	23,139	ND	5,930	ND	12,295	ND	723	ND	42,087	107,243	39.2	120,231	35.0
1979	ND	24,843	ND	9,463	ND	12,555	ND	1,063	ND	47,924	129,815	36.9	139,390	34.4
1980	ND	29,368	ND	6,715	ND	12,785	ND	560	ND	49,428	126,686	39.0	153,476	32.2
1981	ND	41,749	ND	8,813	ND	11,296	ND	1,734	ND	63,592	149,460	42.5	178,613	35.6
1982	ND	30,549	ND	7,536	ND	11,465	ND	398	ND	49,948	142,579	35.0	173,242	28.8
1983	ND	26,421	ND	9,639	ND	9,253	ND	871	ND	46,184	141,705	32.6	168,677	27.4
1984	ND	26,418	ND	7,656	ND	8,079	ND	748	ND	42,901	128,649	33.3	170,117	25.2
1985	ND	46,431	ND	7,872	ND	8,114	ND	902	ND	63,319	142,316	44.5	181,991	34.8
1986	ND	27,690	ND	8,061	ND	6,668	ND	223	ND	42,642	114,873	37.1	152,855	27.9
1987	ND	24,663	ND	6,647	ND	8,020	ND	579	ND	39,909	101,397	39.4	138,698	28.8
1988	ND	58,609	ND	7,622	ND	8,058	ND	673	ND	74,962	155,960	48.1	241,831	31.0
1989	ND	44,518	ND	4,972	ND	4,928	ND	544	ND	54,962	127,444	43.1	209,961	26.2
1990	98,720	30,699	21,806	5,008	33,510	3,960	3,115	472	157,151	40,139	122,987	32.6	191,809	20.9
1991	88,645	39,636	26,329	7,854	46,870	4,526	1,756	497	163,600	52,513	127,492	41.2	205,642	25.5
1992	85,331	27,995	19,915	3,948	23,621	2,028	1,448	190	130,315	34,161	97,730	35.0	139,973	24.4
1993	69,635	21,565	24,240	3,713	29,911	2,481	1,788	191	125,574	27,950	82,312	34.0	136,681	20.4
1994	70,255	22,446	23,619	3,658	25,157	2,526	871	225	119,902	28,855	76,384	37.8	112,261	25.7
1995	56,108	14,878	15,363	3,138	23,432	1,757	1,222	111	96,125	19,884	74,972	26.5	112,681	17.6
1996	80,757	21,780	24,808	2,510	33,603	1,924	1,696	439	140,864	26,653	84,573	31.5	136,482	19.5
1997	85,278	25,695	34,742	2,324	30,217	1,452	2,371	618	152,608	30,089	67,261	44.7	100,372	30.0
1998	66,837	17,693	26,241	968	17,370	1,081	1,576	189	112,024	19,931	56,728	35.1	103,744	19.2
1999	84,691	24,527	39,753	1,755	37,864	1,866	2,617	277	164,925	28,425	77,707	36.6	132,481	21.5
2000	114,013	28,745	42,603	1,521	29,398	1,226	2,793	211	188,807	31,703	89,171	35.6	144,873	21.9
2001	70,821	21,061	32,904	1,112	27,697	759	3,341	270	134,763	23,202	57,629	40.3	81,279	28.5
2002	93,520	28,325	80,190	1,751	29,745	1,209	3,082	236	206,537	31,521	73,542	42.9	117,063	26.9
2003	68,212	17,617	59,440	2,581	40,327	1,425	1,698	264	169,677	21,887	53,155	41.2	84,531	25.9
2004	70,897	17,738	46,130	1,924	42,969	1,629	1,258	177	161,254	21,468	56,082	38.3	85,136	25.2
1977-2004 Mean	-	27,979	-	4,997	-	5,387	-	512	-	38,875	101,650	38.2	143,157	27.2
1990-2004 Mean	80,248	24,027	34,539	2,918	31,446	1,990	2,042	291	148,275	29,225	79,848	36.9	125,667	23.6
1995-2004 Mean	79,113	21,806	40,217	1,958	31,262	1,433	2,165	279	152,758	25,476	69,082	37.3	109,864	23.6
2000-2004 Mean	77,543	22,915	61,920	2,813	37,680	2,413	2,013	297	179,156	28,438	71,107	40.1	107,472	26.3
2005	59,870	14,367	36,188	793	46,575	339	791	196	143,424	15,695	39,790	39.4	60,826	25.8
2006	48,064	13,524	38,862	1,590	44,018	1,027	1,538	170	132,482	16,311	33,119	49.2	53,086	30.7

Note: *Catch* = fish harvested plus fish released; *Harvest* = fish kept; Catch and harvest estimates from Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b). ND = no data, catch data not collected prior to 1990. "=" value can't be computed due to limitations of the data.

Table 61.-Knik Arm drainage sport fish harvest by fishery, 1977-2006.

Year	Little Susitna	Knik River [a]	Wasilla Creek	Cotton-wood Ck	Fish Creek [b]	Wasilla Lake	Finger Lake	Kepler L. Complex	Big Lake	Lucille Lake	Kalmbach Lake	Carpenter Lake	Knik Lake	Memory Lake	Seymour Lake	Bonnie Lakes	Nancy L. Complex	Other Streams [c]	Other Lakes	Total
1977	843		252				0	1,822	3,906	0							2,642	9,150		18,615
1978	886		45				0	5,180	4,845	0							1,853	10,330		23,139
1979	1,391		500	1,736		2,782	0	3,372	2,882	0							2,909	9,271		24,843
1980	852		121	1,085		2,084	0	5,906	5,398	0							2,540	11,382		29,368
1981	2,692	0	38	824		2,261	0	8,200	9,810	0							4,723	13,201		41,749
1982	1,551	0	63	786		2,243	0	7,325	9,369	0							2,840	6,372		30,549
1983	1,290	0	84	556		1,804	0	3,986	4,102	0							4,846	1,490	8,263	26,421
1984	860	549	312	748		848	0	9,128	4,938	0				382			1,771	1,247	5,635	26,418
1985	1,294	780	260	590	347	1,231	3,381	14,011	6,953	35							2,514	1,197	13,838	46,431
1986	1,407	235	11	145	391	1,653	3,172	7,249	5,105	168					726	736	2,200	815	3,677	27,690
1987	447	58	126	301	204	680	2,476	7,758	2,476	3,379							2,728	427	3,603	24,663
1988	1,273	382	582	782	309	891	5,421	16,462	4,220	8,495						910	5,439	964	12,479	58,609
1989	599	0	91	163	1,063	972	2,788	18,233	5,402	972	1,625		872	590	445	945	3,696	117	5,945	44,518
1990	673	0	131	410	361	443	2,544	10,223	3,282	246						738	2,182	1,131	8,335	30,699
1991	781	0	28	628	209	1,953	2,539	8,496	4,883	600			600	1,046		363	2,818	545	14,147	39,636
1992	720	0	24	404	791	483	1,860	6,839	2,090	309	610	1,116	887	364	459	1,045	2,945	8	7,041	27,995
1993	186	0	30	475	228	630	2,037	2,930	2,073	424				890	734	399	2,116	248	8,165	21,565
1994	300	0	135	425	393	735	2,666	3,551	2,260	156				323	570	1,184	1,300	56	8,392	22,446
1995	326	0	37	413	150	390	1,887	2,648	1,371	249	543	393		395		365	785	119	4,797	14,878
1996	121	0	40	248	74	1,735	2,316	5,092	2,260		221			53			753	189	8,678	21,780
1997	348	0	29	215	321	475	3,720	8,407	2,083	335				406		520	963	72	7,806	25,695
1998	59	0	0	390	412	483	1,804	3,167	1,358	214			984				321	42	8,459	17,693
1999	253	0	0	93	2,114	762	3,301	5,391	1,501				713			572	611	81	9,135	24,527
2000	252	0		218	355	1,037	3,511	7,469	1,475	116			1,569			223	1,900	84	10,536	28,745
2001	253	0		613	182	305	1,534	4,197	905	1,107	92	42	634	604	117	81	1,349	25	9,021	21,061
2002	154	0	0	290	236	329	5,608	3,498	1,521	989	359	29	907	408	17	223	916	535	12,306	28,325
2003	140	0	0	32	11	511	1,326	3,625	884	1,194	98	230	786	247	224	107	1,601	0	6,601	17,617
2004	93	82	0	290	23	264	1,527	4,423	626	842	175	79	226	234	517	26	525	21	7,765	17,738
1977-2004 Mean	716	87	113	495	409	1,076	1,979	6,735	3,499	763	465	315	818	457	423	527	2,207	2,469	8,392	27,979
1995-2004 Mean	200	8	13	280	388	629	2,653	4,792	1,398	631	248	155	831	335	219	265	972	117	8,510	21,806
2000-2004 Mean	178	16	0	289	161	489	2,701	4,642	1,082	850	181	95	824	373	219	132	1,258	133	9,246	22,697
2005	51	22	88	44	0	535	1,358	3,657	752	391	155	44	66	395	144	22	771	120	5,487	14,102
2006	166	0	0	230	15	115	1,566	2,419	1,005	996	60	24	521	132	147	231	1,032	19	4,846	13,524

Note: Harvest estimates from Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Knik River and tributaries including Jim Creek.

[b] Big Lake drainage.

[c] Includes lakes and streams, 1977-1982.

Table 62.-Knik Arm drainage rainbow trout sport catch by fishery, 1990-2006.

Year	Little Susitna	Knik River [a]	Wasilla Creek	Cotton-wood Ck	Fish Creek [b]	Wasilla Lake	Finger Lake	Kepler L. Complex	Big Lake	Lucille Lake	Kalmbach Lake	Carpenter Lake	Knik Lake	Memory Lake	Seymour Lake	Bonnie Lakes	Nancy L. Complex	Other Streams	Other Lakes	Total
1990	1,953	0	607	2,183	2,100	1,707	5,645	35,085	8,123	1,034						2,133	7,466	5,448	25,236	98,720
1991	1,507	0	28	795	614	2,916	4,576	18,986	10,588	670			2,246	1,576		893	6,348	2,371	34,531	88,645
1992	2,319	0	40	1,987	2,375	1,544	6,087	24,887	5,296	602	3,103	1,868	1,504	1,314	712	3,309	7,765	64	20,555	85,331
1993	1,308	0	195	3,987	1,445	1,497	7,272	16,151	4,845	651				1,523	1,224	2,356	5,130	367	21,684	69,635
1994	1,198	0	312	911	2,295	2,142	6,168	16,534	5,502	302				1,230	1,413	2,657	4,372	282	24,932	70,255
1995	1,783	0	92	1,015	412	1,001	5,792	16,634	3,565	514	1,067	824		863		1,331	2,344	209	18,662	56,108
1996	323	0	40	1,153	171	4,384	6,494	24,201	8,023		252			727			1,966	409	32,614	80,757
1997	1,029	0	53	992	476	938	9,218	27,065	6,357	610				968		1,253	3,098	359	32,862	85,278
1998	319	0	94	1,878	1,276	1,405	6,789	16,175	5,298	1,385		3,324	3,324				1,173	151	27,570	66,837
1999	1,658	0	49	1,903	2,243	2,287	5,602	20,169	6,569				1,746			1,658	3,538	421	36,848	84,691
2000	1,567			957	1,081	2,144	9,327	27,859	7,212	1,161			4,163			1,834	7,273	443	48,992	114,013
2001	1,794	0	58	3,016	548	1,499	4,313	16,349	4,546	3,616	215	1,040	1,447	2,098	175	328	3,874	351	25,554	70,821
2002	1,319	0	0	1,628	2,114	896	9,753	17,330	4,601	6,193	755	87	2,037	1,804	268	586	4,361	934	38,854	93,520
2003	1,568	0	130	1,727	206	2,230	5,217	16,575	5,614	4,842	455	1,685	1,698	343	1989	311	3,767	86	19,769	68,212
2004	1,368	1,414	0	726	1,239	1,720	5,030	19,991	3,253	2,330	1554	79	862	1,531	587	119	4,184	106	24,804	70,897
1990-2004 Mean	1,401	101	121	1,657	1,240	1,887	6,486	20,933	5,959	1,839	1,057	1,272	2,114	1,271	910	1,444	4,444	800	28,898	80,248
1995-2004 Mean	1,273	157	57	1,500	977	1,850	6,754	20,235	5,504	2,581	716	1,173	2,182	1,191	755	928	3,558	347	30,653	79,113
2000-2004 Mean	1,523	354	47	1,611	1,038	1,698	6,728	19,621	5,045	3,628	745	723	2,041	1,444	755	636	4,692	384	31,595	83,493
2005	772	259	221	628	33	1,468	4,833	13,823	5,937	1,727	464	376	0	1,828	199	508	1,994	485	24,315	59,870
2006	1,583	944	0	1,500	159	224	5,221	12,348	2,975	2,896	360	271	576	827	202	709	2,828	62	14,379	48,064

Note: Catch estimates from Statewide Harvest Survey (Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Knik River and tributaries including Jim Creek.

[b] Big Lake drainage.

Table 63.-Eastside Susitna River drainage rainbow trout sport harvest by fishery, 1977-2006.

Year	Willow Creek	Little Willow	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River [a]	Other Streams [b]	Other Lakes	Total
1977	1,055	224			368		727			450	2,401		5,225
1978	913	334			470		1,193			1,501	1,519		5,930
1979	1,500	345		282	573		1,536		382	1,373	3,472		9,463
1980	1,168	353		154	385		854		193	950	2,658		6,715
1981	1,475	374		326	201		1,111		249	1,226	3,851		8,813
1982	891	335		189	325		2,243		545	608	2,400		7,536
1983	1,689	514	357	231	409		1,332		178	1,836	1,656	1,437	9,639
1984	1,359	1,047	449	175	349	125	1,197		374	910	598	1,073	7,656
1985	2,046	746		139	191		1,248		416	832	1,266	988	7,872
1986	545	218	436	0	218	145	399	73	581	1,234	1,126	3,086	8,061
1987	1,141	1,213	471	308	507	272	417	36	72	869	471	870	6,647
1988	1,128	400	255	73	236	291	1,492	73	55	1,110	636	1,873	7,622
1989	906	277	675	37	240	240	407	37	259	822	443	629	4,972
1990	1,008	286	352	101	286	353	487		168	1,109	320	538	5,008
1991	2,044	430	261	384	569	354	615	231	0	1,076	999	891	7,854
1992	712	293	87	47	55	79	467	16	79	665	404	1,044	3,948
1993	934	264	49	148	338	127	271	0	59	242	670	611	3,713
1994	1,161	337	114	53	254	173	241	0	8	262	467	588	3,658
1995	351	250	0	56	79	28	285	0	0	287	442	1,360	3,138
1996	551	113	63	21	73	68	443	0	95	284	354	445	2,510
1997	0	182	137	24	208	179	0	0	24	226	636	708	2,324
1998	0	113	42	0	157	42	0	17	144	179	173	101	968
1999	0	77	82	0	94	152	0	24	0	207	489	630	1,755
2000	91	48	61	12	189	36	0	0	7	197	265	615	1,521
2001	119	42	22	42	131	77	0	0	8	92	315	264	1,112
2002	209	54	37	0	248	58	0	0	0	90	150	905	1,751
2003	61	65	194	31	163	54	0	0	0	299	305	1409	2,581
2004	144	23	0	0	58	70	0	47	0	157	259	1166	1,924
1977-2004 Mean	829	320	197	109	263	146	606	31	150	682	1,027	965	4,997
1995-2004 Mean	153	97	64	19	140	76	73	9	28	202	339	760	1,958
2000-2004 Mean	125	46	63	17	158	59	0	9	3	167	259	872	1,778
2005	32	64	11	0	51	22	0	0	0	61	101	451	793
2006	103	94	73	22	52	34	0	12	0	125	43	680	1,238

Note: Harvest estimates from Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Talkeetna River and tributaries including Clear Creek.

[b] Includes lakes and streams, 1977-1982.

Table 64.-Eastside Susitna River drainage rainbow trout sport catch by fishery, 1990-2006.

Year	Willow Creek	Little Willow	Kashwitna River	Caswell Creek	Sheep Creek	Goose Creek	Montana Creek	Birch Creek	Sunshine Creek	Talkeetna River [a]	Other Streams	Other Lakes	Total
1990	3,914	689	1,630	689	840	1,378	1,277		622	4,788	3,913	2,066	21,806
1991	3,965	1,230	692	446	1,076	2,183	2,136	307	154	5,072	6,347	2,721	26,329
1992	3,206	1,124	293	142	633	617	2,501	40	103	5,581	2,754	2,921	19,915
1993	3,934	829	995	217	967	2,054	2,034	49	407	5,685	4,441	2,628	24,240
1994	4,673	2,024	319	172	757	1,566	1,807	56	56	4,687	2,838	4,664	23,619
1995	2,340	730	178	127	506	280	1,245	47	150	3,510	3,078	3,172	15,363
1996	4,766	1,077	654	21	2,077	384	2,828	0	179	6,790	3,049	2,983	24,808
1997	5,198	1,415	2,177	60	2,008	2,139	3,473	179	60	7,040	5,355	5,638	34,742
1998	4,487	1,259	1,593	93	4,885	333	4,138	135	186	4,560	2,492	2,080	26,241
1999	11,965	2,484	1,016	72	1,415	960	5,337	140	465	7,402	5,188	3,309	39,753
2000	8,836	1,920	2,107	145	2,173	3,175	7,236	569	132	6,669	3,740	5,901	42,603
2001	11,510	1,414	882	184	763	1,103	5,678	123	17	5,937	2,844	2,449	32,904
2002	22,650	2,821	1,402	105	9,308	4,063	19,170	45	66	11,312	5,164	4,084	80,190
2003	13,750	3,576	2,315	344	5,289	1,691	12,393	54	97	7,875	5,191	6,865	59,440
2004	10,920	2,293	698	58	1,869	1,835	10,171	540	351	6,384	6,961	4,050	46,130
1990-2004 Mean	7,741	1,659	1,130	192	2,304	1,584	5,428	163	203	6,219	4,224	3,702	34,539
1995-2004 Mean	9,642	1,899	1,302	121	3,029	1,596	7,167	183	170	6,748	4,306	4,053	40,217
2000-2004 Mean	13,533	2,405	1,481	167	3,880	2,373	10,930	266	133	7,635	4,780	4,670	52,253
2005	10,863	2,878	961	11	2,218	685	6,151	133	183	6,772	1,759	3,574	36,188
2006	10,032	1,744	993	46	2,716	1,121	7,610	60	24	7,653	4,997	1,866	38,862

Note: Catch estimates from Statewide Harvest Survey (Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Talkeetna River and tributaries including Clear Creek.

Table 65.-Westside Susitna River drainage rainbow trout sport harvest by fishery, 1977-2006.

Year	Alexander Creek	Deshka River	Rabideux Creek	Yentna River	Peters Creek	Lake Creek	Fish Creek [a]	Judd Lake	Other Streams [b]	Other Lakes [b]	Total
1977	1,251	1,556				1,853		68	1,677	1,067	7,472
1978	2,640	3,634				2,721		0	1,528	1,772	12,295
1979	1,182	3,182				4,527		100	2,709	855	12,555
1980	1,945	4,305				2,144		86	2,101	2,204	12,785
1981	2,290	3,631				2,874			872	1,629	11,296
1982	2,505	3,804				3,134			597	1,425	11,465
1983	608	2,434				2,287		0	2,917	1,007	9,253
1984	785	2,120			611	3,080		0	1,084	399	8,079
1985	1,318	3,104				1,439			1,387	866	8,114
1986	1,553	3,038				961	45	0	614	457	6,668
1987	978	3,006				1,902	398	0	1,357	379	8,020
1988	1,419	4,075			73	1,146	109	18	672	546	8,058
1989	486	1,676	0	38	162	676	428	105	576	781	4,928
1990	640	707	17	0	303	808	135		810	540	3,960
1991	917	1,275	0	140	295	498	358	0	810	233	4,526
1992	198	459	24	127	214	214	79		349	364	2,028
1993	128	452		36	49	184	172		1,163	297	2,481
1994	207	415		123	146	714	93		613	215	2,526
1995	86	183		140	46	565	360		588	89	2,057
1996	95	321		146	227	616	51		468		1,924
1997	0	264		0	80	436	56		616		1,452
1998	0	218		0		285	124		454		1,081
1999	0	561		59	70	640	168		368		1,866
2000	0	205		151	71	567	85		147	0	1,226
2001	0	270		156	56	183	33		20	41	759
2002	13	417		0	29	445	119		186	0	1,209
2003	0	368		154	48	561	77		217	0	1,425
2004	0	938		0	23	587	27		54	0	1,629
1977-2004 Mean	759	1,665	10	79	147	1,287	154	34	891	632	5,398
1995-2004 Mean	19	375	-	81	72	489	110	-	312	22	1463
2000-2004 Mean	3	440	-	92	45	469	68	-	125	8	1,250
2005	0	60	0	52	11	209	0	[c]	7	0	339
2006	0	523	0	96	39	159	198	0	0	12	1,027

Note: Harvest estimates from Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b). "-" = value can not be computed due to limitations of the data.

[a] Fish Lake drainage (Yentna River drainage).

[b] May include harvest from West Cook Inlet waters through 1995.

[c] No listing for Judd Lake in the 2005 SWHS final estimate, Area M detail harvest spreadsheet on the ADF&G DocuShare website accessed on 7/9/08.

Table 66.-Westside Susitna River drainage rainbow trout sport catch by fishery, 1990-2006.

Year	Alexander Creek	Deshka River	Rabideux Creek	Yentna River	Peters Creek	Lake Creek	Fish Creek [a]	Talachulitna River	Other Streams [b]	Other Lakes [b]	Total
1990	3,065	6,197	34	135	1,532	8,757	707	10,761	2,474	1,431	35,093
1991	2,301	5,303	16	295	1,182	12,969	1,415	18,489	2,863	2,037	46,870
1992	1,124	3,396	142	214	633	5,399	768	7,892	2,123	1,930	23,621
1993	992	5,772		101	331	9,232	647	8,824	3,329	683	29,911
1994	1,075	3,345		201	646	10,387	740	6,646	1,536	763	25,339
1995	472	2,288		1,638	644	5,546	596	6,286	3,499	2,463	23,432
1996	195	4,166		507	709	7,655	572	16,488	3,311		33,603
1997	1,034	2,355		232	331	9,378	1,379	12,535	2,973		30,217
1998	490	1,594		846		6,668	641	4,336	2,795		17,370
1999	643	5,323		446	152	15,310	2,144	11,072	2,774		37,864
2000	759	6,146		1,774	1,435	12,156	833	5,209	1,086		29,398
2001	1335	8,300		1,879	375	7,739	1335	7,027	727	75	28,792
2002	728	4,464		518	1,954	11,622	679	6,283	3,497	0	29,745
2003	313	5,868		768	510	22,460	176	9,721	511	0	40,327
2004	220	5,868		1,514	381	22,130	2411	9,000	150	1,295	42,969
1990-2004 Mean	983	4,692	64	738	773	11,161	1,003	9,371	2,243	1,068	31,637
1995-2004 Mean	619	4,637	-	1,012	721	12,066	1,077	8,796	2,132	767	31,372
2000-2004 Mean	671	6,129	-	1,291	931	15,221	1,087	7,448	1,194	343	34,246
2005	64	3,999	0	2,521	838	21,197	260	17,060	595	41	46,575
2006	402	9,635	0	2,459	195	28,013	395	2,883	0	36	44,018

Note: Catch estimates from Statewide Harvest Survey (Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b). "-" = value can not be computed due to limitations of the data.

[a] Fish Lake drainage (Yentna River drainage).

[b] May include harvest from West Cook Inlet waters through 1995.

Table 67.-Sport catch and harvest of northern pike in Northern Cook Inlet Management Area by management unit, 1977-2006.

	Northern Cook Inlet Management Area													
	Knik Arm		Eastside Susitna		Westside Susitna		West Cook Inlet		Total		Soutcentral Region		Statewide	
Year	Catch	Harvest [a]	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest	Harvest	% NCIMA	Number	% NCIMA
1977	ND	0	ND	ND	ND	132	ND	0	ND	132	321	41.1	11,982	1.1
1978	ND	0	ND	ND	ND	316	ND	0	ND	316	767	41.2	12,520	2.5
1979	ND	0	ND	ND	ND	382	ND	0	ND	382	762	50.1	12,741	3.0
1980	ND	0	ND	ND	ND	232	ND	0	ND	232	1,358	17.1	17,000	1.4
1981	ND	0	ND	ND	ND	125	ND	0	ND	125	1,411	8.9	16,536	0.8
1982	ND	0	ND	ND	ND	607	ND	0	ND	607	1,707	35.6	18,964	3.2
1983	ND	0	ND	ND	ND	944	ND	0	ND	944	2,642	35.7	21,476	4.4
1984	ND	0	ND	ND	ND	1,821	ND	0	ND	1,821	4,424	41.2	18,641	9.8
1985	ND	156	ND	ND	ND	1,248	ND	0	ND	1,404	2,240	62.7	17,943	7.8
1986	ND	458	ND	ND	ND	1,519	ND	0	ND	1,977	2,894	68.3	21,890	9.0
1987	ND	924	ND	ND	ND	1,540	ND	0	ND	2,464	4,839	50.9	19,079	12.9
1988	ND	364	ND	ND	ND	2,818	ND	291	ND	3,473	3,598	96.5	23,440	14.8
1989	ND	863	ND	ND	ND	2,257	ND	0	ND	3,120	4,434	70.4	21,659	14.4
1990	2,593	754	[b]	[b]	14,465	2,088	[b]	0	17,058	2,842	3,655	77.8	15,985	17.8
1991	7,021	2,709	[b]	[b]	11,193	3,931	[b]	0	18,214	6,640	8,704	76.3	29,611	22.4
1992	7,097	2,605	[b]	[b]	13,828	2,777	[b]	0	20,925	5,382	7,314	73.6	18,616	28.9
1993	10,141	2,102	0	0	24,077	3,619	19	0	34,237	5,721	7,131	80.2	19,366	29.5
1994	2,816	1,328	0	0	5,436	2,556	18	9	8,270	3,893	5,800	67.1	25,558	15.2
1995	825	522	0	0	15,414	3,024	0	0	16,239	3,546	5,323	66.6	19,006	18.7
1996	12,220	4,021	368	11	17,657	3,902	0	0	30,245	7,934	10,503	75.5	23,043	34.4
1997	9,137	4,858	795	95	16,266	4,026	75	45	26,273	9,024	10,489	86.0	16,603	54.4
1998	10,223	4,272	130	130	17,928	3,753	321	25	28,602	8,180	9,595	85.3	15,617	52.4
1999	14,231	6,785	441	260	14,348	3,686	334	93	29,354	10,824	13,327	81.2	19,766	54.8
2000	16,717	5,698	308	101	27,381	3,692	234	86	44,640	9,577	12,019	79.7	18,062	53.0
2001	15,457	6,544	776	55	25,147	5,479	1,042	661	42,422	12,739	16,673	76.4	23,623	53.9
2002	13,079	5,716	647	618	18,450	5,865	284	119	32,460	12,318	14,862	82.9	22,567	54.6
2003	14,094	4,026	11	0	14,818	3,816	355	182	29,278	8,024	11,282	71.1	17,388	46.1
2004	11,179	4,961	119	91	21,878	6,626	704	493	33,880	12,171	17,122	71.1	28,799	42.3
1977-2004 Mean	-	2,131	-	-	-	2,599	-	72	-	4,850	6,614	63.2	19,553	23.7
1990-2004 Mean	9,789	3,793	-	-	17,219	3,923	-	114	27,473	7,921	10,253	76.7	20,907	38.6
1993-2004 Mean	10,843	4,236	300	113	18,233	4,170	282	143	29,658	8,663	11,177	76.9	20,783	42.4
1995-2004 Mean	11,716	4,740	360	136	18,929	4,387	335	170	31,339	9,434	12,120	77.6	20,447	46.5
2000-2004 Mean	14,105	5,389	372	173	21,535	5,096	524	308	36,536	10,966	14,392	76.2	22,088	50.0
2005	9,388	4,317	2,427	1,947	25,704	4,889	330	153	37,849	11,306	13,802	81.9	24,819	45.6
2006	9,010	4,839	6,056	1,962	15,658	4,318	799	285	31,523	11,404	13,261	86.0	18,184	62.7

Note: Catch estimates from Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b). ND = no data, catch data not collected prior to 1990. "-" value can't be computed due to limitations.

[a] Prior to 1985, SWHS harvest estimates for northern pike in the Knik Arm Drainage Area may have been included in the "Other" (fish species) category.

[b] No reported catch or harvest from Eastside Susitna or West Cook Inlet management units prior to 1993.

Table 68.-Northern pike assessment data from Northern Cook Inlet Management Area waters, April 14 to June 28, 2006.

			Sampling gear type																
			Gillnet				Hoop net				Hook and line								
Location	Sampling dates	Reason for sampling (A or B) [a]	No. of nets	Hrs fished	Catch (no. of fish)	CPUE [b]	No. of nets	Hrs fished	Catch (no. of fish)	CPUE [b]	No. of rods	Hrs fished	Catch (no. of fish)	CPUE [b]	Total catch (all gear types)	Proportion female	Length (mm) [c] Mean	Min	Max
Alexander Creek sloughs (rm 20-30)	5/10-5/12/2006	A	11	199.50	68	0.34	0	ND	ND	ND	0	ND	ND	ND	68	0.29	597	310	865
Deshka River sloughs (rm 0-7)	5/22-5/23/2006	A	6	97.50	28	0.29	2	33.75	15	0.44	0	ND	ND	ND	43	0.25	404	250	645
Long Lake (Willow)	5/31-6/1/2006	A	6	29.50	9	0.31	2	33.75	6	0.18	0	ND	ND	ND	15	0.80	367	305	450
Crystal Lake	6/1-6/2/2006	A	4	15.25	0	0.00	2	46.25	1	0.02	0	ND	ND	ND	1	0.00	560	560	560
Big Lake	6/5-6/6/2006	B	8	36.00	4	0.11	1	20.50	2	0.10	0	ND	ND	ND	6	0.50	451	425	470
Nancy Lake	6/7-6/8/2006	B	9	40.50	12	0.30	2	45.25	15	0.33	0	ND	ND	ND	27	0.46	471	285	1070
Anderson Lake	6/20-6/21/2006	A	3	17.50	2	0.11	1	33.75	0	0.00	0	ND	ND	ND	2	0.00	340	300	380
Shell Lake	6/27-6/28/2006	A	6	53.00	22	0.42	0	ND	ND	ND	2	10.50	17	1.62	39	0.44	539	280	670
Alexander Lake	4/14/2006	A	0	ND	ND	ND	0	ND	ND	ND	20	120.00	41	0.34	41	0.70	563	460	740
Cottonwood Lake	5/24-5/25/2006	B	4	13.50	0	0.00	1	20.75	0	0.00	0	ND	ND	ND	0	ND	ND	ND	ND
Mud Lake	5/25/2006	B	3	8.50	0	0.00	1	4.00	0	0.00	ND	ND	ND	ND	0	ND	ND	ND	ND
Wasilla Lake	5/30/2006	B	2	10.25	0	0.00	1	5.50	0	0.00	ND	ND	ND	ND	0	ND	ND	ND	ND
West Beaver Lake	6/12-6/13/2006	B	3	15.75	0	0.00	1	18.75	0	0.00	ND	ND	ND	ND	0	ND	ND	ND	ND
Cocoran Lake	6/13/2006	B	2	8.50	0	0.00	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND
Fish Lake	6/14-6/15/2006	B	4	21.50	0	0.00	2	47.00	0	0.00	ND	ND	ND	ND	0	ND	ND	ND	ND
Kings Lake	6/19-6/20/2006	B	4	21.75	0	0.00	1	26.00	0	0.00	ND	ND	ND	ND	0	ND	ND	ND	ND
Horseshoe Lake	6/21-6/22/2006	B	4	16.00	0	0.00	2	40.50	0	0.00	ND	ND	ND	ND	0	ND	ND	ND	ND

Note: "ND" = no data because no attempts were made to collect it. "-" = value can not be computed due to limitations of the data.

[a] "A" = to assess known northern pike stock; "B" = to confirm presence or absence of northern pike in suspected waters.

[b] "CPUE" = catch per unit effort.

[c] Mid eye to fork length.

Table 69.-Knik Arm Management Unit northern pike catch by fishery, 1990-2006.

Year	Little Susitna River	Knik River [a]	Figure Eight Lake	Cottonwood Creek	Big Lake [b]	Flathorn Lake [c]	Nancy Lake [d]	Other [e]	Total
1990	0	0	0	0	0	66	2314	213	2,593
1991	0	0	0	0	0	560	6,385	76	7,021
1992	0	0	0	0	0	948	5,970	179	7,097
1993	0	0	0	0	0	1,786	6,445	1,910	10,141
1994	0	0	0	0	64	709	1,846	197	2,816
1995	59	0	0	0	0	722	0	44	825
1996	0	0	0	0	13	3,852	7,210	1,145	12,220
1997	0	0	1,553	0	7	3,152	3,759	666	9,137
1998	150	0	1,002	0	202	4,241	3,761	867	10,223
1999	0	0	2,305	0	159	1,321	9,336	1,110	14,231
2000	66	0	1,946	0	667	3,708	8,685	1,645	16,717
2001	129	0	1,499	0	235	3,123	7,840	2,631	15,457
2002	76	0	4,078	0	0	3,869	991	4,065	13,079
2003	0	0	1,388	0	48	6,676	1,312	4,670	14,094
2004	150	0	3,389	0	0	1,740	5,354	546	11,179
1990-2004 Mean	42	0	1,144	0	93	2,432	4,747	1,331	9,789
1995-2004 Mean	63	0	1,716	0	133	3,240	4,825	1,739	11,716
2000-2004 Mean	84	0	2,460	0	190	3,823	4,836	2,711	14,105
2005	118	0	2,160	0	12	1,959	5,254	1,844	11,347
2006	0	0	3,141	0	71	5,744	5,606	192	14,754

Source: Catch estimates from Statewide Harvest Survey (SWHS; Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Knik River and tributaries including Jim Creek.

[b] Big Lake and drainage streams.

[c] Flathorn Lake catches tabulated in SWHS Chulitna/East Susitna River Drainages.

[d] Nancy Lake complex lakes.

[e] Includes lakes and streams.

Table 70.-Westside Susitna Management Unit northern pike catch by fishery, 1990-2006.

Year	Alexander Creek [a]	Deshka River [b]	Peters Creek	Lake Creek	Fish Creek [c]	Trapper Lake	Other Streams [d]	Other Lakes [d]	Total
1990	3,149	0	0	589	3,065		691	6,971	14,465
1991	2,866	0	0	376	2,490	1,997	13	3,451	11,193
1992	3,912	0	0	196	1,170	1,349	693	6,508	13,828
1993	12,172	0	0	596	3,885	4,128	3,098	198	24,077
1994	2,306	96	0	318	839	881	832	164	5,436
1995	7,651	0	0	334	1,288	2,359	2,862	920	15,414
1996	7,814	172	0	306	1,347	6,033	1,985		17,657
1997	9,362	272	0	81	1,804	1,948	246	2,175	15,888
1998	10,386	113	0	1,015	418	1,729	556	3,704	17,921
1999	5,018	555	0	284	1,269	3,162		4,060	14,348
2000	13,834	753	0	426	1,870		2,887	7,611	27,381
2001	18,103	962	0	1,030	1,467	891	2,694	0	25,147
2002	9,627	297	0	237	2,266	999	4,142	882	18,450
2003	6,649	515	0	799	2,228	2,066	2,192	352	14,801
2004	11,833	1,645	0	444	921	1,456	4,010	1,569	21,878
1990-2004 Mean	8,312	359	0	469	1,755	2,231	1,922	2,755	17,192
1995-2004 Mean	10,028	528	0	496	1,488	2,294	2,397	2,364	18,889
2000-2004 Mean	12,009	834	0	587	1,750	1,353	3,185	2,083	21,531
2005	9,769	927	0	1,074	1,815	2,182	8,624	1,313	25,704
2006	2,273	1,596	0	812	5,524	1,971	2,248	1,234	15,658

Source: Catch estimates from Statewide Harvest Survey (SWHS; Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

[a] Includes Alexander Creek and Alexander Lake.

[b] Includes Deshka River (Kroto Creek) below weir, Deshka River (Kroto Creek) above weir minus Trapper Lake, and Deshka River (unspecified reach).

[c] Includes Fish Lake Creek and Fish Lakes (Yentna River drainage).

[d] May include harvest from West Cook Inlet waters through 1995.

FIGURES

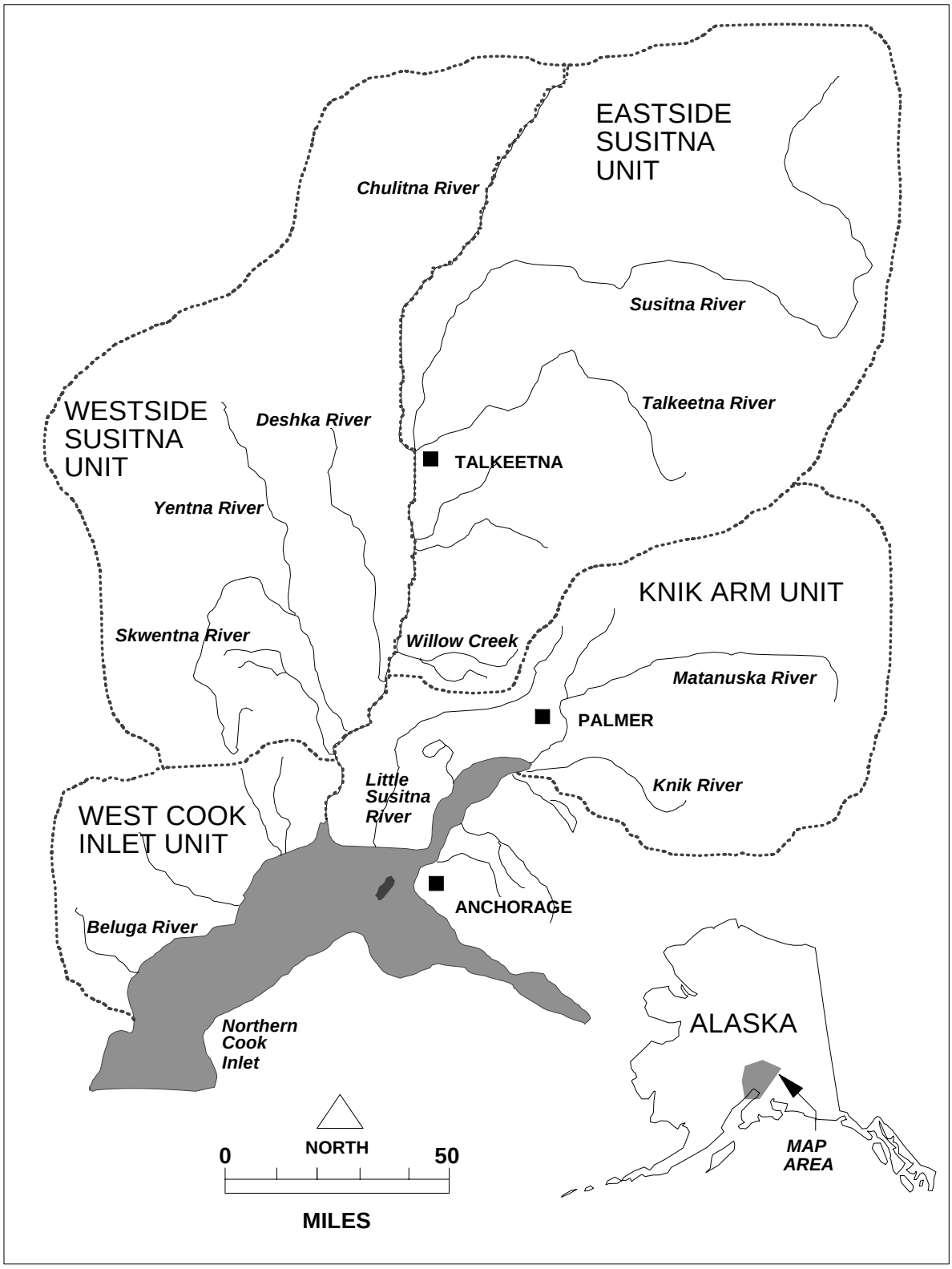


Figure 1.-Northern Cook Inlet sport fish management area.

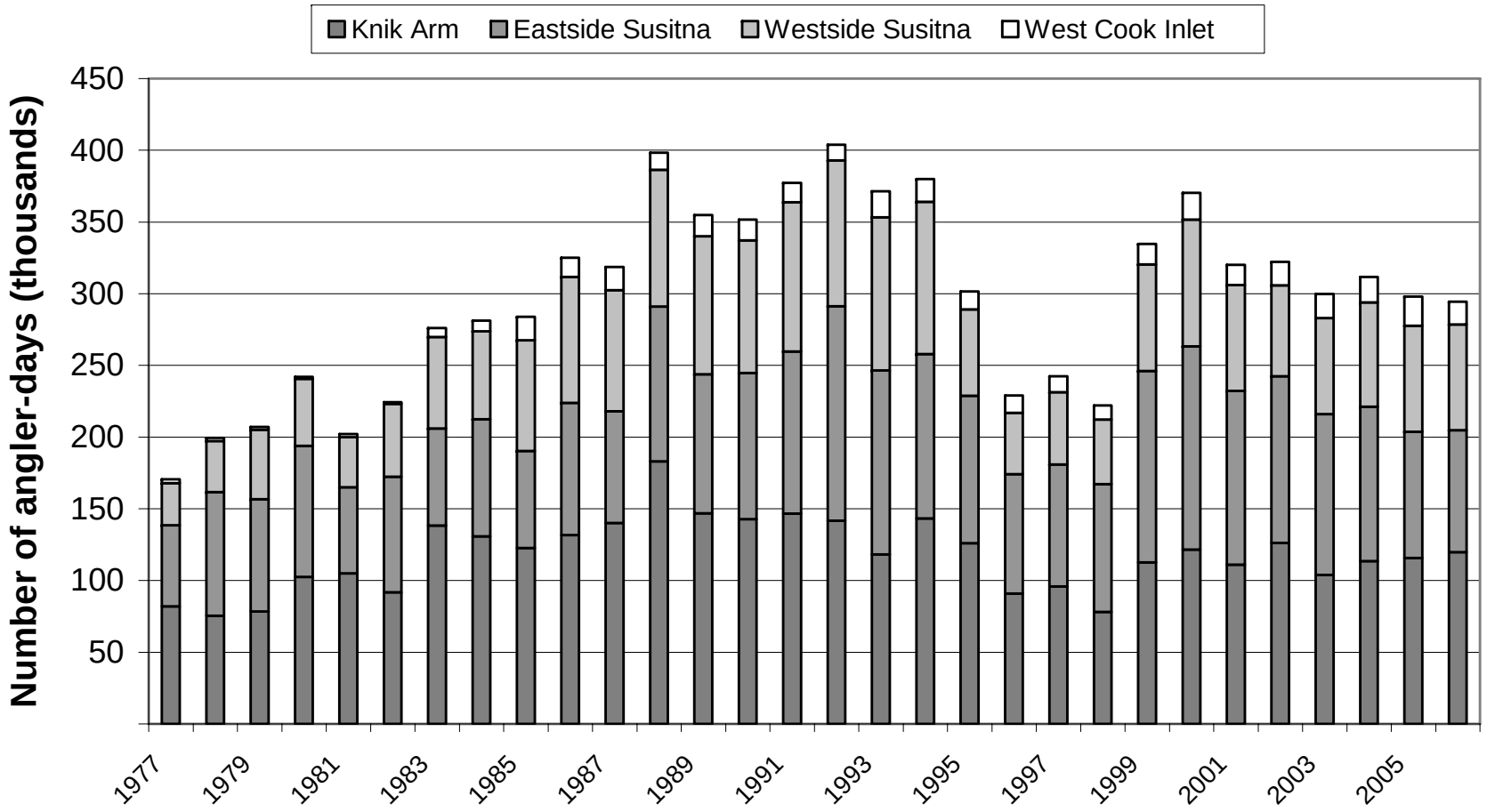


Figure 2.-Angler-days of sport fishing effort expended by recreational anglers fishing Northern Cook Inlet Management Area waters, 1977-2006.

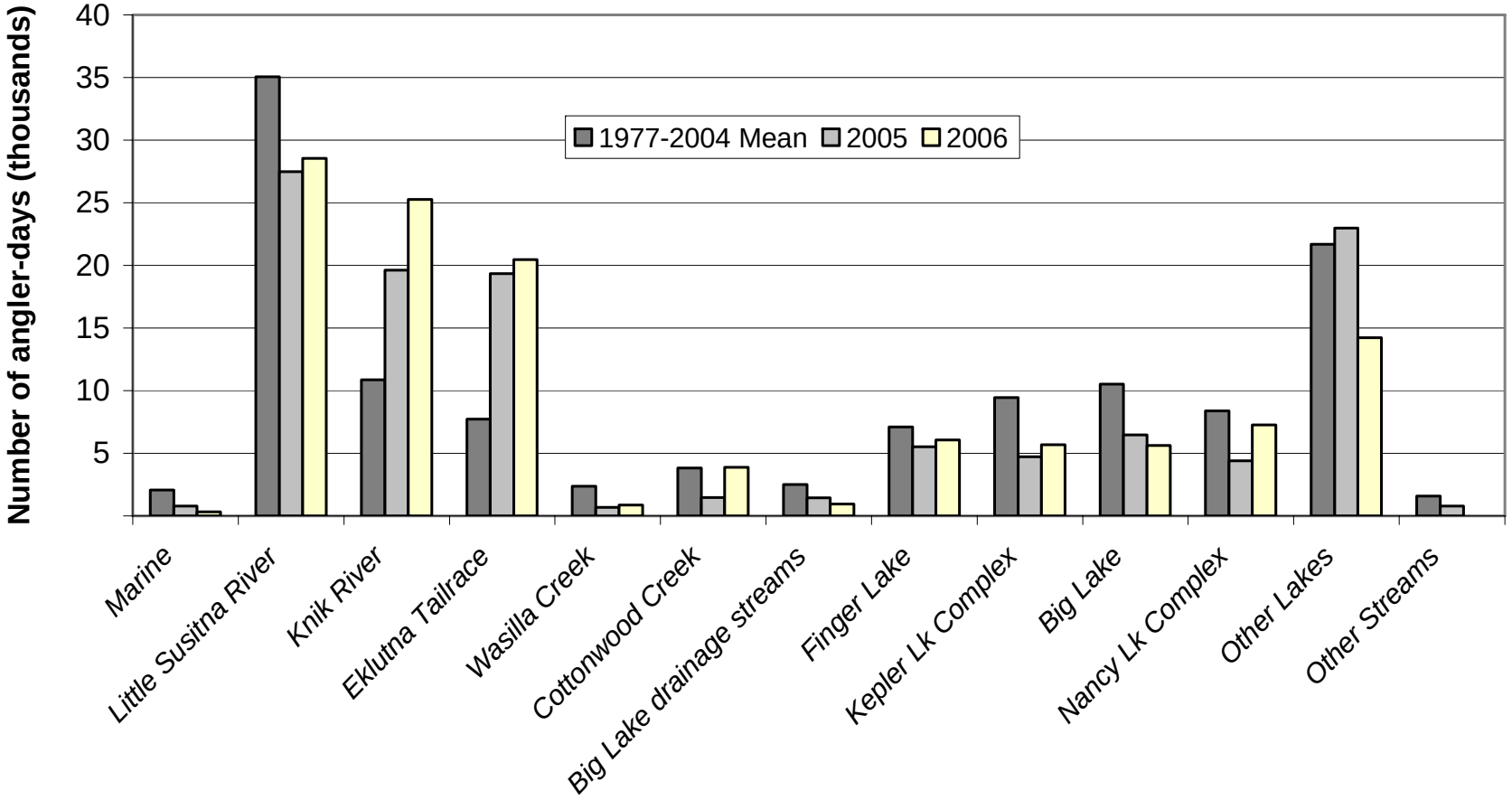


Figure 3.-Comparison of 2005 and 2006 versus the 1977-2004 mean annual sport fishing effort (number of angler-days expended per year) at sites in the Knik Arm Management Unit.

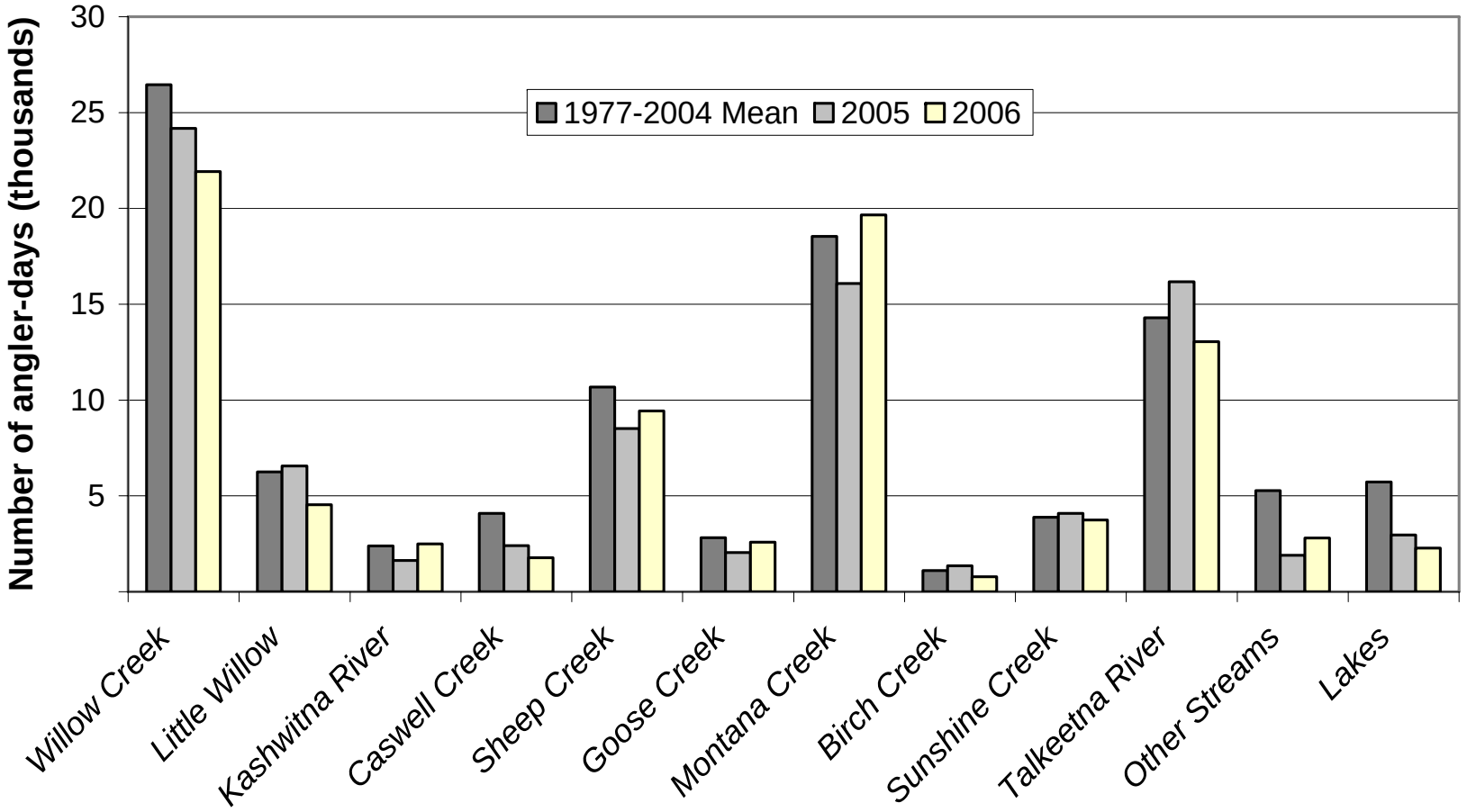


Figure 4.-Comparison of 2005 and 2006 versus the 1977-2004 mean annual sport fishing effort (number of angler-days expended per year) at sites in the Eastside Susitna Management Unit.

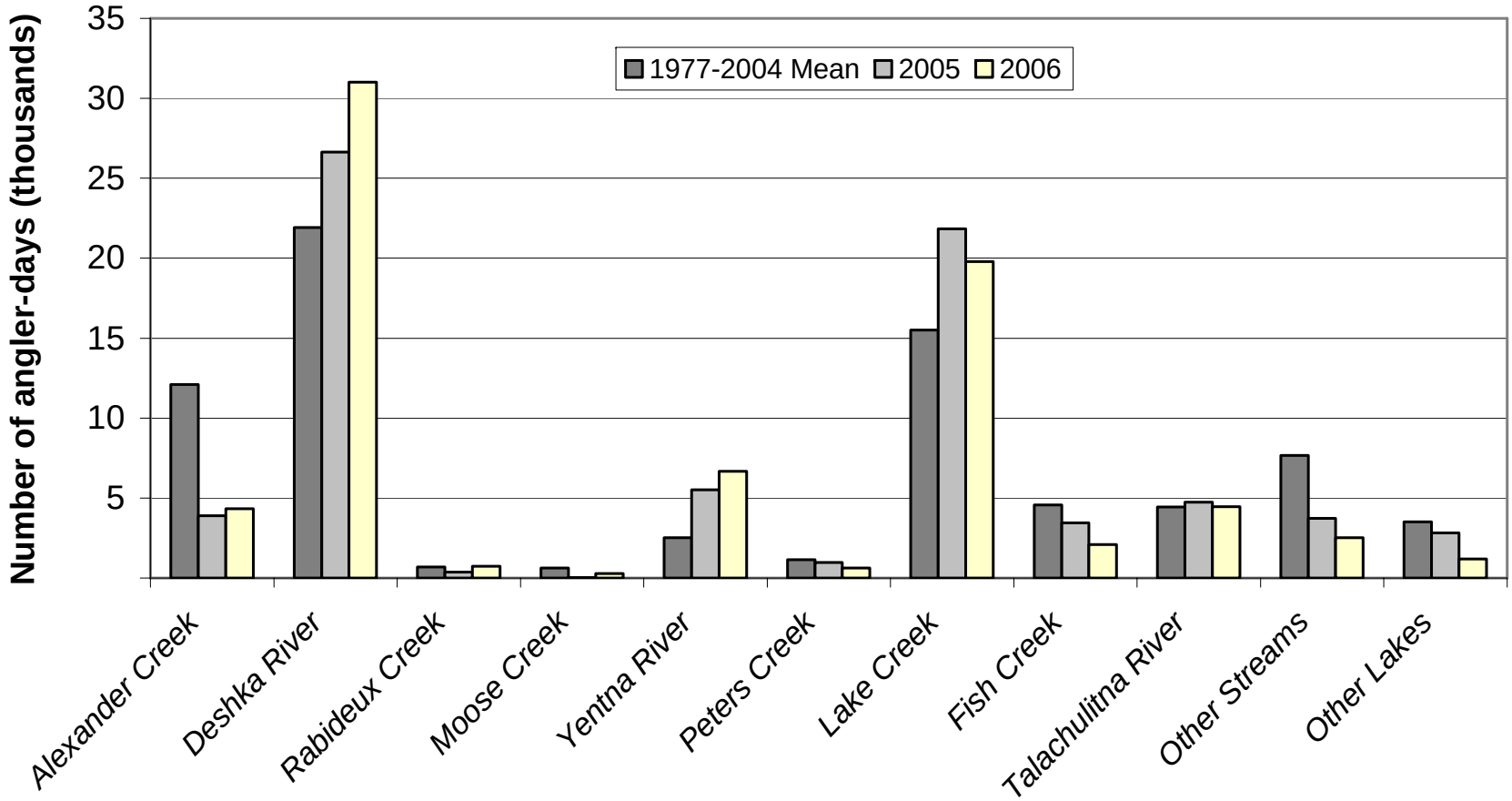
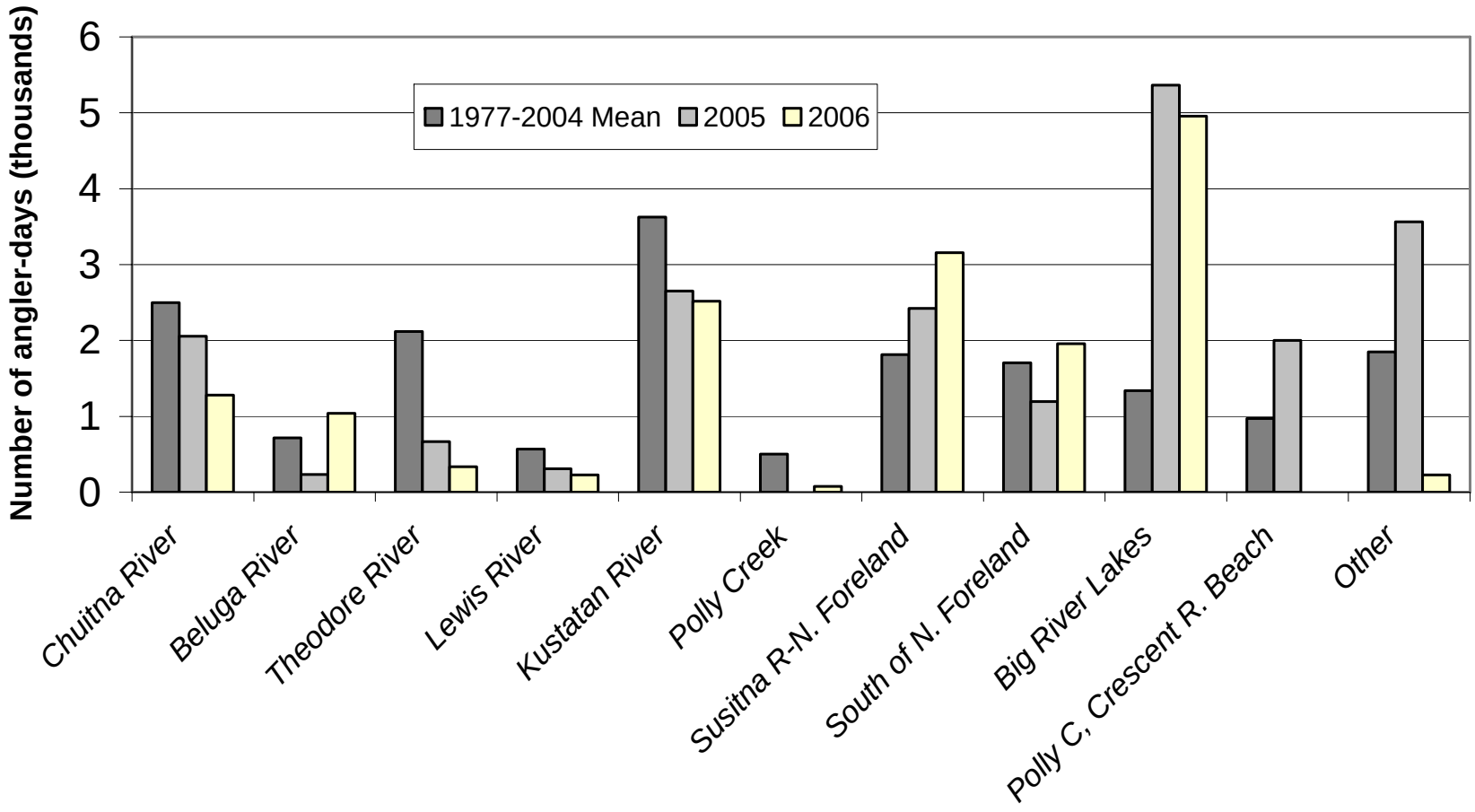
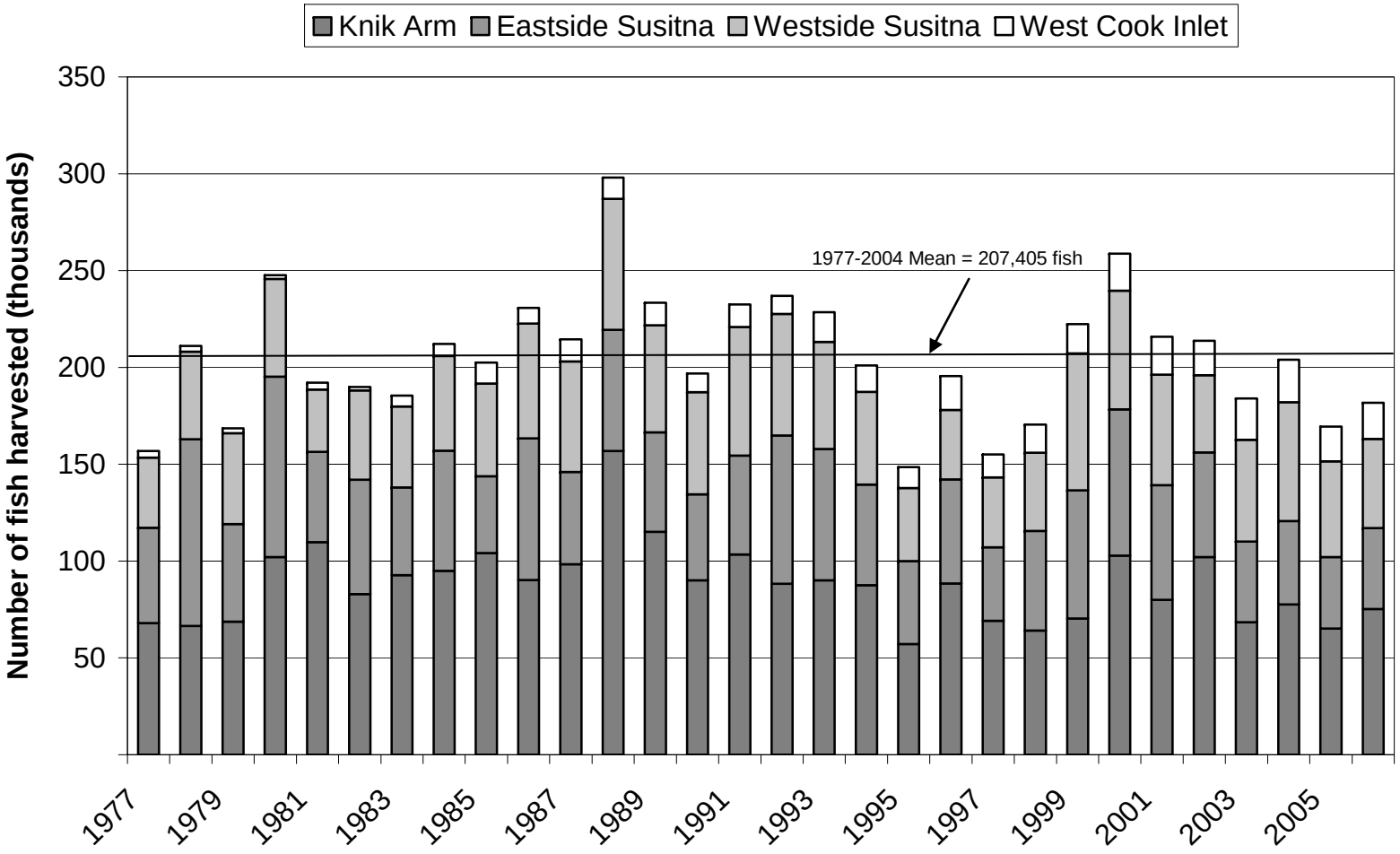


Figure 5.-Comparison of 2005 and 2006 versus the 1977-2004 mean annual sport fishing effort (number of angler-days expended per year) at sites in the Westside Susitna Management Unit.



Note: Big River Lakes (Big River drainage, including Wolverine Creek).

Figure 6.-Comparison of 2005 and 2006 versus the 1977-2004 mean annual sport fishing effort (number of angler-days expended per year) at sites in West Cook Inlet Management Unit.



Note: Statewide Harvest Survey harvest estimates for all species.

Figure 7.-Northern Cook Inlet Management Area sport fish harvest, 1977-2006.

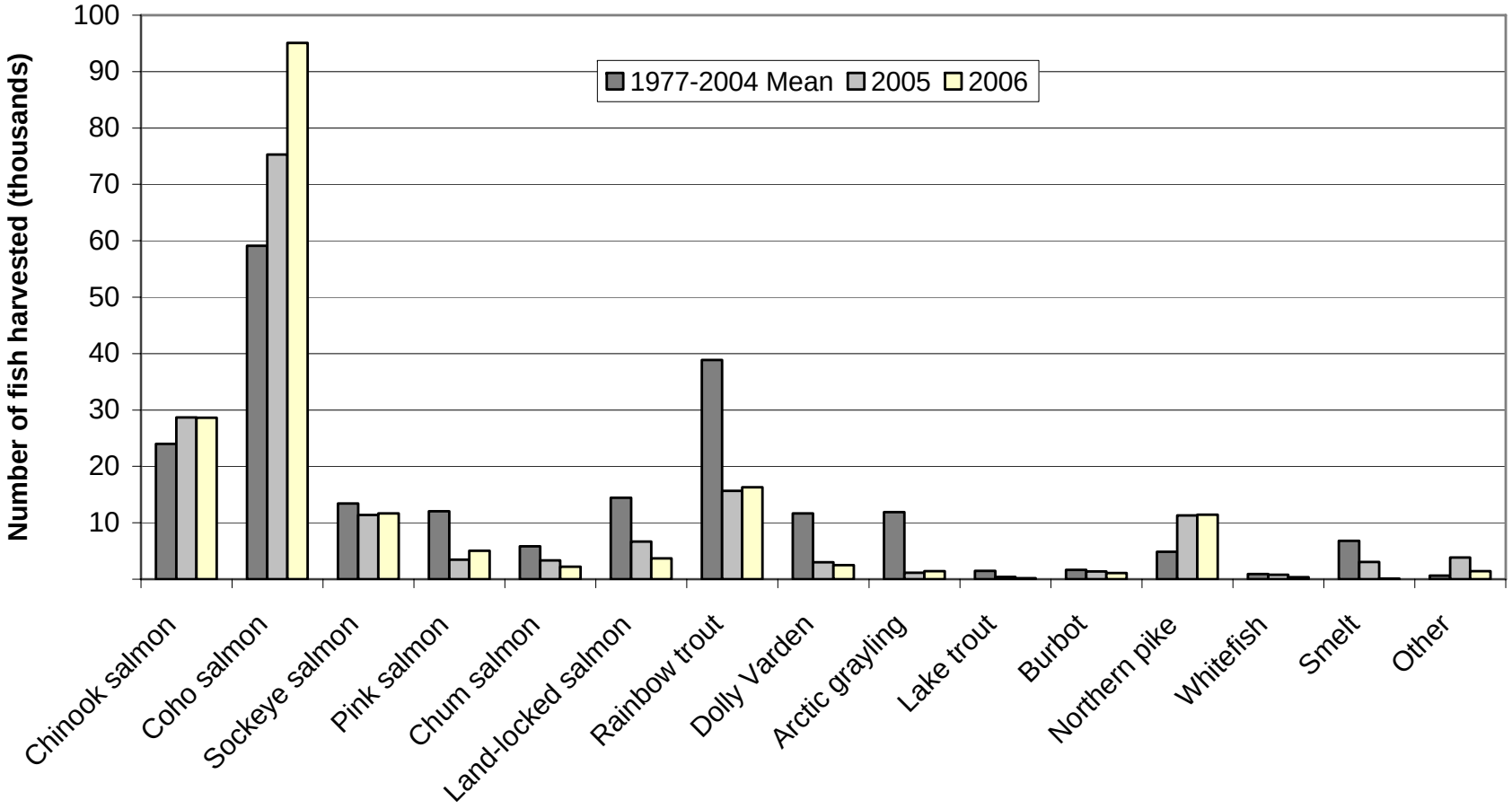


Figure 8.-Comparison of 2005 and 2006 versus the 1977-2004 mean annual recreational fish harvest by species in the Northern Cook Inlet Management Area.

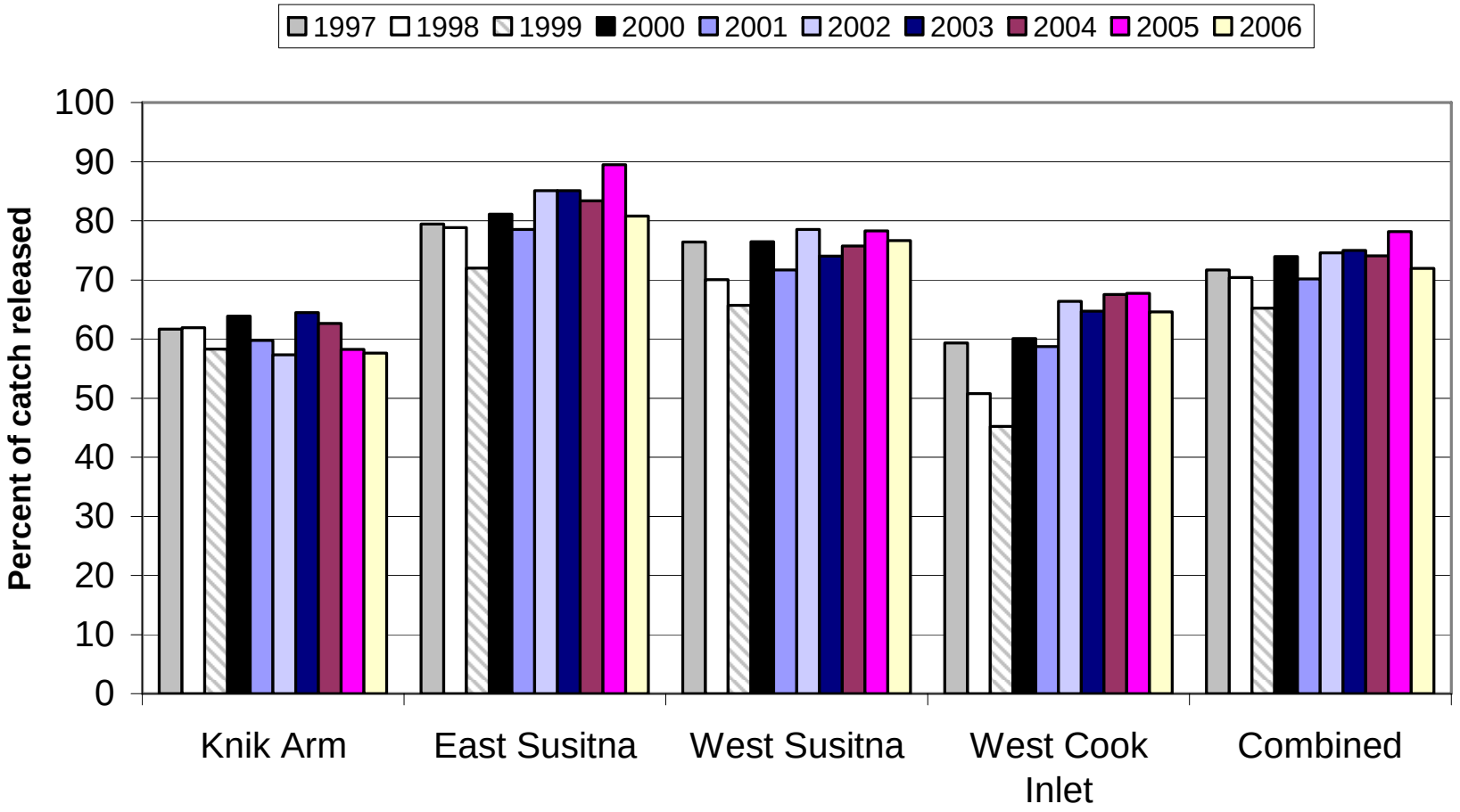


Figure 9.-Percent of the recreational catch that was released (for all fish species) in the Northern Cook Inlet Management Area by management unit, 1997-2006.

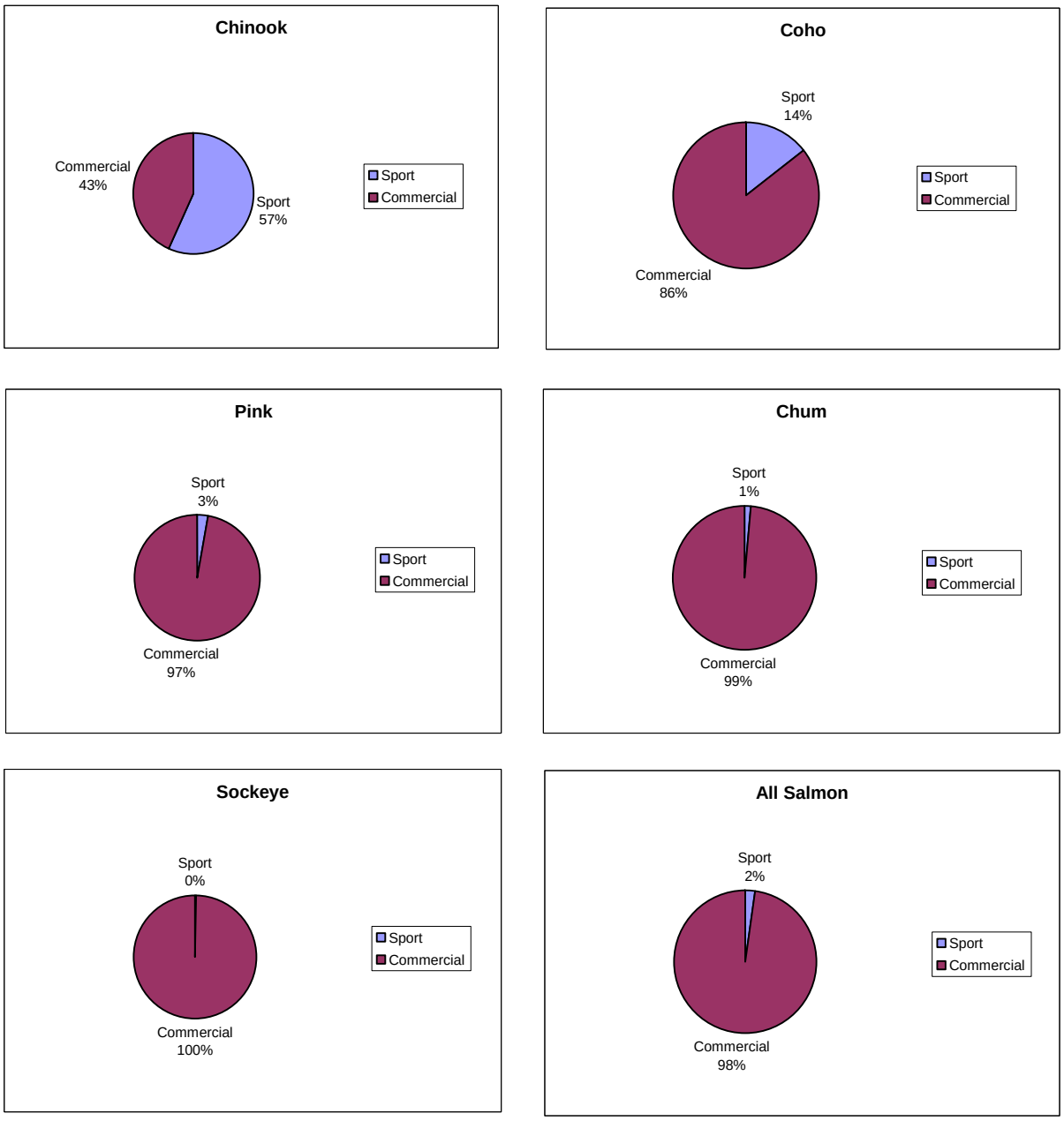


Figure 10.-Sport and commercial composition of the 1977-2006 mean Northern Cook Inlet salmon fishery harvest by species.

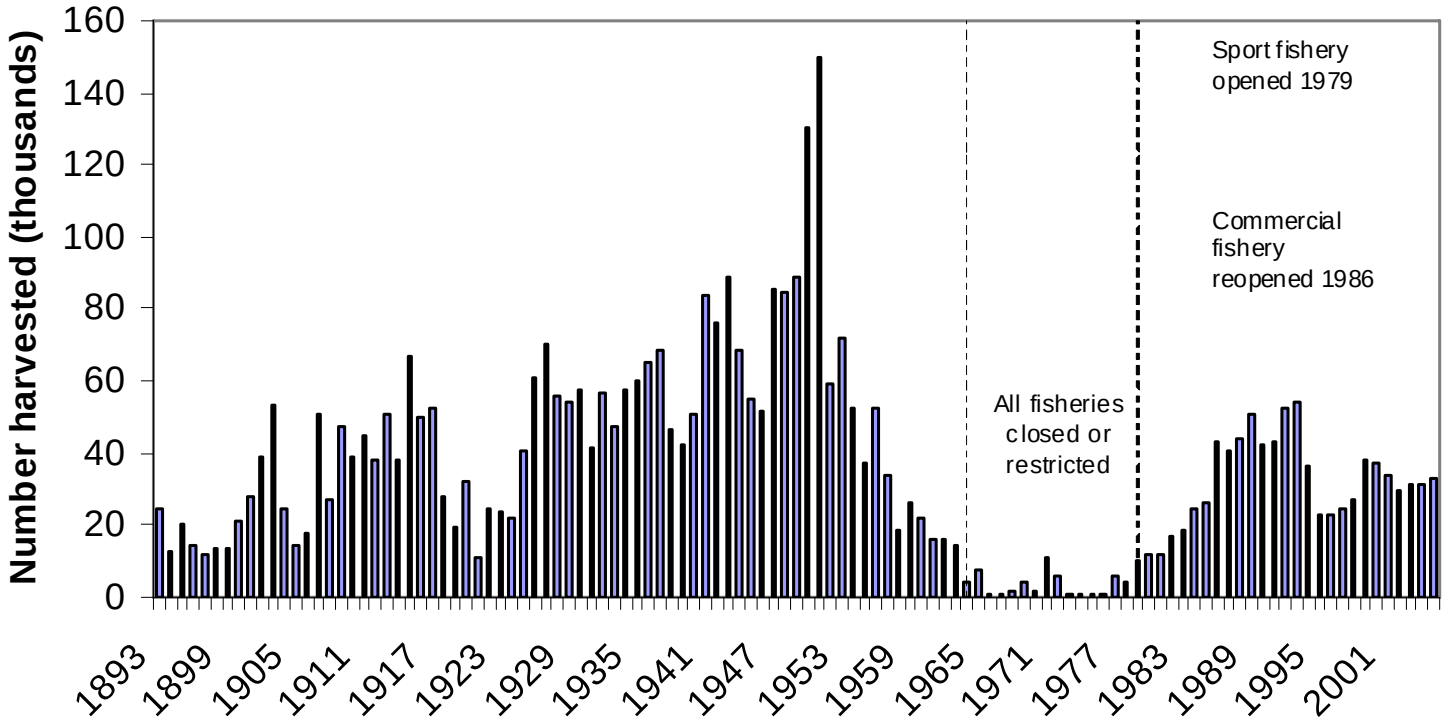


Figure 11.-Estimated harvests of Chinook salmon of Northern Cook Inlet origin by all user groups, 1893-2006.

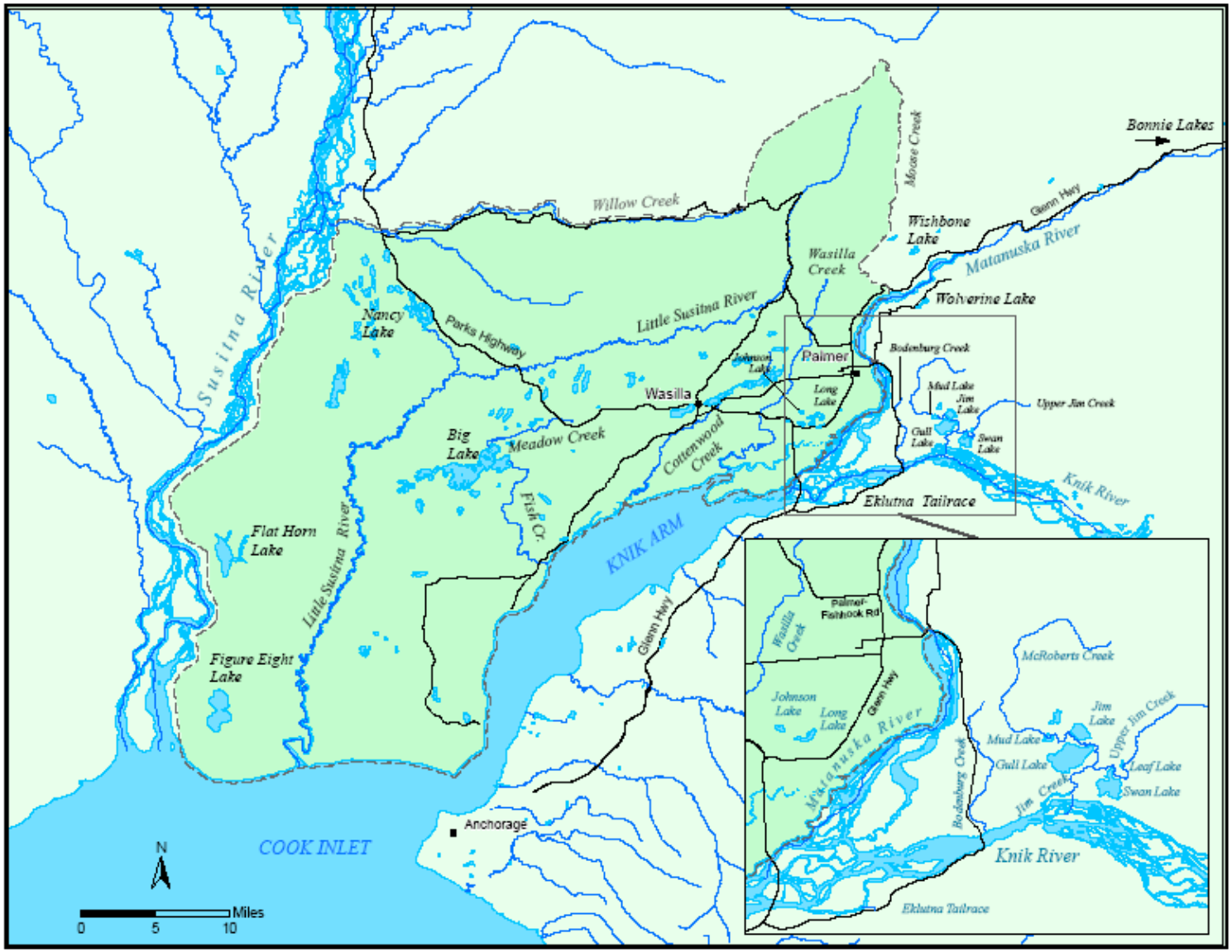


Figure 12.-Knik Arm freshwater drainages.

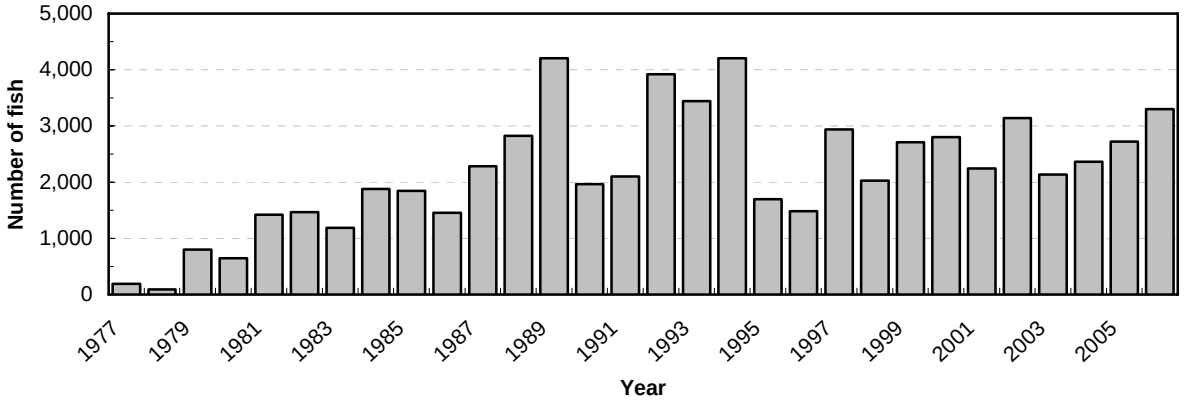
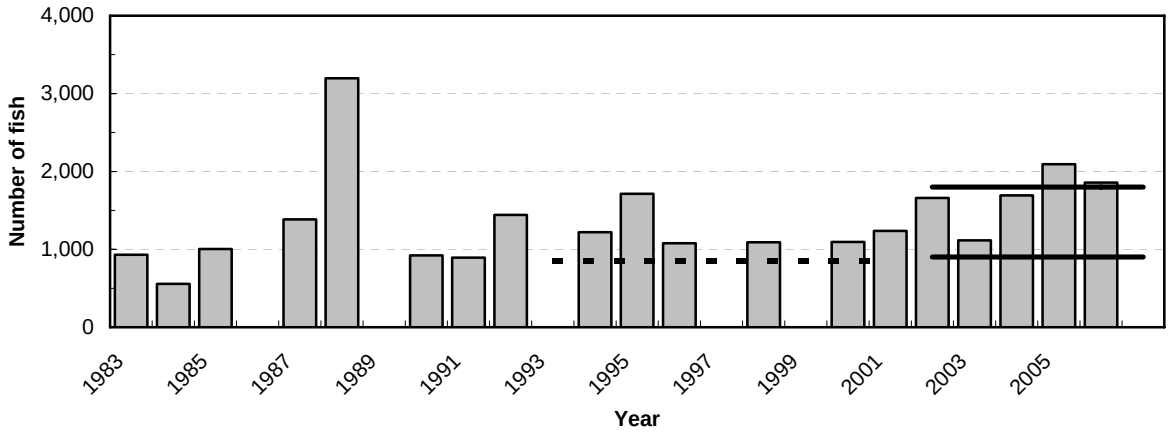


Figure 13.-Little Susitna River Chinook salmon harvest, 1977-2006.



Note: Dashed line = biological escapement goal of 850 fish; solid lines = sustainable escapement goal range of 900 to 1,800 fish.

Figure 14.-Little Susitna River Chinook salmon escapement, 1983-2006.

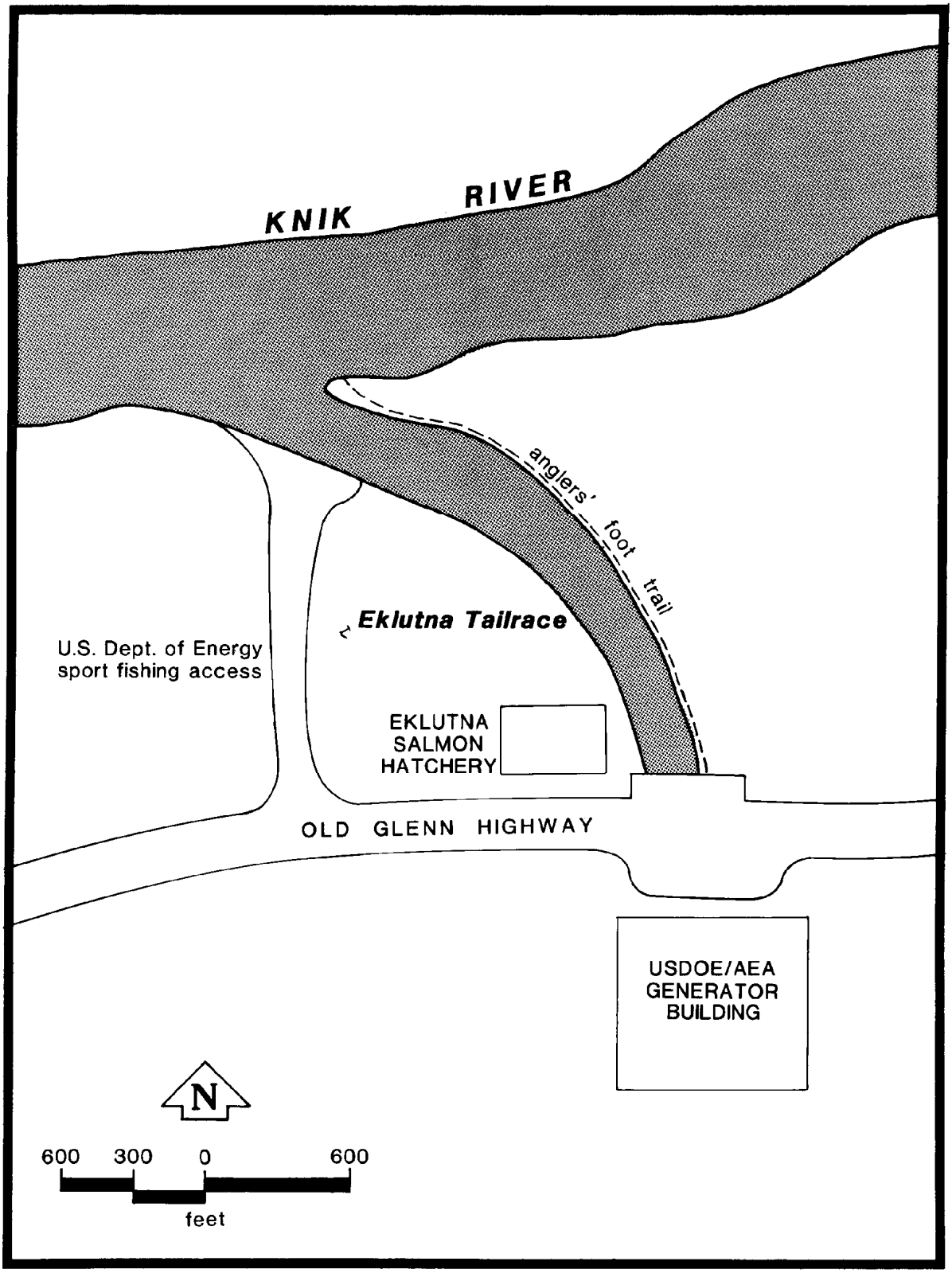


Figure 15.-The Eklutna Tailrace sport fishing area on Knik River.

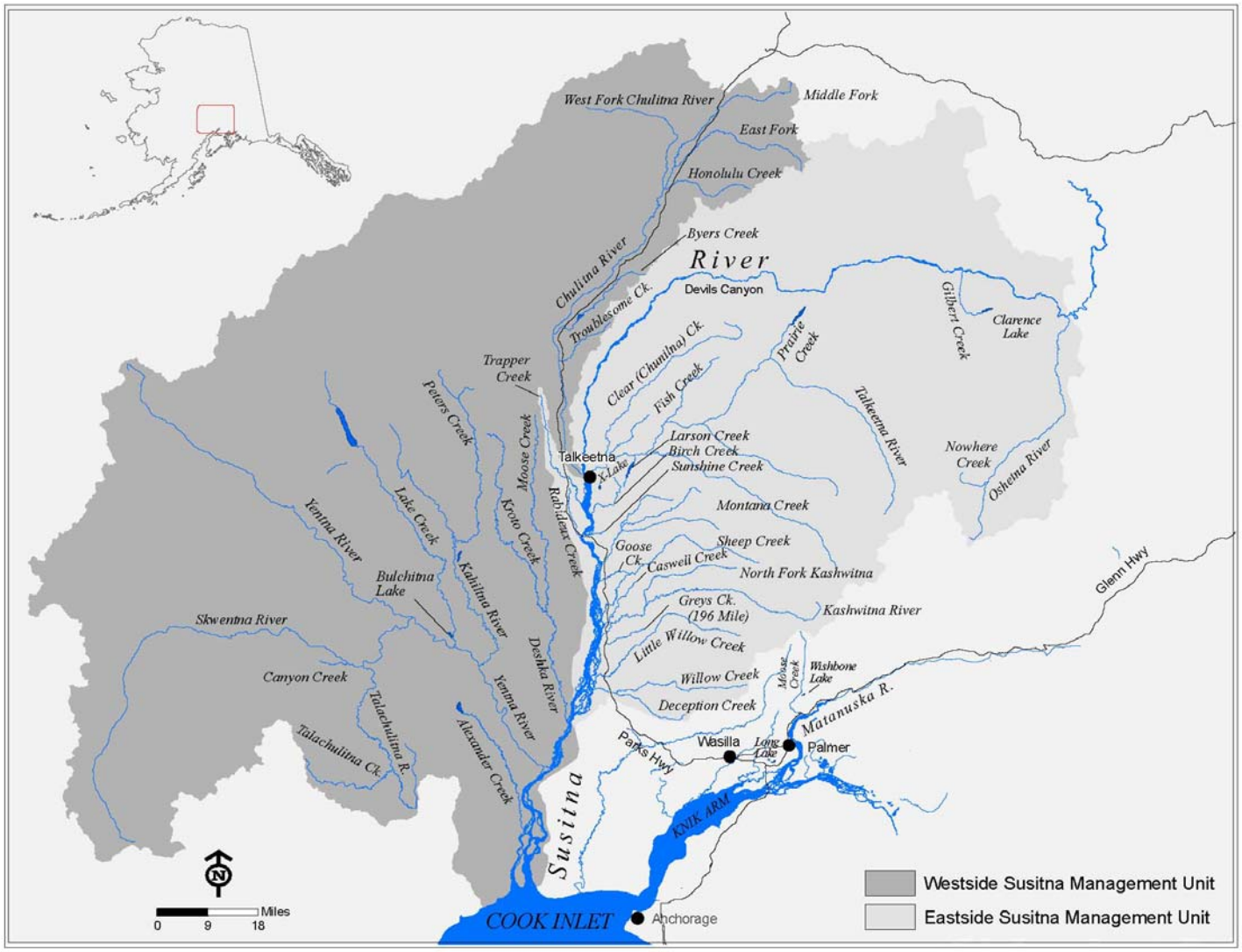
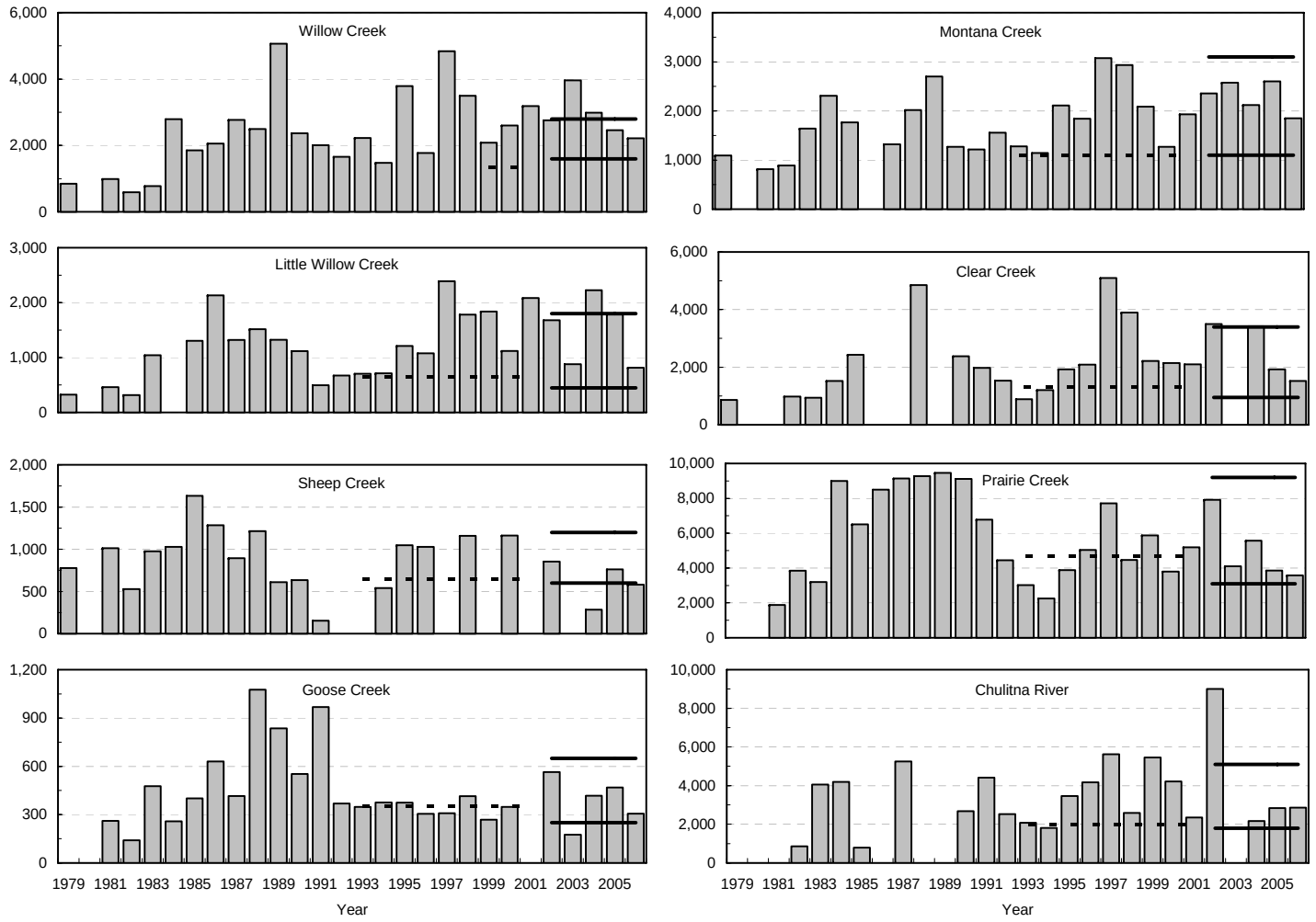
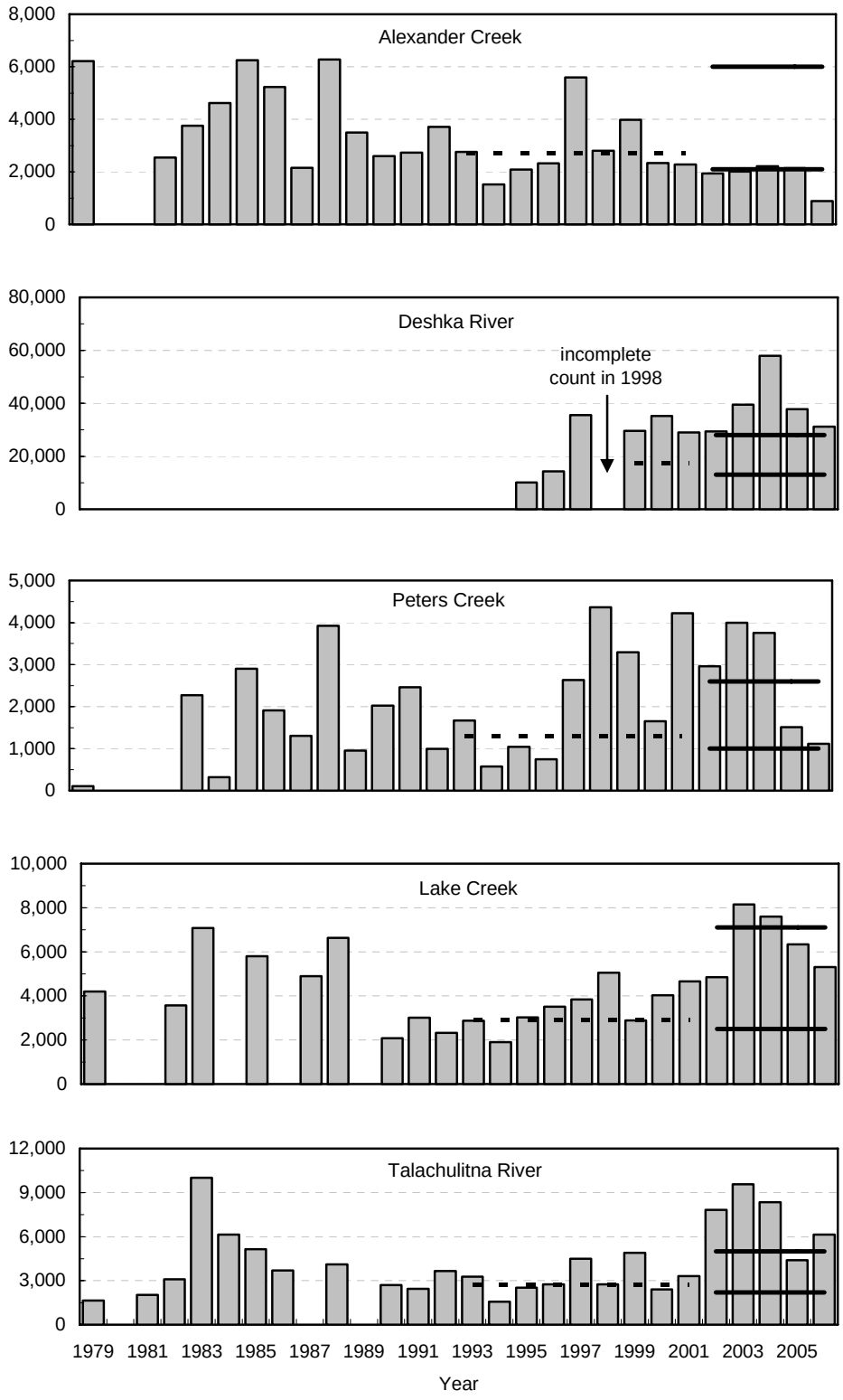


Figure 16.-Susitna River and its major tributaries.



Note: y-axis = Chinook salmon escapement (in number of fish). Dashed line = biological escapement goal. Solid lines = sustainable escapement goal range.

Figure 17.-Chinook salmon escapements at Eastside Susitna River tributaries and Chulitna River, 1979-2006.



Note: y-axis = Chinook salmon escapement (in number of fish). Dashed line = biological escapement goal. Solid lines = sustainable escapement goal range.

Figure 18.-Chinook salmon escapements at Westside Susitna River tributaries, 1979-2006.

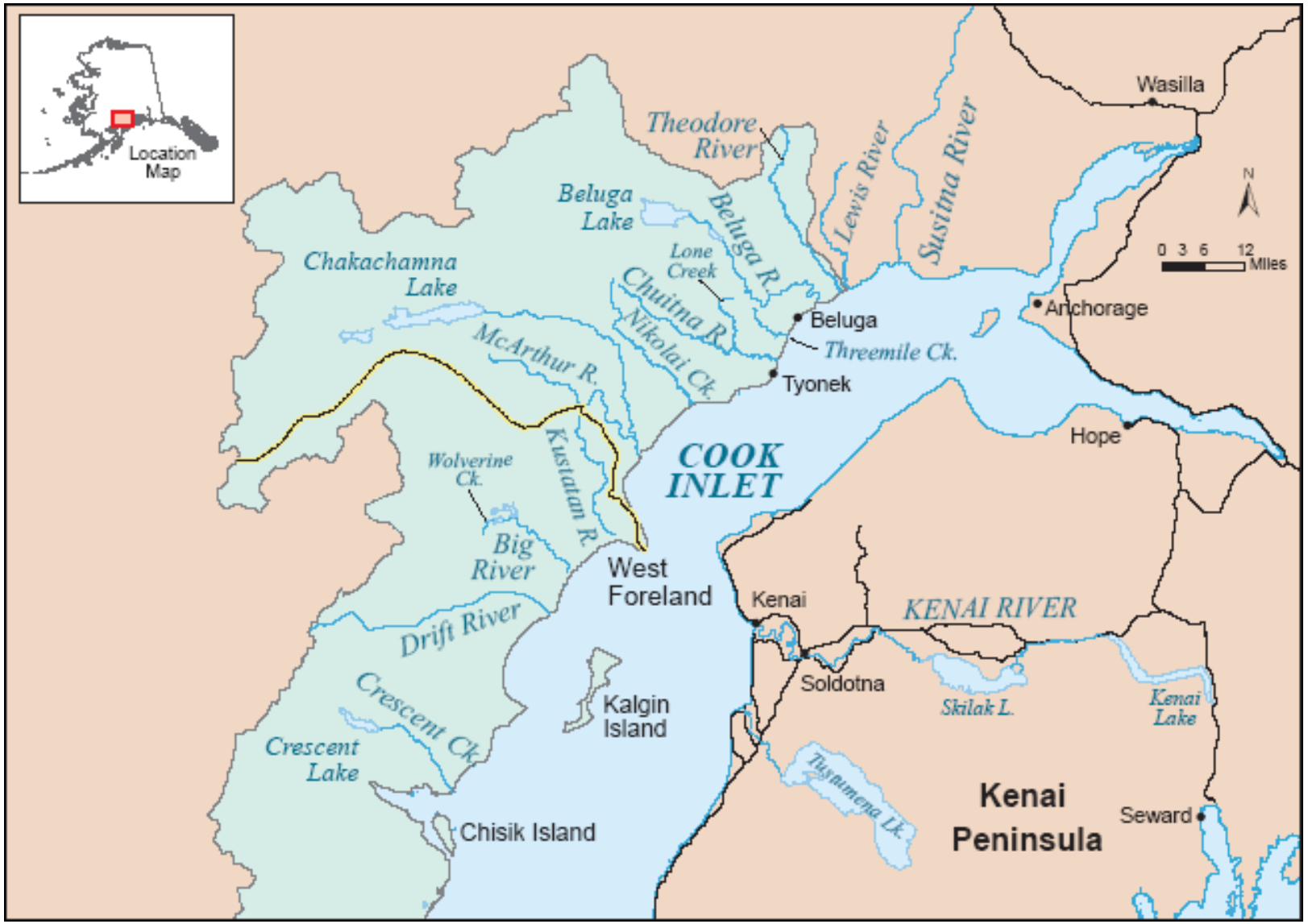
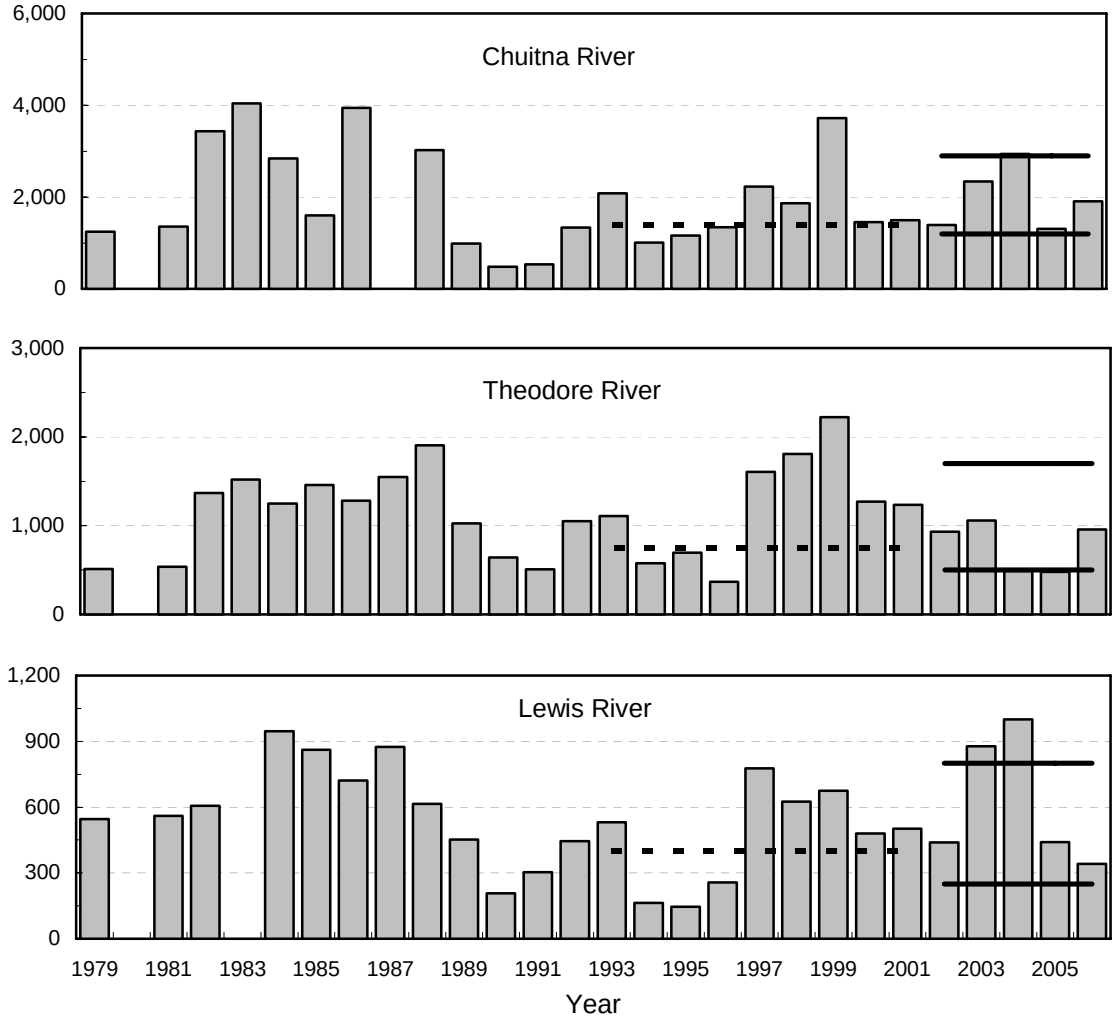
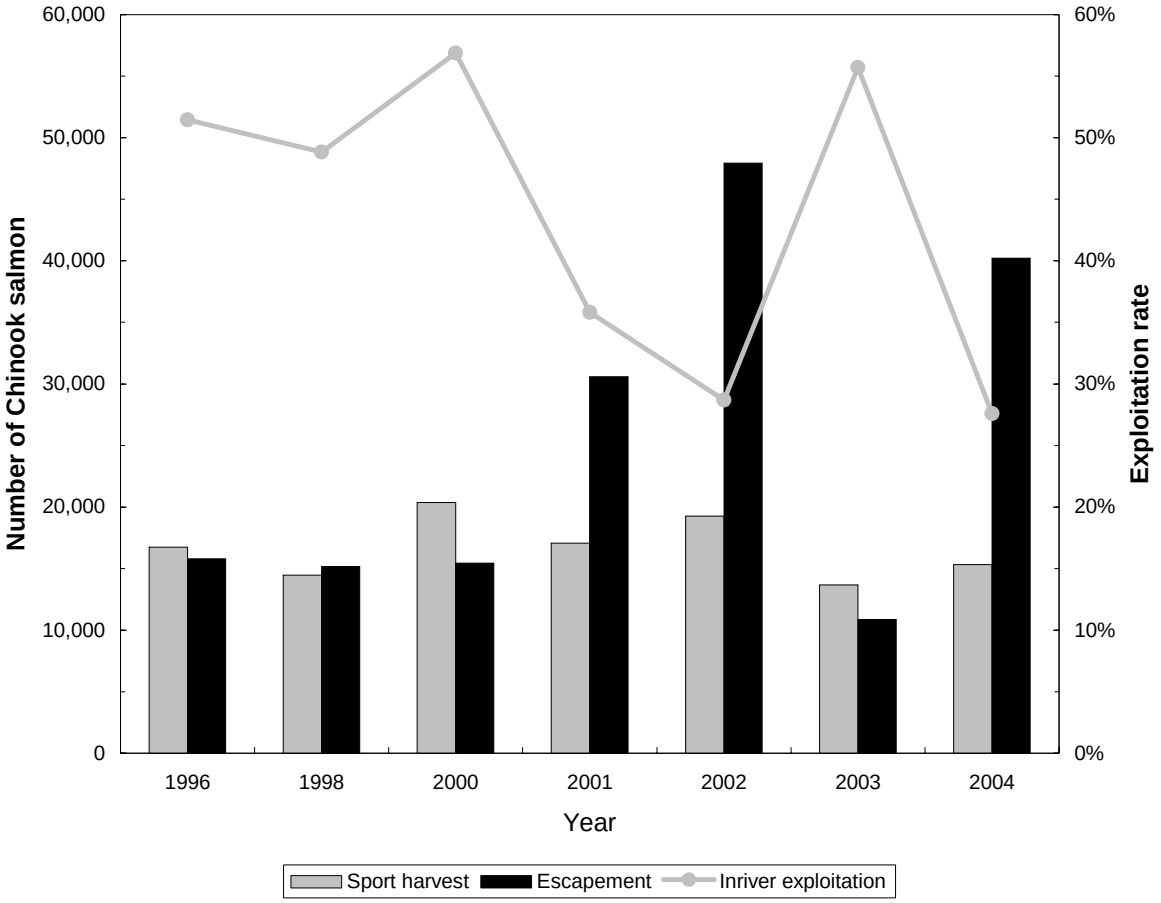


Figure 19.-West Cook Inlet freshwater drainages.



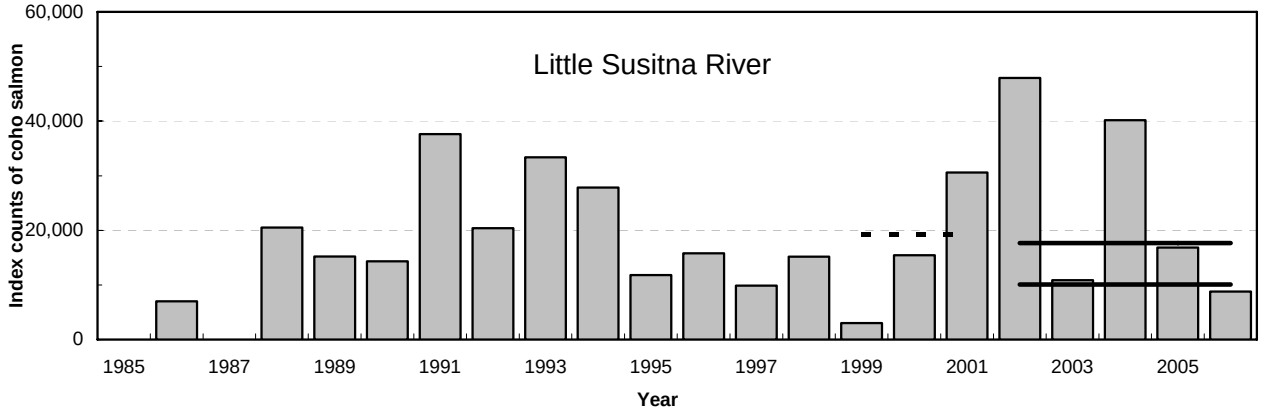
Note: Dashed line = biological escapement goal. Solid lines = sustainable escapement goal range. y-axis = Chinook salmon escapement (in number of fish).

Figure 20.-Chinook salmon escapements at major West Cook Inlet freshwater drainages, 1979-2006.

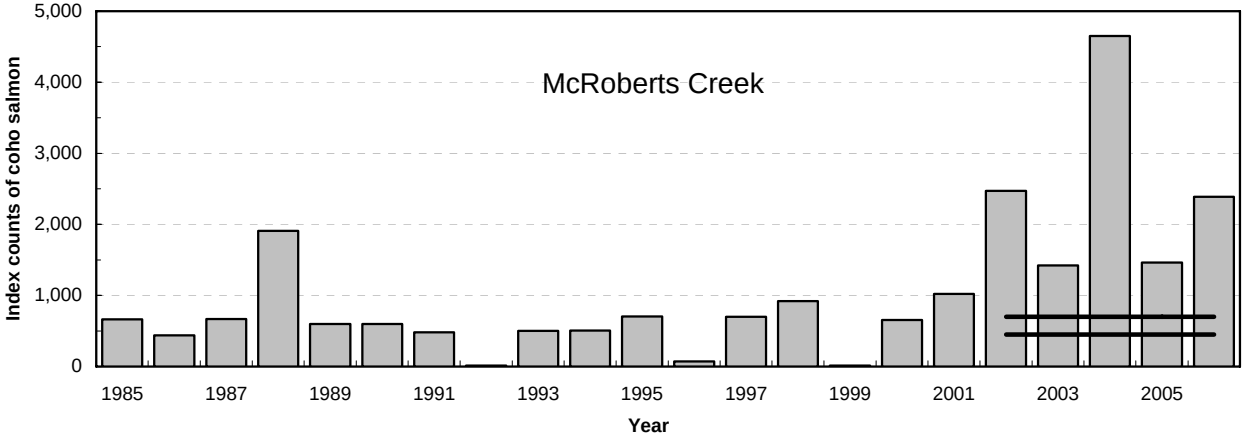


Note: 1997, 1999, 2005, and 2006 were not included because data from these years were incomplete due to flooding.

Figure 21.-Coho salmon harvest, escapement, and inriver exploitation rate for Little Susitna River, 1996, 1998, and 2000-2004.



Note: Incomplete or partial counts at Little Susitna River weir in 2005 and 2006 due to flooding and weir submersion.



Note: No biological escapement goal established for McRoberts Creek.

Dashed line = biological escapement goal. Solid lines = sustainable escapement goal range.

Figure 22.-Little Susitna River weir and McRoberts Creek index counts of coho salmon, 1985-2006.

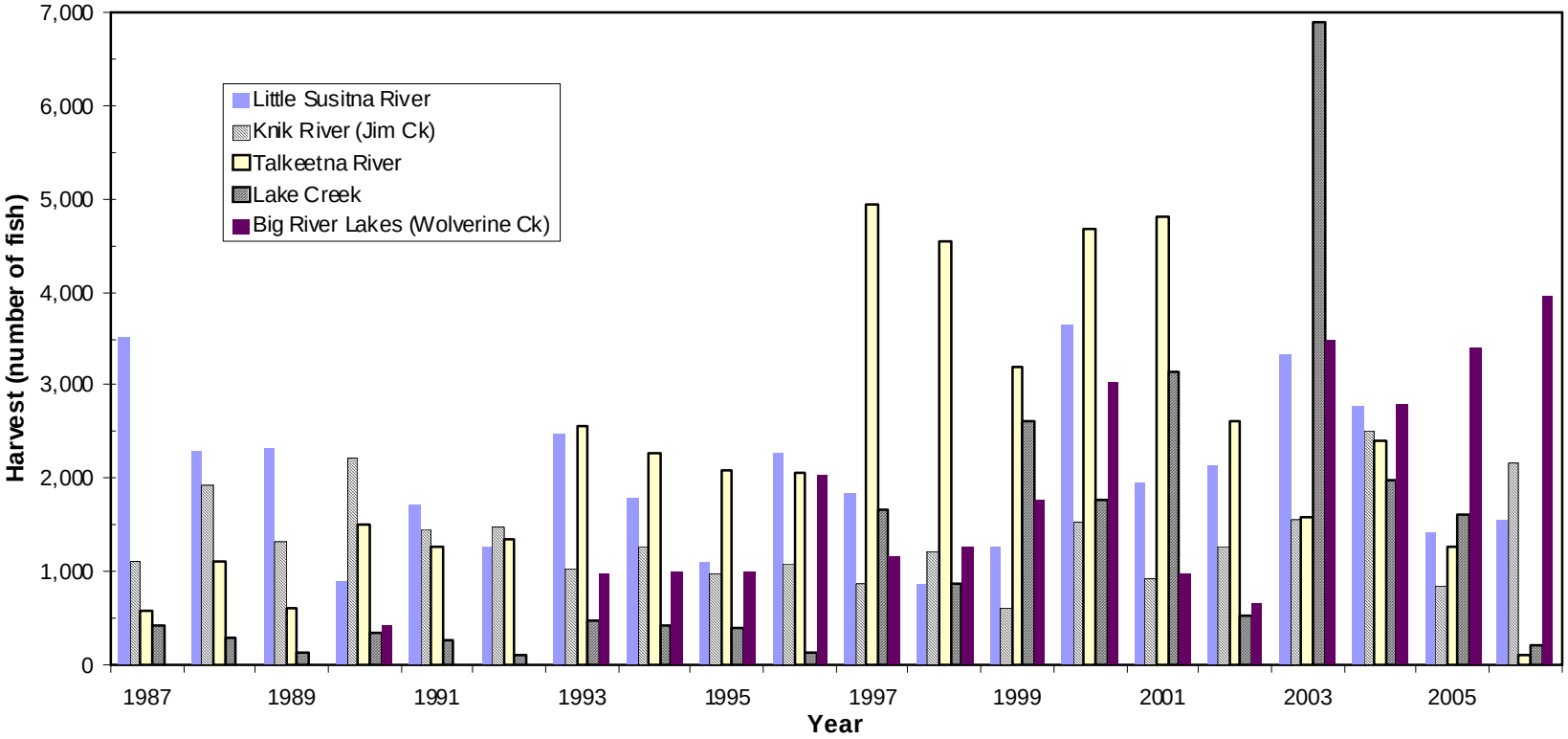
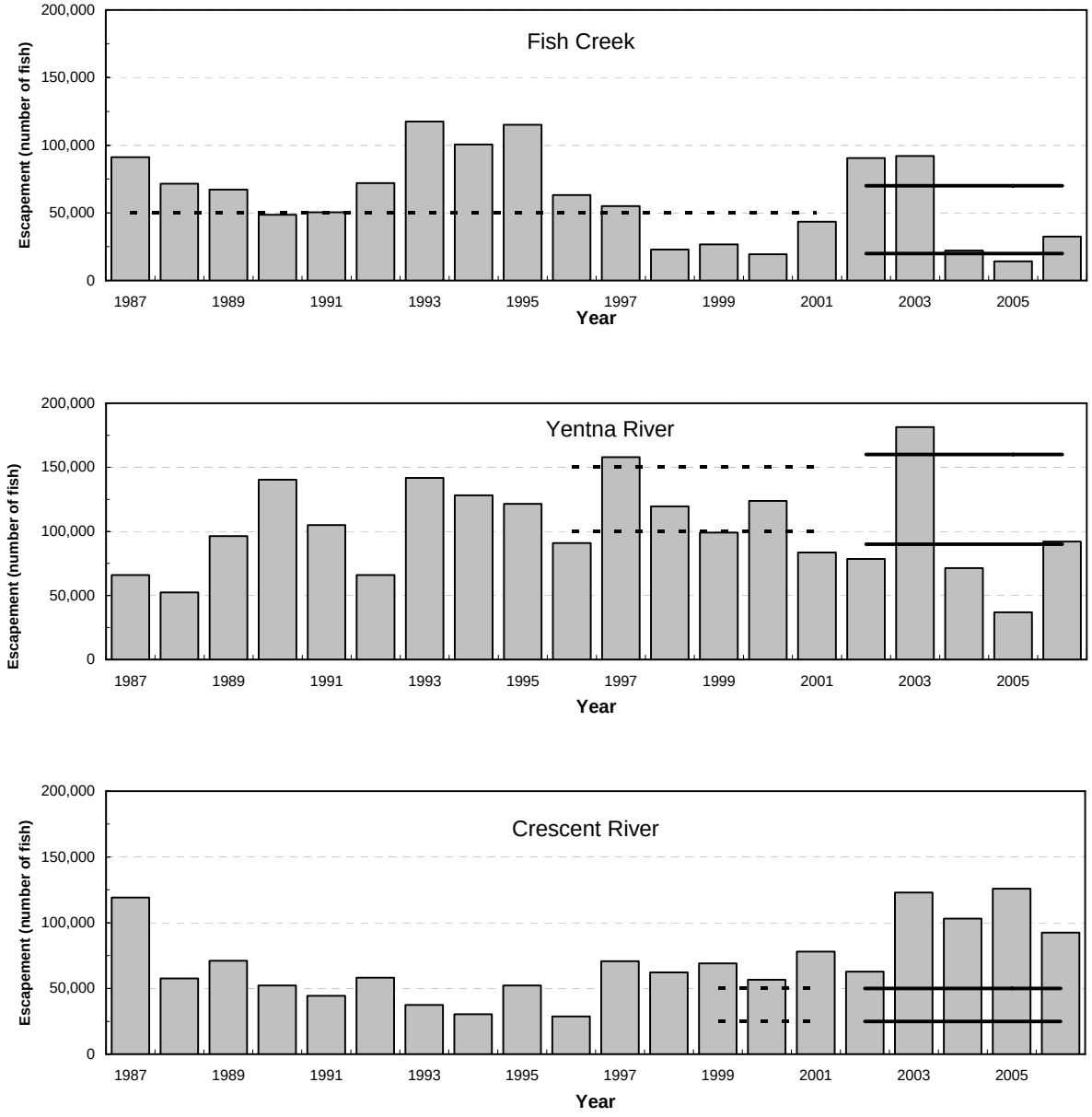
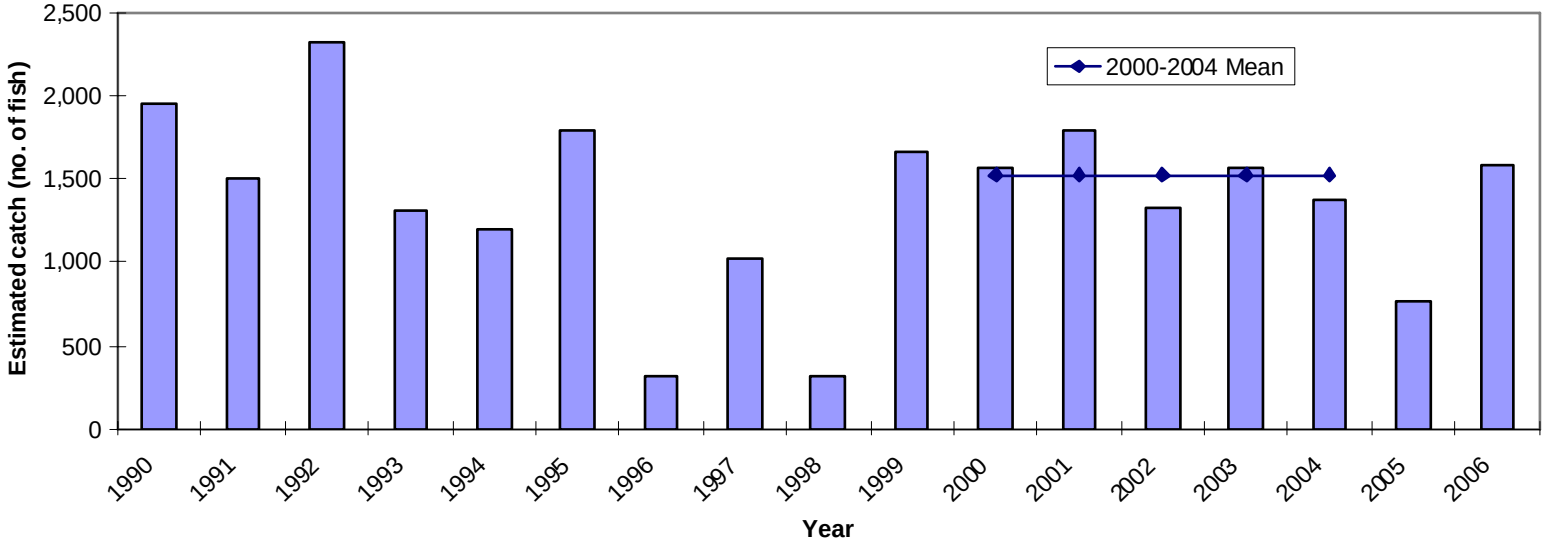


Figure 23.-Estimated sockeye salmon sport harvest from major fisheries in Northern Cook Inlet Management Area, 1987-2006.



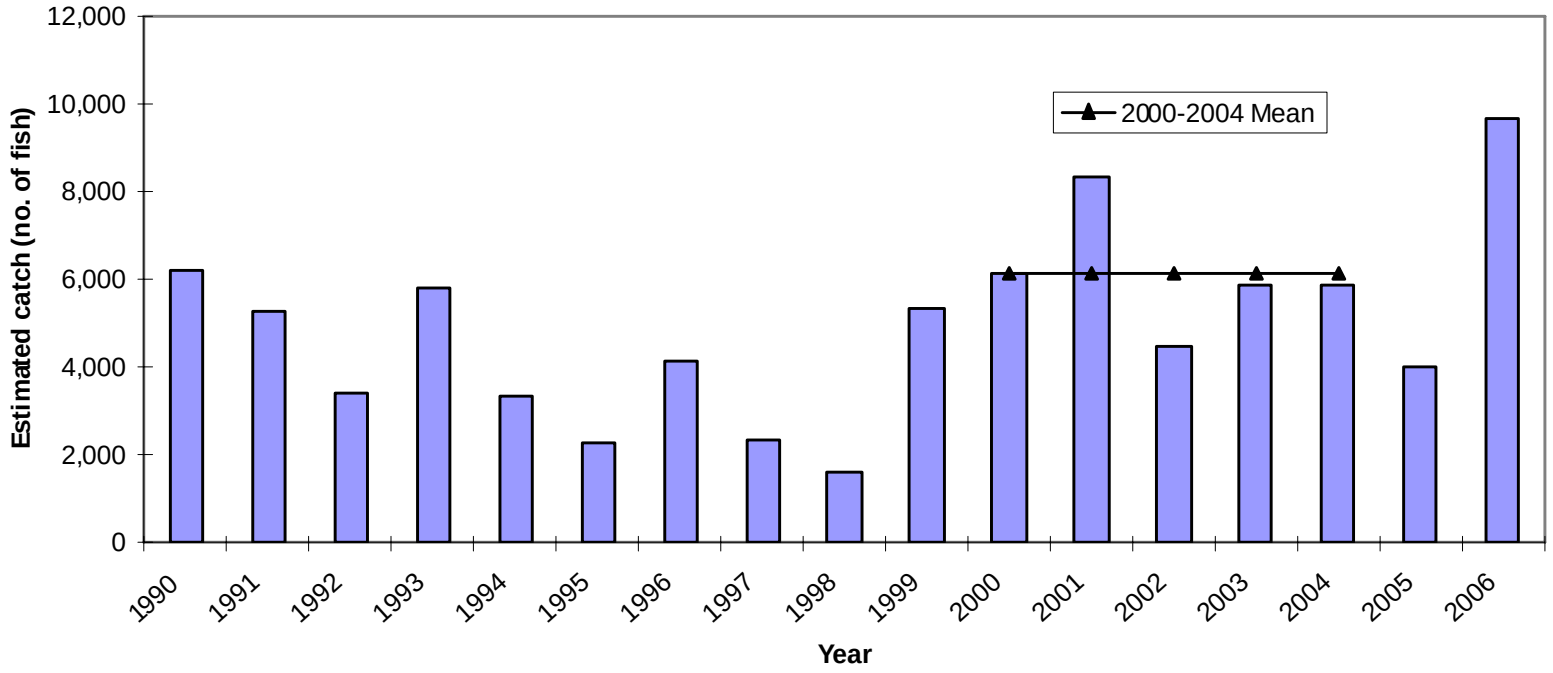
Note: Dashed line(s) = old escapement goal. Solid lines = sustainable escapement goal range.

Figure 24.-Estimated sockeye salmon escapements from major fisheries in Northern Cook Inlet Management Area, 1987-2006.



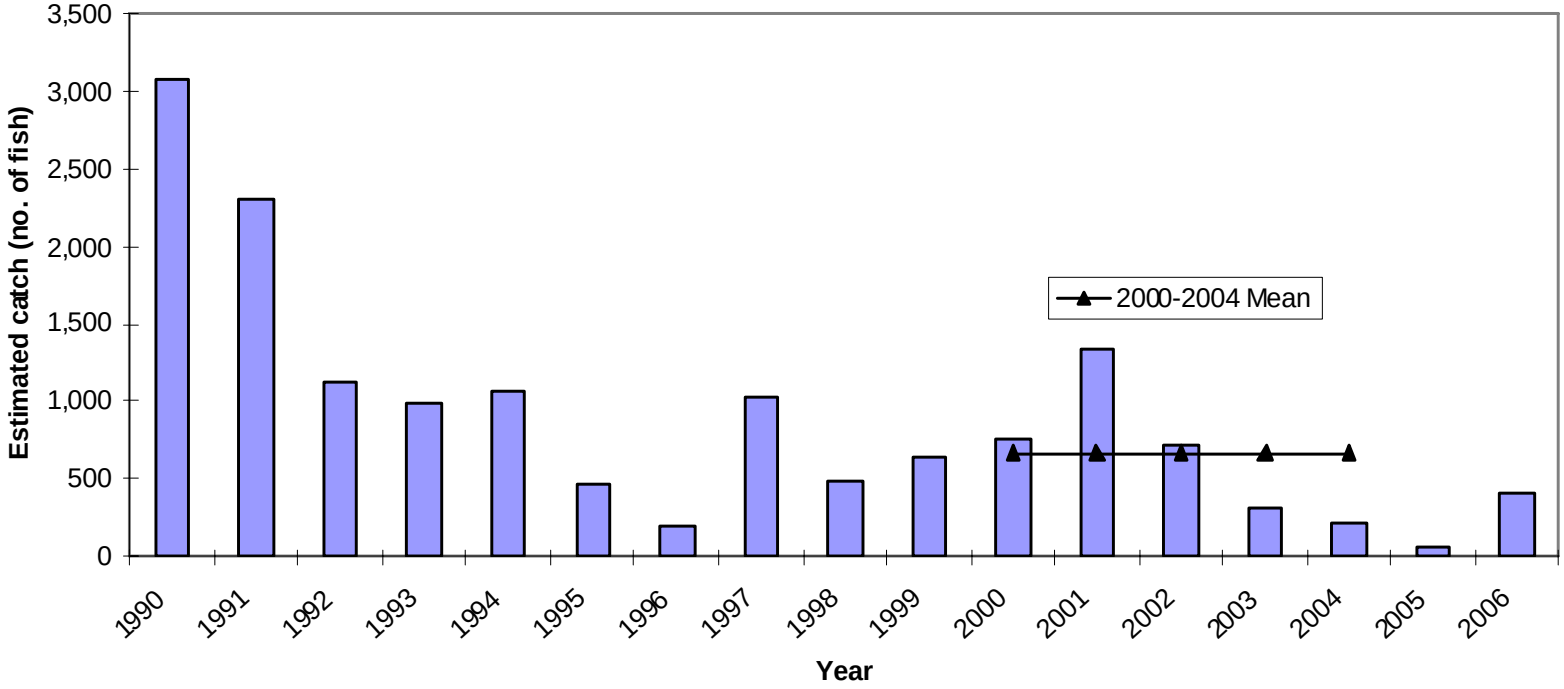
Source: Catch estimates from Statewide Harvest Survey (Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Figure 25.-Rainbow trout catch at Little Susitna River, 1990-2006.



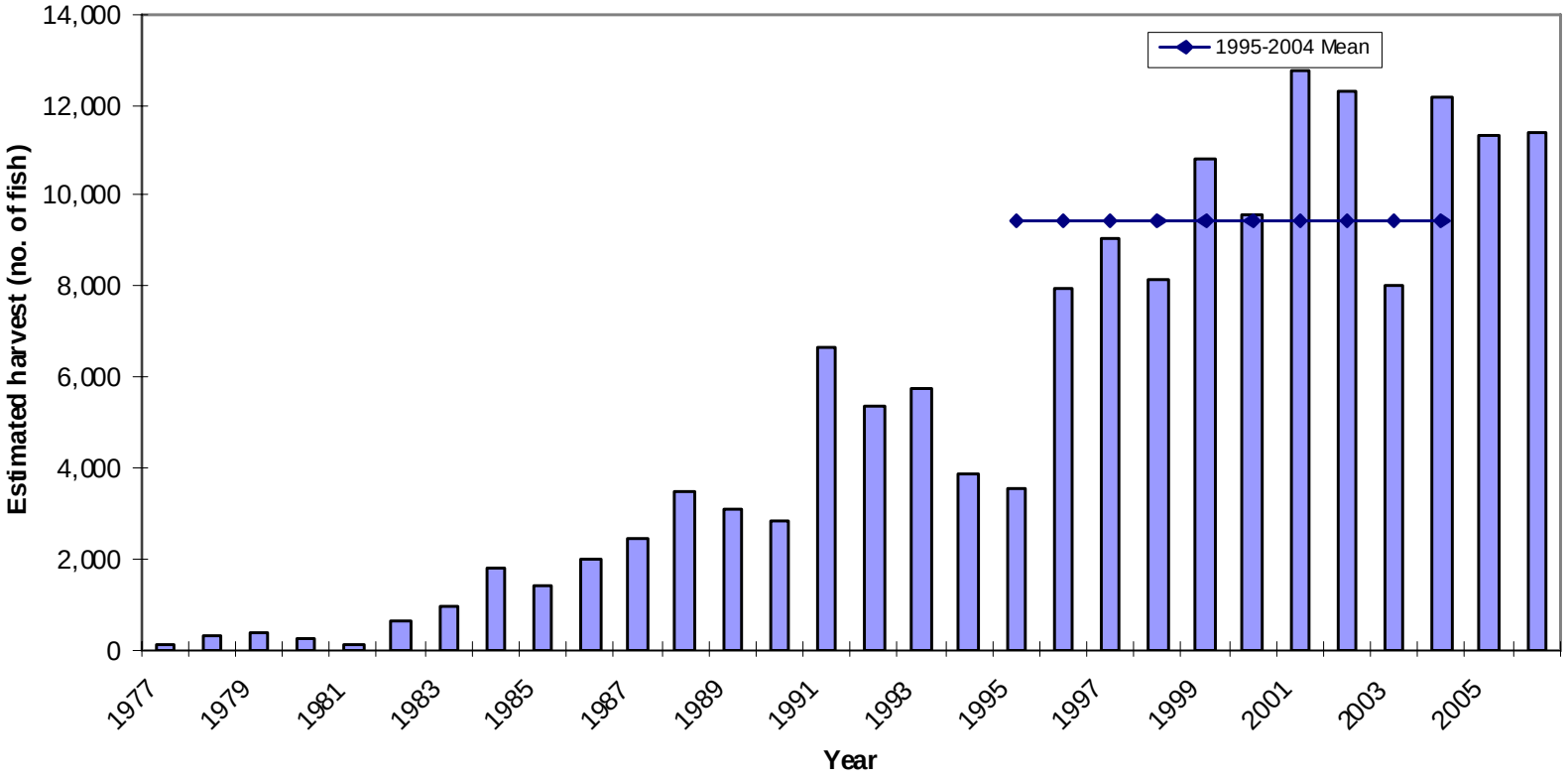
Source: Catch estimates from Statewide Harvest Survey (Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Figure 26.-Rainbow trout catch at Deshka River, 1990-2006.



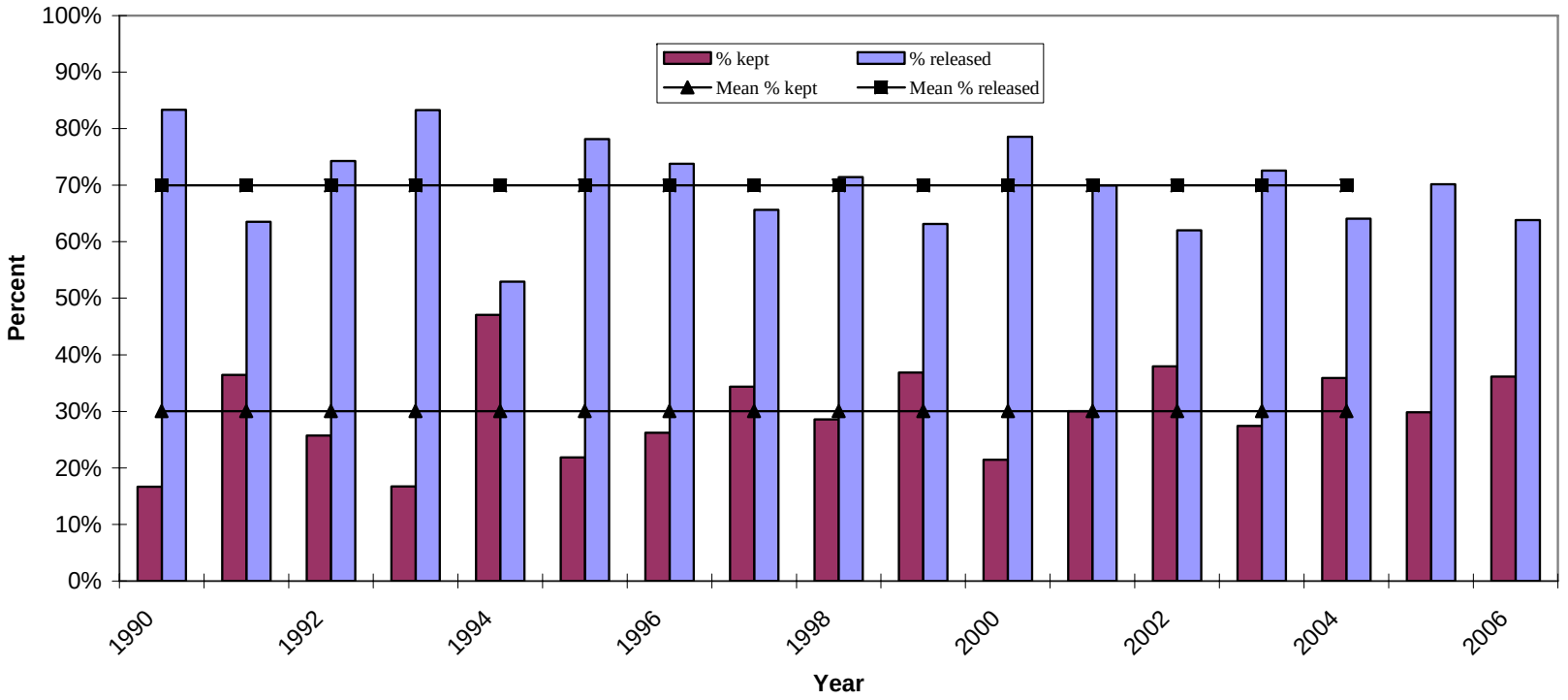
Source: Catch estimates from Statewide Harvest Survey (Mills 1991-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Figure 27.-Rainbow trout catch at Alexander Creek, 1990-2006.



Source: Statewide Harvest Survey (Mills 1979-1980, 1981a-b, 1982-1994; Howe et al. 1995, 1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b; Jennings et al. 2007, *In prep* a-b).

Figure 28.-Northern pike harvest in Northern Cook Inlet Management Area, 1977-2006.



Source: Statewide Harvest Surveys (Mills 1991-1994; Howe et al. 1995, 1996, 2001 a-d; Walker et al. 2003; Jennings et al. 2007, In prep; Jennings et al. 2004; 2006 a-b).

Figure 29.-Percentage of northern pike kept and released in Northern Cook Inlet Management Area, 1990-2006.

APPENDIX A. FISH AND GAME ADVISORY COMMITTEE

Appendix A1.-List of Northern Cook Inlet Management Area, Fish and Game Advisory Committee members.

First	Last	Profile	Address	City	Zip Code	Home	Work	Fax	Email	Term Ends
Matanuska Susitna Valley										
Kenneth	Barber		17367 E Melin Road	Palmer	99645	745-4446			pkbarber@alaska.net	12/06
Mark	Chryson	Secretary	2140 Wolverine Circle	Wasilla	99654	376-8285			mark@akip.org	12/08
Andy	Couch		PO Box 155	Palmer	99645	746-2199		376-3687	fish@fish4salmon.com	12/06
Stephen	Darilek		9780 Bridle Lane	Wasilla	99654	376-9797	357-8742		stevedon@gci.net	12/07
Howard	Delo	Chair	PO Box 520707	Big Lake	99652	892-8796			hodelo@mtaonline.net	12/07
Bennett	Durgeloh		2200 Wasilla Fishook Rd	Wasilla	99654	376-0603	376-3958	357-3958		12/06
Bill	Folsom	WAS ALTERNATE	PO Box 4861	Palmer	99645	745-4339		745-1670	kdfish@matnet.com	12/07
Daniel	Green		HC 31, Box 5263B	Wasilla	99654	376-9593	376-5873	376-5863	dgreen@mtaonline.net	12/07
Dennis	Hamann	Vice Chair	1200 Oat Street	Wasilla	99654	373-5938	373-6038	373-6001	loriann@mtaonline.net	12/08
Bruce	Knowles		PO Box 457	Willow	99688	495-4965	232-5873 cell		bigfish@mtaonline.net	12/06
Wayne	Kubat		PO Box 874867	Wasilla	99687	376-9569	376-9568	376-9568	args@mtaonline.net	12/06
Patrick	O'Connor		PO Box 3687	Palmer	99645	745-0426			arleta@mtaonline.net	12/08
Israel	Payton	RESIGNED	3100 Story Book Circle	Wasilla	99654		354-4576 cell		truewildernessadventures@yahoo.com	12/07
Greg	Pepperd	WAS ALTERNATE	PO Box 870282	Wasilla	99687	376-2615	441-9205		pepperd@gci.net	12/07
Steve	Runyan		PO Box 874661	Wasilla	99687	355-2697	373-5434	373-5444	willphish4food@yahoo.com	12/08
Doug	Sehm	RESIGNED	2571 N Tait Drive	Wasilla	99654	376-5337		373-6543	sehm@mtaonline.net	12/07
Mark	Vingoe		PO Box 4311	Palmer	99645	746-2021	892-6019		rcm1@mtaonline.net	12/08
Mt Yenlo										
Ed	Apperson	Undesignated	PO Box 91279	Anchorage	99509	243-7717	244-9999 - cell	248-7716		12/06
Steve & Bonnie	Childs	Undesignated	PO Box 33	Skwentna	99667	733-3560				12/07 Steve, 12/06 Bonnie
Eric	Johnson	Skwentna	PO Box 56	Skwentna	99667	733-3742				12/06
Vern	Logan	Secretary - Undesignated	PO Box 521365	Big Lake	99652	892-7446			evlogan@mtaonline.net	12/07
David	McHoes	Skwentna	PO Box 62	Skwentna	99667	733-6220				12/08
Bob	Meisner	Skwentna	HC 34, Box 2433	Wasilla	99654	733-1819				12/06
Mark	Miller	Undesignated	PO Box 190043	Anchorage	99519	248-7930	440-0614	248-6205	talaheim@gci.net	12/08
Thomas	Payton	Vice Chair - Skwentna	PO Box 1	Skwentna	99667	746-9029	733-3400	733-3400 Call 1st	paytonplace@gci.net	12/08
Barry	Stanley	Willow	PO Box 1017	Willow	99688	495-5897	495-5899	495-5898	dfs@mtaonline.net	12/07

-continued-

Appendix A1.-Page 2 of 2.

First	Last	Profile	Address	City	Zip Code	Home	Work	Fax	Email	Term Ends
Tyonek										
Lindsey	Bismark		PO Box 82078	Tyonek	99682	583-2078	583-2315			12/07
Theodore "Chad"	Chickalusion		PO Box 82095	Tyonek	99682-0095	583-2230				12/08
Cornell	Constantine	Chair	PO Box 82055	Tyonek	99682	583-2227	583-2206			12/08
Peter	Merryman		PO Box 82033	Tyonek	99682	583-2035	583-2135 / 223-5048	583-2442	Peter_M@tyonek.net	12/06
Brandy	Standifer	Alternate	PO Box 82048	Tyonek	99682	583-2282			brandy_ty@hotmail.com	12/06
Randy	Standifer		PO Box 82071	Tyonek	99682	583-2211	583-2201	583-2442		12/06
Arthur	Standifer		PO Box 82067	Tyonek	99682	583-2207	583-2145			12/07
John	Standifer		PO Box 82064	Tyonek	99682	583-2066	(907)583-2291			12/07
Daniel	Standifer, Sr	Vice Chair	PO Box 82046	Tyonek	99682	583-2811				12/06
Denali										
Ray	Atkins	Guide	PO Box 22	Cantwell	99729	768-2143		768-2651	atkins_diane@hotmail.com	12/06
Janet & Michael	Brooks	Vice Chair - Mike	PO Box 93	Cantwell	99729	768-2406	768-2355	768-2406	akmikeb@yahoo.com	12/07 Mike 12/05 Janet
Jeff	Burney		PO Box 162	Cantwell	99729	768-2636				12/06
Marty	Caress	Chair	PO Box 76	Cantwell	99729	768-1123		768-1123	mateo@mtaonline.net	12/07
Gordon	Carlson		PO Box 191	Cantwell	99729	768-2008	768-2000		cliconstruction@yahoo.com	12/06
Vernon	Carlson		PO Box 31	Cantwell	99729	768-2483	768-2355	768-2356		12/05
Bruce	Gore		PO Box 86	Cantwell	99729	768-2485		768-2486	fsjmg2@uaf.edu	12/07
Lawrence	Matlock		PO Box 74	Cantwell	99729	768-2424	768-2355			12/05
Chris	Phillips		PO Box 211	Cantwell	99729	768-2454	388-5315		chrisincantwell@hotmail.com	12/06
Jason	Rucker		PO Box 227	Cantwell	99729	768-1134				12/05

APPENDIX B. HISTORY OF REGULATORY ACTIONS BY SPECIES

Appendix B1.-Chinook salmon regulatory history for Northern Cook Inlet Management Area waters.

Chinook salmon fishing in NCIMA waters was open from statehood through 1963. During 1964 through 1966 Chinook salmon fishing in fresh water was closed. During 1967 through 1970 Alexander Creek, Clear Creek, Deshka River and Lake Creek were open in their entirety. This fishery operated over a 15-day season during the middle of June on a 250 fish, over 20 inches in length, harvest quota system. Achievement of the quota may have resulted in early season closure. A 1 fish per day 2 per season bag limit for fish over 20 inches in length was in place and a punch card was a requirement of participation in the fishery. In 1971 the harvest quota was eliminated. During 1971 and 1972, in addition to the 15-day season in Alexander Creek, Deshka River, and Lake Creek, a more restrictive fishery was allowed (few days) in Clear Creek and portions of the Little Susitna River, Ship Creek (Anchorage) and Willow Creek; however, a punch card was still required. In 1973, the area Chinook salmon fishery was closed to the harvest of Chinook salmon 20 inches or larger in length and remained so through 1978.

Selected Susitna River streams were reopened to Chinook salmon fishing in 1979 after being closed for several years because of low stock abundance. Cautious incremental expansion has characterized the area's Chinook salmon fisheries since they reopened. From 1979 through 1982 Chinook salmon fishing was permitted at Alexander Creek, Lake Creek and at the Deshka River from the fourth Saturday in May through July 6. These streams drain into the Susitna River from the west. Clear Creek, a tributary of the Talkeetna River, also had a similar Chinook salmon season. In addition, three eastside tributaries of the Susitna River, Willow, Caswell and Montana creeks, were open on Saturdays and Sundays only for 4 consecutive weekends commencing on the second Saturday in June. Harvest quotas, ranging from 200 to 7,000 Chinook salmon, governed these fisheries from 1979 through 1982. The Chuitna River, a coastal stream near Beluga, and the entire Yentna and Talkeetna river drainages were opened to Chinook salmon fishing in 1983. The opening date for Chinook salmon fisheries that provided continuous daily fishing was also changed to January 1.

In 1984 the remaining coastal streams near Beluga and all waters draining into the westside of the Susitna River downstream from the Deshka River were opened to Chinook salmon fishing. In 1986, portions of five road-accessible streams on the east side of the Susitna River opened to weekend-only fishing. These streams were Little Willow, Goose, Sunshine, Sheep and Birch creeks.

Expanded Chinook salmon fishing opportunity continued in 1987 when Monday fishing was added to all former weekend-only fisheries that drain into the Susitna River from the east. Saturday through Monday fishing was also allowed on the Susitna River and all flowing waters within one-quarter mile of the Susitna River (excluding the Kashwitna River) between the Deshka and Talkeetna rivers. These "corridor" fisheries were open for 4 continuous "weekends" similar to the previously mentioned Saturday through Monday fisheries. Chinook salmon fishing was permitted for the first time on the Susitna River drainage upstream from the Susitna River's confluence with the Talkeetna River to Devils Canyon but excluding the Chulitna River drainage. Unbaited, single-hook, artificial lures were mandatory in this area. The season extended from January 1 through July 13. The season for all Susitna River and coastal fisheries that formerly closed on July 6 was extended to July 13 in 1987.

In 1989, Chinook salmon fishing was allowed within a one-quarter mile radius of the mouth of the Kashwitna River. That same year fishing was permitted daily at Willow Creek between

January 1 and the third Monday in June and on Saturday through Monday for 2 consecutive weeks starting the fourth Saturday in June.

Bag and possession limits were 1 Chinook salmon 20 inches or over in length in 1979. The following year bag and possession limits changed to 2 Chinook salmon 20 inches or over in length but only 1 Chinook salmon could be over 28 inches in length. In 1981 the bag limit was reduced to 1 Chinook salmon 20 inches or more in length and in possession. This limit remained in effect through 1985. A 5 fish (20 inches or more in length) per year limit governed all Cook Inlet Chinook salmon fisheries from 1979 through 1985. This limit applied collectively to Northern Cook Inlet fresh water, Cook Inlet salt water and the Kenai Peninsula.

In 1986, bag and possession limits for the western drainages of the Susitna River were changed to 2 Chinook salmon, 16 inches or more in length daily and 4 in possession and remained so through 1992. Only 1 fish daily and 2 in possession could be over 28 inches. Similar limits also applied to the West Cook Inlet coastal fisheries. Bag and possession limits for eastern drainages of the Susitna River in 1986 were 1 Chinook salmon, 16 inches or more in length, and 2 in possession. The seasonal limit was 5 Chinook salmon 16 inches or more in length. Anglers were required to list their Chinook salmon harvest on nontransferable harvest records from 1979 through 1988. The date and location of harvested Chinook salmon were recorded. A $5 permit stamp was mandatory for Chinook salmon fishing from 1980 through 1982. The harvest record and yearly limit was eliminated for all Northern Cook Inlet Chinook salmon fisheries in 1989.

During the November 1992 BOF meeting several regulations were changed in the Susitna West-Cook Inlet Management Area to be in effect for the 1993 season. A seasonal limit of 5 Chinook salmon was established for all waters of Cook Inlet. Individuals or companies engaged in freshwater sport fish guiding were prohibited from participating or engaging in sport fishing while clients were present or within his or her control or responsibility during the Chinook salmon season except when guiding a client subject to the Americans with Disabilities Act.

In effect for the 1993 season in the West Cook Inlet area the Chinook salmon fishing season was reduced in length to end on June 30. The bag and possession limits were reduced in areas open to the retention of Chinook salmon 16 inches or more in length to 1 daily and 1 in possession.

Additionally, in the following areas of West Cook Inlet only unbaited, artificial lures could be used and Chinook salmon 16 inches or more in length could not be possessed or retained; all Chinook salmon caught had to be released immediately: (1) Chuitna River Drainage: upstream of a department marker located adjacent to the old cable crossing; (2) Theodore River Drainage: upstream of a department marker located approximately 1 mile upstream of the Beluga/Anchorage high voltage power lines; and (3) Lewis River Drainage: upstream of a department marker located approximately 1 river mile upstream of the main Beluga haul road bridge.

Action during the November 1992 meeting also reduced the Chinook salmon bag and possession limit in the Susitna River drainage including all flowing waters draining into the west side of the Susitna River downstream of and including the Deshka River. The bag and possession limits for Chinook salmon over 16 inches were reduced to 1 daily and 2 in possession.

In addition to BOF action, legislative action during June of 1992 established provisions that prohibited resident or nonresident anglers from fishing in Alaska without a king salmon stamp beginning in 1993.

In anticipation of an inadequate return to the Deshka River, prior to the 1994 Chinook season an emergency order was issued reducing the Chinook salmon possession limit to 1 fish and eliminated the use of bait in the Deshka River May 1 through July 14. As the 1994 Chinook season progressed it became apparent a weak return was occurring in the entire Susitna River drainage and particularly in the Deshka River. In response to this an emergency order was issued closing all waters of the Deshka River to sport fishing for Chinook salmon and prohibiting the use of bait in all waters of the Susitna River drainage downstream of the Deshka River which flow into the Susitna River from the east and the Alexander Creek drainage, all waters of the Yentna River drainage, all waters of the Talkeetna River drainage, and all waters of the Chulitna River drainage, June 17 through July 13, 1994.

The BOF during its October 1994 work session choose to delegate to the department the authority to change regulations for the 1995 fishing season. These regulation changes were as follows:

1. The Deshka River and Prairie Creek are closed to fishing for Chinook salmon.
2. Alexander Creek above the confluence of Trail Creek is closed to fishing for Chinook salmon.
3. The bag and possession limits in the Susitna River and Little Susitna River drainages have been reduced to 1 Chinook salmon over 16 inches in length.
4. The use of bait throughout the NCIMA is prohibited (excluding the Anchorage Management Unit).
5. Fishing in the NCIMA is allowed only between the hours of 6:00 a.m. and 11:00 p.m. May 15 through July 13. This time restriction will not apply to that portion of the Susitna River drainage currently opened to weekend-only fishing (e.g. between, but not including, the Deshka River and the Talkeetna River) and the Anchorage Management Unit.
6. The first opening of the Northern District commercial Chinook salmon fishery will occur by emergency order. Additional opening of this fishery will be dependent upon inseason indications of run strength.

The only new regulation for the 1996 season was the closure of the Lewis River to Chinook salmon fishing, including catch-and-release for Chinook salmon.

The Alaska Board of Fisheries convened in Anchorage, Alaska during November 11-17, 1996. A brief summary of regulatory changes affecting the Susitna-West Cook Inlet Area Chinook salmon fisheries as adopted by the Board of Fisheries follows.

5 AAC 21.366. Northern District King Salmon Management Plan

- To fulfill changes to the Upper Cook Inlet King Salmon Management Plan, as adopted by the Board of Fisheries, the Department of Fish and Game shall manage the Northern District commercial king salmon fishery as follows:

1. (3) The harvest shall not exceed 12,500 king salmon.
2. (8) The season closes on June 24, unless closed earlier by emergency order.
3. (9) The number of regular periods shall be determined by the department based on preseason expectations of king salmon run strength.
4. (10) The area from 1 mile south of the Theodore River to the Susitna River is closed to fishing; provisions of this paragraph do not apply after December 31, 1998.
5. (11) If at least 90% of the biological escapement goal for the Theodore River (BEG = 750) or Chuitna River (BEG = 1,400) is not met during the 1997 fishing season, the area from 1 mile south of the Chuitna River to the Susitna River will be closed to commercial fishing during the 1998 fishing season; the provisions of this paragraph do not apply after December 31, 1998.
6. (12) In addition to (11) above, if at least 90% of the biological escapement goal for the Chuitna River has not been met during the 1997 fishing season, the area from 1 mile south of the Chuitna River to the Susitna River will be closed to sport fishing for king salmon during the 1998 fishing season; the provisions of this paragraph do not apply after December 31, 1998.

5 AAC 61.010. Fishing Seasons:

- The Alexander Creek drainage is open to the retention (harvest) of king salmon from January 1 through June 30 downstream from an ADF&G regulatory marker at Granite Creek.

5 AAC 61.020. Bag Limits, Possession Limits, and Size Limits:

- In all waters of Alexander Creek drainage between an ADF&G regulatory marker located at Granite Creek, upstream to an ADF&G regulatory marker located 400 yards upstream of Trail Creek, king salmon 16 inches or more in length may not be possessed or retained. All king salmon caught must be released immediately.

5 AAC 61.035. Methods and Means:

- Only unbaited, single-hook, artificial lures may be used from January 1 through June 30 in all waters of the Alexander Creek drainage between an ADF&G regulatory marker located at Granite Creek to an ADF&G regulatory marker located 400 yards upstream of Trail Creek.

5 AAC 61.050. Waters Closed to Sport Fishing:

1. Peters Creek (Susitna River drainage) is closed to sport fishing for king salmon upstream from an ADF&G regulatory marker, located approximately 1 mile upstream from its confluence with the Kahiltna River.
2. The Theodore River is closed to sport fishing for king salmon. The provisions of this paragraph do not apply after December 31, 1998.

5 AAC 61.020. Bag Limits, Possession Limits, and Size Limits:

1. In all waters of the Susitna River drainage between the confluence of the Deshka River and the confluence of the Talkeetna River: after taking a king salmon 16 inches or more in length, a person may not fish for any species of fish in any water open to king salmon fishing during that same day.
2. In the Little Susitna River from its mouth to the Parks Highway bridge at Houston: after taking a king salmon 16 inches or more in length, a person may not fish for any species of fish in any water open to king salmon fishing during that same day.
3. In all waters of the Susitna-West Cook Inlet Management Area, excluding the Susitna River between its confluence with the Deshka River and its confluence with the Talkeetna River: after taking a king salmon 16 inches or more in length, a person may not fish for king salmon during that same day.

5 AAC 61.020. Bag Limits, Possession Limits, and Size Limits:

- The bag and possession limits of king salmon 16 inches or more in length taken from the Little Susitna River drainage are 1 fish per day and in possession.

During 1997 the Deshka River was open to king salmon fishing on June 21 though July 13. Fishing was limited to the lower 2 miles of river and all Chinook salmon regulations applying to the Susitna River from its mouth to its confluence with the Deshka River were in effect for the Deshka River.

In 1998 the Deshka River was open to king salmon fishing from its confluence with the Susitna River upstream 5 miles to a Department marker. The seasonal bag limit for king salmon over 16 inches from the Deshka River was set at 2. In addition, all Chinook salmon regulations applying to the Susitna River from its mouth to its confluence with the Deshka River were in effect for the Deshka River. Inseason emergency orders (EOs) affecting Chinook salmon fishing opened Willow Creek June 20-22 to correct an oversight in the regulations and added one Friday to Chinook fishing in the Susitna River between the Deshka River and the Talkeetna River (excluding both).

The BOF made the following changes for the 1999 season. The Deshka River will be open to king salmon fishing from its mouth upstream to Chijuk Creek a distance of approximately 17 river miles from January 1 to July 13. Other area regulations apply such as 1 fish per day bag and possession limits, a 5 fish seasonal limit, and once an angler harvests his or her king salmon they must quit fishing for king salmon the remainder of the day. Additionally fishing is allowed only between the hours of 6:00 a.m. to 11:00 p.m., no bait is allowed and guides cannot fish while guiding clients.

The area open for retention of king salmon on Alexander Creek was extended from its mouth upstream to Trail Creek. This provides anglers with an additional 11 miles of stream from the 1997 and 1998 seasons in which they may harvest king salmon on Alexander Creek.

The Theodore River was opened to catch-and-release fishing for king salmon from January 1 through June 30, only single hook artificial lures will be allowed. Other West Cook Inlet Area regulations apply as follows: fishing is allowed only between the hours of 6:00 a.m. to 11:00 p.m., bait is prohibited, and guides cannot fish while guiding.

There will be increased fishing opportunities for the road-accessible Parks Highway streams (Eastside Susitna River tributaries) during the early part of June. The Parks Highway streams (Eastside Susitna River tributaries) will open to king salmon fishing from January 1 through the third Monday in June and for the next 2 consecutive 3-day weekends. This regulation identifying the fishing season is consistent with that on Willow Creek.

On the Little Susitna River, anglers will be allowed to use treble hooks year-round downstream of the Parks Highway Bridge. Existing bait restrictions were modified to allow the use of bait during the month of September.

The area open to king salmon fishing on the Kashwitna River was extended from its mouth upstream to the Parks Highway Bridge, a distance of 2 miles. The Kashwitna River, a Parks Highway stream, will be regulated under the new season regulation implemented for the Parks Highway streams.

In all waters of the Westside-Susitna River and West Cook Inlet Management Areas (excluding waters between the Deshka River and the Talkeetna River mouths), anglers will be allowed to continue to fish for king salmon (catch-and-release) once they have harvested their limit excluding Alexander Creek, Lake Creek, Deshka River, Fish Lake Creek and Clear Creek. In these streams you will be required to quit fishing for king salmon for the day once you have harvested your limit.

By EO Willow, Little Willow, Sheep and Montana creeks were open to king salmon fishing for an additional weekend, July 10 through July 12, 1999.

1. The 2000 season began with no regulation changes from 1999. When it was determined that the Deshka River was experiencing an exceptional return of Chinook, an EO was issued that allowed the use of bait in the first 17 miles of the Deshka River and within a ¼-mile radius of the mouth of the Deshka River with the Susitna River, June 8 through July 13, 2000. Two additional EOs were issued in 2000. One opened Willow, Little Willow, Sheep and Montana creeks to king salmon fishing for an additional day, July 4, 2000, and the other opened East Fork Chulitna River, Willow, Little Willow, Sheep and Montana creeks to king salmon fishing for an additional 3-day weekend, July 8 through July 10, 2000.

During the January 2001 BOF meeting a "jack" king salmon was defined as any king 20 inches or less in length statewide. In all fresh waters open to king salmon fishing the bag/possession limit for "jacks" is 10. These limits are in addition to any limits for kings over 20 inches in length and do not count against annual or seasonal limits. This new definition increased the length requirement for kings that must be recorded for the 5 fish seasonal limit from 16 inches to 20 inches.

1. E.O. No. 2-KS-2-15-01 extended king salmon season in the Susitna River drainage upstream from its confluence with the Deshka River to its confluence with the Talkeetna River including Susitna River tributaries Willow Creek to Trapper Creek and the East Fork of the Chulitna River (including the first ¼ mile of Honolulu Creek only). These waters which were scheduled to close on Monday July 2 were opened through Wednesday, July 4 at 12:00 midnight.

2. In June of 2001 it was determined that the Deshka River was experiencing an exceptional return of Chinook. An EO was issued that allowed the use of bait in the first 17 miles of the Deshka River and within a ¼-mile radius of the mouth of the Deshka River with the Susitna

River, June 12 through July 13. Three additional EOs were issued in 2001. One extended king salmon fishing on the Chuitna River downstream of the cable crossing July 1 through July 5. Another opened Willow Creek to king fishing June 29 at 12:01 a.m. adding 1 additional day of fishing. The last EO extended king salmon season in the Susitna River drainage upstream from its confluence with the Deshka River to its confluence with the Talkeetna River including Susitna River tributaries Willow Creek to Trapper Creek and the East Fork of the Chulitna River (including the first ¼ mile of Honolulu Creek only). These waters which were scheduled to close on Monday July 2 were opened through Wednesday, July 4 at 12:00 midnight.

3. A BOF meeting was held in February of 2002 resulting in the following king salmon regulations changes:

a. Allow catch-and-release fishing for kings in the East Fork of the Chulitna River January 1 through July 13. Only one single-hook, unbaited artificial lure may be used January 1 through July 13.

b. Increase possession limit to 2 kings for West Susitna River tributaries (excluding Alexander Creek).

c. In the Northern District King Salmon Management Plan: The commercial setnet fishery will open on the first Monday on or after May 25 and close June 24. The number of commercial periods will depend upon expected northern Cook Inlet king salmon run strengths and there shall be no more than three commercial openings targeting kings. The area from an ADF&G marker located 1 mile south of the Theodore River to the Susitna River is open to fishing in the second regular period only. If the Theodore, Lewis or Ivan rivers are closed to sport fishing, the area from an ADF&G regulatory marker located 1 mile south of the Theodore River to the Susitna River is closed to commercial king salmon fishing for the remainder of the directed king salmon fishery. If the Deshka River is closed to sport fishing, the commercial king salmon fishery throughout the Northern District is closed for the remainder of the directed king salmon fishery. If the Chuitna River is closed to sport fishing, the area from an ADF&G marker located 1 mile south of the Chuitna River to the Susitna River is closed to commercial king salmon fishing for the remainder of the directed king salmon fishery.

d. Allow a catch-and-release fishery in the entire Theodore and Lewis rivers. No bait, single hook only.

1. These regulations were not signed into law prior to the start of the 2002 season. Because of this delay the following EOs were issued to allow the new regulations to be in effect during the beginning of the fishing season:

a. Increased the possession limit to two king salmon in all Westside Susitna River tributaries except Alexander Creek.

b. Opened the entire Theodore and Lewis rivers to catch-and-release for king salmon through June 30. Single hook, no bait.

c. Allowed the use of bait in the first 17 miles of the Deshka River and within a ¼ mile radius of the mouth of the Deshka River with the Susitna River, June 8 through July 13, 2002.

1. All regulations became effective midway through the season. As in past years an EO was issued which extended king salmon season in Willow, Sheep and Montana creeks 3 days, July 5-7 from 6:00 a.m. to 11:00 p.m.

2. In 2003 there were no new regulations. As in past years an EO was issued which extended king salmon season in Willow, Sheep and Montana creeks 3 days, July 4-6 from 6:00 a.m. to 11:00 p.m. In mid June when an exceptional return was realized for Deshka River, an EO was issued to increase the bag and possession limit of king salmon greater than 20 inches in the Deshka River from 1 per day and 2 in possession to 2 per day and 4 in possession.

3. During 2004, two EOs were issued to liberalize the Deshka River Chinook salmon fishery. The first EO allowed use of bait in the first 17 miles of the river May 28 through July 13. The second EO increased the daily bag and possession limits from 1 per day and 2 in possession to 2 per day and 4 in possession on that portion of river open to Chinook salmon fishing (first 17 miles). An EO was issued to open the Chinook salmon fishery at Eklutna Tailrace on April 15.

4. A BOF meeting was held January 2005. Sport fish regulatory changes included:

   a. Anglers were allowed to use bait earlier in the Deshka River commencing May 15.

   b. The Parks Highway streams were opened for an additional 3-day weekend for king salmon fishing. For 2005 the Parks Highway streams were open from January 1–June 20 and on June 25-27, July 2-4 and July 9-11.

   c. The area open to king salmon fishing on the Kashwitna River was increased by approximately 1 mile, from the Parks Highway Bridge to the Alaska Railroad Bridge.

   d. Anglers may no longer fish for king salmon 20 in or less in waters closed to king salmon fishing.

   e. Eklutna Tailrace and all waters within a ½ mile radius of its confluence with the Knik River were opened to fishing for king salmon from January 1 through December 31. Once an angler retains a bag limit of king salmon 20 in or longer they may not fish in any water open to king salmon fishing on that same day.

Commercial fish regulatory changes included:

   1. The Northern District King Salmon Management Plan was altered by limiting fishing periods to a maximum of three and increasing fishing time per period from 6 hours to 12 hours. The gear restriction of two nets from August 1 to August 10 was removed.

   2. The Big River Sockeye Salmon Management Plan was amended to allow fishing in a portion of the Kalgin Island Subdistrict along the western shore from Light Point (60° 29.00' N. lat., 151° 50.50' W. long.) to the Kalgin Island Light on the southern end of the island at 60° 20.80' N. lat., 152° 05.09' W. long. Note: this fishery is closed if 1,000 Chinook salmon are harvested.

1. Two EOs were issued inseason to liberalize the Deshka River Chinook salmon fishery:
    a. On May 27, the daily bag and possession limit for Chinook salmon was increased from 1 per day, 2 in possession to 2 per day, 4 in possession. Fishing time was increased to 24 hours per day.
    b. The fishery was extended from July 14 through July 31.

In 2006, an EO increased the bag limit and fishing time on the Deshka River. The daily bag and possession limit was increased to 2 per day, 4 in possession and fishing time was increased to 24 hours per day.

Appendix B2.-Deshka River Chinook salmon regulatory changes, 1977-2006.

Year	Fishery dates	Area and time restrictions	Method/Gear restrictions	Bag & possession	Seasonal NCI limit	Other requirements
1977	closed to adults			20" or less only		
1978	closed to adults			20" or less only		
1979	4th Sat. in May - July 6	mouth to Laub's Homestead marker		1/day over 20" & 1 possession	5 over 20"	punch card required
1980	4th Sat. in May - July 6	mouth to forks		2/day over 20", only 1 over 28" & 2 possession	5 over 20"	punch card required
1981	4th Sat. in May - July 6	mouth to forks		1/day over 20" & 2 possession	5 over 20"	Harvest record sticker
1982	4th Sat. in May - July 6	mouth to forks		1/day over 20" & 2 possession	5 over 20"	Permit stamp. Record on back of license
1983	January 1 - July 6	mouth to forks		1/day over 20" & 2 possession	5 over 20"	Harvest record back of license
1984	January 1 - July 6	mouth to forks		1/day over 20" & 2 possession	5 over 20"	Harvest record back of license
1985	January 1 - July 6	mouth to forks		1/day over 20" & 2 possession	5 over 20"	Harvest record back of license
1986	January 1 - July 6	mouth to forks		over 16": 2/day & 4 possession, only 1/day & 2 possession over 28"	5 over 16"	Harvest record back of license
1987	January 1 - July 13	mouth to forks		over 16": 2/day & 4 possession, only 1/day & 2 possession over 28"	5 over 16"	Harvest record back of license
1988	January 1 - July 13	mouth to forks		over 16": 2/day & 4 possession, only 1/day & 2 possession over 28"	5 over 16"	Harvest record back of license
1989	January 1 - July 13	mouth to forks		over 16": 2/day & 4 possession, only 1/day & 2 possession over 28"	5 over 16"	
1990	January 1 - July 13	mouth to forks		over 16": 2/day & 4 possession, only 1/day & 2 possession over 28"	5 over 16"	
1991	January 1 - July 13	mouth to forks		over 16": 2/day & 4 possession, only 1/day & 2 possession over 28"	5 over 16"	

-continued-

Year	Fishery dates	Area and time restrictions	Method/Gear restrictions	Bag & possession	Seasonal NCI limit	Other requirements
1992	January 1 - July 13	mouth to forks	no bait between Trapper Creek and forks on June 22 by EO	1/day over 16" & 1 possession. Release of fish over 16" between Trapper and forks on June 22 by EO	5 over 16"	
1993	January 1 - July 13	mouth to forks	artificial only until May 15	1/day over 16" & 2 possession	5 over 16"	King stamp. Harvest record back of license
1994	closed June 17 by EO	mouth to forks	artificial only until May 16	1/day over 16" & 2 possession	5 over 16"	King stamp. Harvest record back of license
1995	Closed					
1996	Closed					
1997	opened June 21 by EO	lower 2 miles of river	artificial only	1/day over 16" & 1 possession	5 over 16"	King stamp. Harvest record back of license
1998	January 1 - July 13	lower 5 miles of river	artificial only	1/day over 16" & 1 possession	5 over 16", only 2 from Deshka	King stamp. Harvest record back of license
1999	January 1 - July 13	mouth to Chijuk Creek, 6 am-11 pm	artificial only	1/day over 16" & 1 possession	5 over 16"	King stamp. Harvest record back of license
2000	January 1 - July 13	mouth to Chijuk Creek, 6 am-11 pm	bait allowed June 8 by EO	1/day over 16" & 1 possession	5 over 16"	King stamp. Harvest record back of license
2001	January 1 - July 13	mouth to Chijuk Creek, 6 am-11 pm	bait allowed June 12 by EO	1/day over 20" & 1 possession	5 over 20"	King stamp. Harvest record back of license
2002	January 1 - July 13	mouth to Chijuk Creek, 6 am-11 pm	bait allowed June8 by regulation	1/day over 20" & 2 possession	5 over 20"	King stamp. Harvest record back of license
2003	January 1 - July 13	mouth to Chijuk Creek, 6 am-11 pm	bait allowed June8 by regulation	2/day over 20" & 4 possession on June 18 by EO	5 over 20"	King stamp. Harvest record back of license
2004	January 1 - July 13	mouth to Chijuk Creek, 6 am-11 pm	bait allowed May 28 by EO	2/day over 20" & 4 possession on June 12 by EO	5 over 20"	King stamp. Harvest record back of license
2005	January 1 - July 13. Extended through July 31 by EO.	mouth to Chijuk Creek. Opened 24-hr May 27 by EO	bait allowed May 15 by regulation	2/day over 20" & 4 possession on May 27 by EO	5 over 20"	King stamp. Harvest record back of license
2006	January 1 - July 13	mouth to Chijuk Creek. Opened 24-hr May 26 by EO.	bait allowed May 15 by regulation	2/day over 20" & 4 possession on May 26 by EO	5 over 20"	King stamp. Harvest record back of license

Appendix B3.-Coho salmon regulatory history for Northern Cook Inlet Management Area waters, 1991-2006.

1991

1. Little Susitna River Coho Salmon Management Plan (5 AAC 61.060). Initiated in 1991 season. One coho salmon January 1 through August 5, 3 coho salmon August 6 through December 31, increase to 5 coho salmon below weir and at Nancy Lake Creek when 7,500 projected above Parks Highway, quit fishing when bag limit harvested below Burma Landing. Previously there was a 3 salmon daily bag limit, all 3 of which could be coho salmon.

Emergency Orders:

1. E.O. No. 2-SS-2-27-91 closed to fishing that portion of the Little Susitna River from the fish counting weir located at River Mile 32.5 downstream for a distance of 1,500 feet. Effective July 27 through September 14, 1991.
2. E.O. No. 2-RS-1-29-91 closed sockeye salmon fishing in all waters north of the latitude of Anchor Point. Effective 7:00 a.m. July 26 through December 31, 1991.
3. E.O. No. 2-RS-2-33-91 opened the Fish Creek personal use dip net fishery. Effective July 30 through August 9, 1991.
4. E.O. No. 2-RS-2-34-91 reopened the Little Susitna River drainage and all freshwater drainages of Knik Arm to fishing for sockeye salmon. Effective noon, July 29 through December 31, 1991.
5. E.O. No. 2-RS-2-36-91 rescinded E.O. No. 2-RS-1-29-91, thereby reopening recreational sockeye salmon fisheries within waters of the Kenai Peninsula and Susitna-West Cook Inlet regulatory areas and marine waters of Cook Inlet north of Anchor Point. Effective 7:00 a.m. August 2 through December 31, 1991.
6. E.O. No. 2-CS-2-38-91 closed the Eklutna Power Plant tailrace to sport fishing from the Old Glenn Highway downstream to department markers placed approximately 100 yards upstream of the confluence of the tailrace and the Knik River. Effective noon, August 6 through December 31, 1991.
7. E.O. No. 2-SS-2-42-91 increased bag and possession limits to 5 coho salmon at the Little Susitna River downstream from the department's salmon counting weir at River Mile 32.5. Effective noon, August 14 through December 31, 1991.

1992

1. Little Susitna River Coho Salmon Management Plan modified. In effect for 1993 season. Only unbaited artificial lures may be used in the Little Susitna River from July 15 through August 5. The bag and possession limits for coho salmon 16 inches or more in length during this time period were increased to 3 daily and in possession.
2. Aimed at rainbow trout. Only unbaited artificial lures may be used in all flowing waters of the Susitna-West Cook Inlet area September 1 though May 15. Initiated in 1993 season.
3. Changes in the Cook Inlet Personal Use Salmon Dip Net Fishery Management Plan (5 AAC 77.540) pertaining to the Fish Creek dip net fishery. 1993 was the first year coho salmon were allowed in the harvest. Daily bag and possession limit 6 salmon.

4. BOF found that most of Cook Inlet was a nonsubsistence zone and repealed the Upper Cook Inlet Subsistence Salmon Management Plan (5 AAC 01.592) thus eliminating the subsistence fishery in Upper Cook Inlet for the 1993 season (eliminated the Knik set gillnet fishery). This plan was reinstated by court action for the 1994 season. The only area that remained open to subsistence fishing in the Upper Cook Inlet area during 1993 was the Tyonek Subdistrict of the Northern District on the west side of Cook Inlet.

Emergency Orders:

1. E.O. No. 2-RS-2-21-92 opened the Fish Creek personal use dip net fishery. Dip net fishing was allowed for 3 consecutive days followed by a 1 day closure on a continuing basis. Effective 6:00 a.m. July 23 through August 6, 1992.
2. E.O. No. 2-SS-2-22-92 closed to fishing that portion of the Little Susitna River from the fish counting weir located at River Mile 33 downstream for a distance of 1,500 feet. Effective July 25 through September 14, 1992.
3. E.O. No. 2-RS-2-28-92 closed the Susitna River drainage to sockeye salmon fishing. Effective July 31 through December 31, 1992.
4. E.O. No. 2-SS-2-29-92 increased bag and possession limits to 5 coho salmon 16 inches or more in length downstream from the department's counting weir at River Mile 32.5. Effective August 15 through December 31, 1992.

1993

Emergency Orders:

1. E.O. No. 2-RS-2-23-93 opened the Fish Creek personal use fishery. The dip net fishery opened 9:00 a.m. July 24 and closed midnight August 6, with the fishery being closed July 26, July 30, and August 3, 1993.
2. E.O. No. 2-SS-2-25-93 closed to fishing that portion of the Little Susitna River from the fish counting weir located at River Mile 33 downstream for a distance of 1,500 feet. Effective July 23 through September 15, 1993.
3. E.O. No. 2-SS-2-32-93 increased the bag and possession limits to 5 coho salmon at the Little Susitna River downstream from the department's counting weir at River Mile 32.5. Effective August 11 through December 31, 1993.
4. E.O. No. 2-SS-2-33-93 closed to fishing that portion of Jim Creek from the fish counting weir located at River Mile 1 downstream for a distance of 500 feet. Effective August 12 through November 1, 1993.

1994

Emergency Orders:

1. E.O. No. 2-RS-2-28-94 opened the Fish Creek personal use fishery. The dip net fishery opened 9:00 a.m. July 27 and closed midnight August 5, with the fishery being closed July 29 and August 2, 1994.

2. E.O. No 2-RS-2-33-94 supersedes E.O. 2-RS-2-28-94 extending the Fish Creek Personal Use Dip Net Fishery through midnight August 9. Effective August 7, 1994 through August 9, 1994.
3. E.O. No. 2-KS-2-05-94 closed to fishing that portion of the Little Susitna River from the fish counting weir located at River Mile 33 downstream for a distance of 1,500 feet. Effective May 25 through September 15, 1994.
4. E.O. No. 2-SS-2-32-94 increased the bag and possession limits to 5 coho salmon at the Little Susitna River downstream from the department's counting weir at River Mile 32.5. Effective August 6 through December 31, 1994.
5. E.O. No. 2-SS-2-29-94 closed that portion of Jim Creek to fishing from the fish counting weir located at River Mile 1 downstream for a distance of 1,000 feet. Effective July 26, 1994 through November 1, 1994.

1995

1. Upper Cook Inlet Subsistence Salmon Management Plan was repealed by the BOF in 1995. BOF took action to allow subsistence fishery as a personal use fishery. The Knik set gillnet fishery was executed as a personal use fishery in 1995.

Emergency Orders:

1. E.O. No. 2-KS-2-07-95 closed to fishing that portion of the Little Susitna River from the fish counting weir located at River Mile 33 downstream for a distance of 1,900 feet. Effective May 25 through September 15, 1995.
2. E.O. No. 2-RS-02-32-95 opened the Fish Creek personal use fishery. The dip net fishery opened 5:00 a.m. July 26 and closed midnight August 8, with the fishery being closed July 28 and August 1 and August 4, 1995.
3. E.O. No. 2-SS-02-40-95 increased the bag and possession limits to 5 coho salmon at the Little Susitna River downstream from the department's counting weir at River Mile 32.5. Effective August 9 through December 31, 1995.

1996

1. The Upper Cook Inlet Personal Use Salmon Fishery Management Plan (5 AAC 77.540) establishes time, area, methods and means for taking salmon for personal use. This plan first went into effect during the 1996 season. It provides for personal use dip net fisheries in the Kenai and Kasilof rivers and Fish Creek. Additionally, limited personal use gillnet fishing opportunity is provided near the terminus of the Kasilof River. No Knik set gillnet fishery was provided.
2. Changes were made to the Fish Creek Sockeye Management Plan (5 AAC 21.364) concerning the Fish Creek Personal Use Dipnet fishery. The dip net fishery will now run July 10 through July 31 with a bag limit of 25 salmon per head of household plus 10 salmon per each household member. A permit is required.

3. The Skwentna River Personal Use Salmon Fishery Management Plan (5 AAC 77.526) establishes a subsistence fish wheel fishery in the Yentna River downstream of its confluence with the Skwentna River. This fishery was implemented as a personal use fishery during the 1996 and 1997 seasons.
4. Little Susitna River Coho Salmon Management Plan was modified. The option to increase the bag and possession limits of coho salmon in specified areas of the Little Susitna River when the escapement goal of 7,500 nonhatchery fish upstream of the Parks Highway is projected, was repealed. The bag and possession limits of salmon other than king salmon in the Little Susitna River are 3 fish per day and in possession.
5. At the November 1996 meeting the BOF modified 5 AAC 61.035. Only unbaited, single-hook, artificial lures may be used in all flowing waters of the Alexander Creek drainage upstream of an ADF&G regulatory marker located 400 yards upstream of the confluence of Trail Creek.

1997

Emergency Orders:

1. E.O. No. 2-RS-2-25-97 closed Fish Creek dipnetting from 11:00 a.m. July 23 through 11:00 p.m. July 25, 1997.
2. E.O. No. 2-RS-2-28-97 closed Fish Creek dipnetting for the remainder of the 1997 season on July 26, 1997.
3. E.O. No. 2-SS-02-31-97 prohibited use of bait and reduced daily bag and possession limit of coho salmon to 1 in all waters of Cook Inlet on August 9, 1997. Areas not included were Eklutna Tailrace, Ship, Bird, and Campbell creeks.
4. E.O. No. 2-SS-2-34-97 closed Wasilla Creek downstream from the railroad bridge, including Rabbit Slough and Spring Creek, to sport fishing August 23 through October 31, 1997.

1998

1. The Upper Yentna River Subsistence Salmon Fishery (5 AAC 01.593) establishes a subsistence fish wheel fishery in the Yentna River downstream of its confluence with the Skwentna River. This fishery was implemented as a personal use fishery during the 1996 and 1997 seasons. State Supreme Court and BOF action changed it to a subsistence fishery beginning in 1998. This change did not affect coho salmon harvest.

Emergency Orders:

1. E.O. No. 2-KS-2-14-98 closes the Deshka River to all fishing 1,200 feet downstream and 300 feet upstream of the fish counting weir.
2. E.O. No. 2-RS-2-15-98 closes Fish Creek to dipnetting effective July 25, 1998 through July 31, 1998.

1999

1. Recreational fishing time on Fish, Wasilla and Cottonwood creeks has been reduced. Fishing hours were restricted from 24-hour fishing days to 12-hour fishing days (6:00 a.m. to 6:00 p.m.) in these Saturday and Sunday only fisheries. Once an angler has harvested a bag limit of three salmon, he/she may no longer fish on this stream for the remainder of the day.
2. In all waters of West Cook Inlet South of the Susitna River (i.e. Chuitna, Lewis, Theodore & McArthur River) once an angler has harvested a bag limit of 3 coho salmon he/she may no longer fish on this stream for the remainder of the day. These same streams are closed to coho salmon fishing from October 1-December 31.
3. For the Little Susitna River existing bait restrictions were modified to allow the use of bait during the month of September.
4. Little Susitna River Coho Salmon Management Plan was modified. The escapement goal of 7,500 coho salmon was changed to an escapement range of 9,600-19,200 nonhatchery fish.

Emergency Orders:

1. E.O. No. 2-KS-2-05-99 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the fish counting weir.
2. E.O. No. 2-RS-2-15-99 closed Fish Creek to dipnetting on July 26, 1999.
3. E.O. No. 2-SS-2-20-99 reduced the bag limit to 1 coho salmon and no bait for Cottonwood, Wasilla and Fish creeks and the Little Susitna River, on August 19, 1999.

2000

During the BOF meeting in February 2000 the following recreational fishery restrictions were put in place to address coho salmon conservation concerns.

The coho bag and possession limits in the Knik Arm (excluding the stocked coho fishery in the Eklutna Tailrace) and the Susitna River were reduced to 2. The West Cook Inlet bag and possession limits north of the West Foreland were reduced to 2 daily and 4 in possession. South of the West Foreland they remained at 3 daily and 6 in possession.

Wasilla Creek, Jim Lake, Upper Jim Creek and McRoberts creeks were closed to coho fishing.

After taking a limit of coho from Fish and Cottonwood creeks a person may not fish that same day in Fish and Cottonwoods creeks in waters open to salmon fishing.

The sockeye return to Fish Creek was poor again this year and the dip net fishery was closed early by EO.

Emergency Orders: The 2 coho daily bag limit caused some confusion on the Little Susitna River so an EO was issued to clarify the new regulation.

1. E.O. No. 2-SS-2-17-00 stated after keeping 2 coho below RM 32.5 Little Susitna River, an angler must quit fishing in the Little Susitna River for the remainder of the day, July 28-December 31.
2. E.O. No. 2-RS-2-16-00 closed Fish Creek to dipnetting on July 26, 2000.

2001

There were no new regulations concerning coho for the 2001 season.

Emergency Orders: Only one EO was issued affecting coho salmon harvest.

1. E.O. No. 2-RS-2-17-01 closed Fish Creek to dipnetting on July 12 at 11:00 p.m.

2002

The BOF met in February 2002 and adopted new regulations affecting coho.

1. The Larson Creek drainage upstream of a marker ¼ mile upstream from its mouth is closed to sport fishing for all salmon year-round.
2. Nancy Lake Creek drainage upstream of a marker ¼ mile upstream from its mouth is closed to all salmon fishing including catch-and-release.
3. The Clearwater and Roscoe creek drainages are closed year-round to all fishing upstream from a marker ½ mile upstream of their confluences with the Chinitna River.
4. Open Fish Creek personal use fishery by EO when escapement goal is projected.
5. Open Wasilla Creek from its mouth to the Alaska Railroad bridge for salmon fishing (excluding king salmon). Saturday and Sunday only from 6:00 a.m.–6:00 p.m. only.
6. Eliminate use of bait on Little Susitna River July 14, upstream of the Little Susitna Public Use Facility.

Emergency Orders: Only one EO was issued affecting coho salmon harvest.

1. E.O. No. 2-SS-2-29-02 in Fish Creek increased coho bag limit to 3 per day and allowed 24-hour per day fishing on Saturdays and Sundays beginning August 17 at 12:01 a.m. through December 31.

2003

No new regulations adopted for 2003 and no EOs issued.

2004

No new regulations adopted for 2004 and no EOs issued.

2005

The BOF met January 2005. Sport fish regulatory changes included:

1. A person may no longer fish in waters open to salmon fishing the same day they take a limit of salmon 16 inches or greater from Wasilla Creek.
2. Excluding Alexander Creek, the bag and possession limit for coho salmon on Westside Susitna streams was increased from 2 per day, 4 in possession to 3 per day, 6 in possession.
3. Anglers may no longer fish for other salmon (coho, pinks, chums) 16 in or less in waters closed to fishing for other salmon.

1. The BOF adopted the following commercial fishery regulations:

a. Central District Drift Gillnet Fishery Management Plan (5 AAC 21.353)

- The drift fishery opens the third Monday in June or June 19 whichever is later.
- From July 9 through July 15,
  - Drift gillnet fishing is restricted for two regular fishing periods to the Kenai and Kasilof Sections and Drift Area One described below.
  - In runs of over 2 million sockeye salmon to the Kenai River there may be one additional 12-hour period in the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Area One.
- From July 16 through July 31,
  - In runs of less than 2 million sockeye salmon to the Kenai River there will be two regular 12-hour fishing periods restricted to the Kenai and Kasilof Sections of the Upper Subdistrict and Drift Area one;
  - In runs of between 2 and 4 million sockeye salmon to the Kenai River; there will be two regular 12-hour fishing periods restricted to the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Areas One & Two;
  - In runs of over 4 million sockeye salmon to the Kenai River, there are no mandatory restrictions.
- From August 11 until closed by emergency order,
  - Drift Areas Three & Four are open for regular periods;
  - Chinitna Bay may be opened by emergency order.

New Drift Fishing Areas:

(1) Drift Area One: includes those waters of the Central District south of Kalgin Island at 60° 20.43' N. lat.;

(2) Drift Area Two: includes those waters of the Central District enclosed by a line from 60° 20.43' N. lat., 151° 54.83' W. long. to a point at 60° 41.08' N. lat., 151° 39.00' W. long. to a point at 60° 41.08' N. lat., 151° 24.00' W. long. to a point at 60° 27.10' N. lat., 151° 25.70' W. long. to a point at 60° 20.43' N. lat., 151° 28.55' W. long.;

(3) Drift Area Three; includes those waters of the Central District within one mile of mean lower low water (zero tide) south of a point on the West Foreland at 60° 42.70' N. lat., 151° 42.30' W. long.;

(4) Drift Area Four; includes those waters of the Central District enclosed by a line from 60° 04.70' N. lat., 152° 34.74' W. long. to the Kalgin Buoy at 60° 04.70' N. lat., 152° 09.90' W. long. to a point at 59° 46.15' N. lat., 152° 18.62' W. long. to a point on the western shore at 59° 46.15' N. lat., 153° 00.20' W. long., not including the waters of the Chinitna Bay Subdistrict.

Other commercial fishery regulatory changes included:

- Up to 50 fathoms of the 150 fathoms of allowable drift gillnet gear per boat may be monofilament mesh; you must register with ADF&G prior to using monofilament gear.
- Spotter planes are allowed during the fishing period.
- Pink salmon fishery during even years was reauthorized; mesh size restriction was removed.
- Up to 35 fathoms of set gillnet gear per permit may be monofilament mesh with no more than one net per permit having monofilament mesh; you must register with ADF&G prior to using monofilament gear.

No emergency orders were issued affecting coho salmon fisheries in 2005.

2006

No new regulations adopted in 2006.

Emergency orders:

1. E.O. No. 2-SS-2-41-06 increased the daily bag limit of coho salmon to 3 daily in that portion of the Little Susitna River open to salmon fishing beginning August 19.
2. E.O. No. 2-SS-2-44-06 increased salmon fishing time on Wasilla Creek to 24 hours per day while keeping the Saturday and Sunday, weekend-only restriction and increased the bag limit for coho salmon to 3 daily in those waters open to salmon fishing on August 19.
3. E.O. No. 2-SS-43-06 increased salmon (other than king salmon) fishing time on Fish Creek to 24 hours per day while keeping the Saturday and Sunday, weekend only restriction and increased the bag limit for coho salmon to 3 daily in those waters open to salmon fishing on August 19.
4. E.O. No. 2-SS-2-42-06 increased salmon fishing time on Cottonwood Creek to 24 hours per day while keeping the Saturday and Sunday, weekend-only restriction and increased the bag limit for coho salmon to 3 daily in those waters open to salmon fishing on August 19.

Appendix B4.-Rainbow trout regulatory history for Northern Cook Inlet Management Area waters, 1977-2005.

1977

1. Rainbow trout daily bag and possession limits are 10.
2. Talachulitna River became Alaska's first catch-and-release rainbow trout fishery. Only unbaited, single-hook lures are allowed.

1982

1. Beginning in 1982 the daily bag and possession limits dropped to 5 rainbow trout of which only 2 could be 20 inches or more in length.

1983

1. The daily bag and possession limits were further reduced to allow 5 fish of which only 1 could be 20 inches or more in length.

1985

1. In Lake Creek (Yentna River) daily bag and possession limits were reduced to 2 and upstream of a marker 2 miles upstream of the mouth only artificial lures were allowed.

1986

During the fall of 1986, the Board of Fisheries officially adopted the Cook Inlet and Copper River Rainbow/Steelhead Trout Management Policy. The BOF used this policy from 1986-1996 to implement regulations for rainbow trout within the NCIMA.

1987

1. In the flowing waters of the Susitna River, Matanuska River and West Cook Inlet drainages only unbaited, artificial lures are allowed September 1 through December 31.
2. In the flowing waters of the Susitna River, Matanuska River and West Cook Inlet daily bag and possession limits were reduced to 2 per day only 1 over 20 inches.
3. Anglers required to record harvest of rainbow trout over 20 inches on harvest record card (back of license). Yearly limit of 2 rainbow trout over 20 inches.
4. Beginning in 1987 a major portion of the Eastside Susitna Management Unit was managed for trophy-size trout (trout over 20 inches). This fishery encompasses all drainages of the Susitna River from the junction of the Susitna and Talkeetna rivers upstream to Devils Canyon. Only 1 trout 20 inches or more in length is allowed daily with a 2 trout over 20 inches seasonal limit. Trout less than 20 inches must be released immediately. An unbaited, single-hook lure requirement complements this strategy.

1989

1. Beginning in 1989 catch-and-release was initiated in the Lake Creek drainage ¼ mile upstream of Bulchitna Lake, the Deshka River upstream of the confluence of Moose and Kroto creeks (The Forks), and the Fish Creek drainage located within the Talkeetna River drainage. Only unbaited, single-hook lures are allowed in these waters.

2. Long (Kepler/Bradley), X and Wishbone Lakes designated catch-and-release only, unbaited, single hook, artificial lures only.

1991

1. In Lake Creek only unbaited, artificial lures may be used August 15 through December 31 from a department marker 100 yards upstream of the mouth to department marker ¼ mile upstream of Bulchitna Lake.
2. The Talachulitna River catch-and-release area was extended to within ¾ mile of the confluence of the Talachulitna River with the Skwentna River.

1993

1. In Big Lake the rainbow trout bag limit was reduced to 2 daily and in possession.
2. In the upper Cook Inlet area only 1 rainbow trout per day and 2 per season may be over 20 inches in length.
3. Long, X, and Wishbone lakes are closed to sport fishing from November 1 through April 30.
4. The North Fork of the Kashwitna River was established as a special management area for rainbow trout. Only single-hook, unbaited, artificial lures may be used in the North Fork of the Kashwitna River and rainbow trout may not be possessed or retained; all rainbow trout caught must be released immediately.
5. Only unbaited artificial lures may be used in all flowing waters of the Susitna-West Cook Inlet area (except when fishing for burbot when using legal gear for burbot) from September 1 through May 15, except in areas in which special regulations are in effect.
6. In the Lake Creek drainage, rainbow trout may not be possessed or retained in all flowing waters from August 15 through May 15, upstream from a department marker located approximately 100 yards upstream from its confluence with the Yentna River to a department marker located approximately one-quarter mile upstream from Bulchitna Lake. Only single-hook unbaited artificial lures may be used in this area during this time period. The Lake Creek drainage upstream from the Bulchitna Lake marker continues to be managed as a catch-and-release area for rainbow trout.

1995

Only unbaited artificial lures may be used in all flowing waters of the Susitna River drainage from September 1 through July 15.

1996

In November 1996 the BOF adopted the Criteria for Establishing Special Management for Trout, 5 ACC 75.013, to replace the Cook Inlet and Copper River Rainbow/Steelhead Trout Management Policy for use in instituting regulations. Bag and possession limits under this concept are 2 trout, of which only 1 may be 20 inches or more in length and also requires the use of unbaited artificial lures in all flowing waters from September 1 through May 15.

1997

1. Rainbow trout may not be possessed or retained and only unbaited, single-hook, artificial lures may be used in all waters of the Prairie Creek drainage and within one-quarter mile of its confluence with the Talkeetna River.
2. Rainbow trout, Dolly Varden, whitefish, and Arctic grayling may not be possessed or retained in all waters of the Alexander Creek drainage and within one-quarter mile of its confluence with the Susitna River.
3. The retention of rainbow trout in the Willow Creek drainage and in all waters within one-half mile radius of its confluence with the Susitna River is prohibited. All rainbow trout caught in the Willow Creek drainage and within a one-half mile radius of its confluence with the Susitna River must be immediately released.
4. The retention of rainbow trout is prohibited in Montana Creek drainage and all waters within a one-half mile radius of its confluence with the Susitna River.
5. The bag and possession limits for rainbow trout in all flowing waters and nonstocked lakes of the Susitna West-Cook Inlet Area open to the retention of rainbow trout are 2 rainbow trout of which 1 may be over 20 inches in length and the bag and possession limits in stocked lakes are 5 rainbow trout of which 1 may be over 20 inches in length. Stocked lakes are: Barley, Bear Paw, Bench, Benka, Beverly, Big No Luck, Upper and Lower Bonnie, Bruce, B-J, Canoe, Carpenter, Christiansen, Coyote, Crystal, Dawn, Diamond, Echo, Farmer, Finger, Lalen, Little Lonely, Little No Luck, Loberg (Junction), Long (Glenn Highway MP 86), Loon, Lorraine, Lucille, Lynne, Marion, Matanuska, Meirs, Memory, Morvro, North Friend, Prator, Ravine, Reed, Rocky, Ruby, Seventeenmile, Seymour, Slipper, South Friend, South Rolly, Tigger, Twin Island, Vera, Victor, Visnaw, Walby, Weiner, West Sunshine, Willow, Wolf, and Y.
6. Only unbaited, single-hook, artificial lures may be used in all flowing waters of the Alexander Creek drainage upstream of an ADF&G regulatory marker located 400 yards upstream of the confluence of Trail Creek.
7. Unbaited, single-hook, artificial lures are required year-round upstream of the Parks Highway in Rabideux Creek, Montana Creek, Goose Creek, Caswell Creek, Kashwitna River, Grays Creek, Little Willow Creek, Sheep Creek, Willow Creek, and Little Susitna River, and upstream of a department regulatory marker in Birch Creek drainage, Sunshine Creek drainage, and upstream of the Petersville Road in Trapper Creek.
8. Only unbaited, single-hook, artificial lures may be used from September 1 through May 31 in all waters of the above described drainages (number 7 above) and in all waters within a one-half mile radius of their confluence with the Susitna River or the mouth of the Little Susitna River.
9. Unbaited, single-hook, artificial lures are required year-round in the Willow Creek drainage upstream of a department marker located one-quarter mile upstream from its confluence with the Susitna River and in all waters of the Willow Creek drainage and within a one-half mile radius of its confluence with the Susitna River from September 1 through May 31.

10. Only unbaited, single-hook, artificial lures may be used year-round in Montana Creek upstream of the Parks Highway. Only unbaited, single-hook, artificial lures may be used in Montana Creek downstream of the Parks Highway and in all waters within a one-half mile radius of its confluence with the Susitna River from September 1 through May 31.

1999

1. Willow Creek went from no retention of rainbow trout to allowing the retention of 1 rainbow trout under 16 inches in length per day and in possession upstream of the Parks Highway bridge. The single-hook, unbaited, artificial lure provision for this area remains in effect. Downstream of the Parks Highway bridge rainbow trout may still not be possessed or retained.
2. Anglers will be allowed to retain rainbow trout and use bait when fishing on the Willow Creek drainage lakes. The bag and possession limits in Shirley, Long, and Rainbow lakes are 2 per day and 2 in possession with only 1 over 20 inches in length. The bag and possession limits in Willow and Crystal lakes, which are stocked annually, are 5 per day and 5 in possession with only 1 over 20 inches in length. The seasonal limit of 2 rainbow trout greater than 20 inches applies to these and all other Cook Inlet waters.
3. Anglers will not be allowed to harvest rainbow trout from Canyon Creek (Skwentna River drainage). Additionally, only single-hook, unbaited, artificial lures may be used in Canyon Creek year-round.
4. Anglers will not be allowed to retain rainbow trout in flowing waters of West Cook Inlet and the Susitna River drainage from April 15 to June 14. This regulation applies to all flowing waters in these areas, including Willow Creek. This regulation provides for catch-and-release fishing for rainbow trout during this time period.
5. In Big Lake (Houston area) only unbaited, single hook, artificial lures may be used from November 1 through April 30.
6. On the Little Susitna River, anglers will be allowed to use treble hooks year-round downstream of the Parks Highway Bridge. Existing bait restrictions were modified to allow the use of bait during the month of September. Aimed at salmon with small effect on rainbow trout fishing.

In **2000** and **2001** no changes were made affecting rainbow trout fisheries.

2002

The following regulations affecting rainbow trout were adopted by the BOF during the February 2002 meeting:

1. Allow beads fixed on line within 2 inches of fly, lure, or hook.
2. Clarify the single-hook regulation to mean one single hook.
3. In the East Fork of Chulitna, Theodore and Lewis rivers only one single-hook, unbaited artificial lure may be used January 1 through July 13. This regulation was made in conjunction with allowing a hook-and-release fishery for king salmon.

At this time the majority of Cook Inlet rainbow trout fisheries are managed under a seasonal limit of 2 rainbow trout over 20 inches. To assure compliance with this regulation, anglers must, immediately upon harvesting a trout over 20 inches, record that harvest on the back of their license or on a harvest record.

In **2003** and **2004** no changes were made affecting rainbow trout fisheries.

2005

1. In January 2005, the BOF increased the annual limit for rainbow trout caught in Northern Cook Inlet stocked lakes from two to 10 fish.

In **2006** there were no changes affecting rainbow trout fisheries.

Appendix B5.-Northern pike regulatory history for Northern Cook Inlet Management Area waters.

1989

1. The board adopted a proposal to establish a bag limit of 10 per day 10 in possession on northern pike in Susitna-West Cook Inlet Area.

1997

1. Sport fishing for northern pike using five (5) lines is allowed in specified lakes of the Susitna-West Cook Inlet Area provided: hooks are single hooks with a gap between the point and shank no smaller than three-quarters inch, the lines are closely attended, and all species of fish other than northern pike are immediately released. Specified lakes include: Alexander Lake, Sucker Lake, Trapper Lake, Flathorn Lake, Whiskey Lake, Hewitt Lake, Donkey Lake, Three Mile Lake (Beluga area), Neil Lake, Kroto Lake, and lakes of the Nancy Lake Recreation Area excluding Nancy and Big No Luck Lake.
2. The 10 fish bag and possession limits on northern pike in the Susitna-West Cook Inlet Area were repealed.

1998

1. Established a slot limit for northern pike in Alexander and Trapper lakes. No bag and possession limits are in effect for pike less than 22 inches in length. Northern pike between 22 inches and 30 inches in length may not be retained. The bag and possession limits for pike 30 inches or greater in length are 1 per day and 1 in possession. Additionally, the action taken for Alexander and Trapper lakes reduced the number of lines allowed when fishing through the ice for northern pike from 5 lines to 2 lines, and prohibited the use of spears and bow and arrows for taking of northern pike.
2. Action resulted in allowing the use of bow and arrow for taking northern pike in NCI waters.
3. Action resulted in eliminating the ¾-inch single-hook size restriction when fishing through the ice on select northern Cook Inlet lakes where 5 lines are allowed.

2002

1. The use of five lines while ice fishing for pike applies to seven additional lakes in Northern Cook Inlet: Trapper Lake, Big No Luck Lake, Figure Eight Lake, Cabin Lake, Lower Vern Lake, Upper Vern Lake and Lockwood Lake. On Trapper Lake, there is no longer a "slot limit" for pike; bait, multiple hooks, spears, and bow and arrow gear are now allowed. For the purposes of sport fishing, legal bow and arrow gear includes crossbows. When fishing through the ice for pike, anglers may use two hooks on a single line, provided that both hooks are attached to one single piece of bait.

APPENDIX C. MANAGEMENT PLANS AND POLICIES

Appendix C1.-Management plans and policies that impact Northern Cook Inlet Management Area fisheries.

5 AAC 21.363. **UPPER COOK INLET SALMON MANAGEMENT PLAN** (UCISMP) provides long-term direction to the Alaska Board of Fisheries for allocation and conservation of fisheries involving Upper Cook Inlet (UCI) salmon stocks. The plan defines UCI salmon stocks as those that move through the Northern and Central Districts and spawn in waters draining into those districts. Various "step down" management plans relate to the Upper Cook Inlet Salmon Management Plan and provide specific direction to fishery managers regarding user groups, time, area or species.

The Upper Cook Inlet Salmon Management Plan established the following provisions for the management and conservation of UCI salmon stocks:

1. Provide for a subsistence priority.
2. Harvest of UCI salmon will be governed by specific and comprehensive management plans.
3. In adopting these plans the following will be considered: need for subsistence, protection of fisheries habitat, and the needs and demands of user groups.
4. The management plans may address: the need to allocate harvestable surplus among commercial, sport, guided sport and personal use fisheries and the need to allocate the harvestable surplus within user groups.
5. In the absence of a specific management plan salmon shall be harvested in the fisheries that have historically harvested them.
6. In the absence of a specific management plan the burden of conservation shall be shared among all user groups in close proportion to their respective harvest.

Included in the UCISMP are eight guiding principals to assist the Alaska Board of Fisheries when taking actions associated with adoption of regulations regarding upper Cook Inlet salmon stocks. These principles are:

1. Conservation and sustained yield of healthy salmon resources and maintenance of the habitat and ecosystem on which salmon and allied species depend for survival throughout their life-cycle.
2. Maintenance of viable and diverse fish species and stocks.
3. Maintenance of the genetic diversity of fish species and stocks.
4. Presentation to the Board of the best available information.
5. Proposed actions should be capable of being implemented and evaluated. This consideration includes factors such as flexible and adaptive management, conflict with other law and mixed-stock management.
6. Proposed actions should provide tangible benefits to user groups or conservation, with the least risk to existing fisheries and to conservation.
7. Maintenance of the stability and viability of sport, commercial and personal use fisheries.

8. Use a precautionary approach in a manner consistent with the degree of uncertainty regarding the status and biology of the resource.

5 AAC 01.560. **TYONEK SUBSISTENCE FISHERY** is an important component of the Upper Cook Inlet Salmon Management Plan. This fishery provides subsistence fishing opportunity primarily to residents of the village of Tyonek. Fish harvested in this fishery are bound for NCIMA. Specific fishing periods occur from May 15 through October 15. A 4,200 Chinook salmon harvest quota has regulated this fishery since 1980.

5 AAC 21.368. **BIG RIVER SOCKEYE SALMON MANAGEMENT PLAN** authorizes a harvest of Big River salmon by set gillnets in the Kustatan Subdistrict of the Central District. Sockeye salmon is the targeted species. This fishery extends from June 1 through June 24, on Monday, Wednesday and Friday from 7:00 a.m. to 7:00 p.m. It is subject to emergency closure when the incidental harvest of Chinook salmon exceeds 1,000 fish. At the January 2005 BOF meeting, the plan was amended to expand fishing to a portion of the Kalgin Island Subdistrict along the western shore from Light Point to the Kalgin Island Light on the southern end of the island.

5 ACC 21.353. **CENTRAL DISTRICT DRIFT GILLNET FISHERY MANAGEMENT PLAN** was partitioned from the Northern District Salmon Management Plan during the January 2005 BOF meeting. Management of the drift gillnet fishery is dependent on the run strength of sockeye salmon to the Kenai River.

1. The drift fishery opens the third Monday in June or June 19, whichever is later.
2. From July 9 through July 15, Drift gillnet fishing is restricted for two regular fishing periods to the Kenai and Kasilof Sections and Drift Area One described below.

   In runs of over 2 million sockeye salmon to the Kenai River there may be one additional 12-hour period in the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Area One.
3. From July 16 through July 31,

   In runs of less than 2 million sockeye salmon to the Kenai River there will be two regular 12-hour fishing periods restricted to the Kenai and Kasilof Sections of the Upper Subdistrict and Drift Area One;

   In runs of between 2 and 4 million sockeye salmon to the Kenai River; there will be two regular 12-hour fishing periods restricted to the Kenai and Kasilof Sections of the Upper Subdistrict and in Drift Areas One & Two;

   In runs of over 4 million sockeye salmon to the Kenai River, there are no mandatory restrictions.
4. From August 11 until closed by emergency order, Drift Areas Three & Four are open for regular periods; Chinitna Bay may be opened by emergency order.

Four drift fishing areas were identified and defined:

(1) “Drift Area One” includes those waters of the Central District south of Kalgin Island at 60° 20.43' N. lat.;

(2) “Drift Area Two” includes those waters of the Central District enclosed by a line from 60° 20.43' N. lat., 151° 54.83' W. long. to a point at 60° 41.08' N. lat., 151° 39.00' W. long. to a point at 60° 41.08' N. lat., 151° 24.00' W. long. to a point at 60° 27.10' N. lat., 151° 25.70' W. long. to a point at 60° 20.43' N. lat., 151° 28.55' W. long.;

(3) “Drift Area Three” includes those waters of the Central District within one mile of mean lower low water (zero tide) south of a point on the West Foreland at 60° 42.70' N. lat., 151° 42.30' W. long.;

(4) “Drift Area Four” includes those waters of the Central District enclosed by a line from 60° 04.70' N. lat., 152° 34.74' W. long. to the Kalgin Buoy at 60° 04.70' N. lat., 152° 09.90' W. long. to a point at 59° 46.15' N. lat., 152° 18.62' W. long. to a point on the western shore at 59° 46.15' N. lat., 153° 00.20' W. long., not including the waters of the Chinitna Bay Subdistrict.

5 AAC 21.358. **NORTHERN DISTRICT SALMON MANAGEMENT PLAN** provides for the following management guidelines:

1. Minimizes the harvest of coho salmon bound for the Northern District of UCI and provides the department direction for management of salmon stocks.
2. Manage the Northern district commercial salmon fisheries based on abundance of Yentna River sockeye salmon, or other salmon indices, as it deems appropriate.
3. Manage the Northern district commercial salmon fisheries to minimize the incidental take of coho salmon stocks bound for the Northern District.
4. Restricts Central District drift gillnet fishery weekly fishing periods unless late-run sockeye salmon to the Kenai River will be more than 4 million.
5. Personal use fishing with a set gillnet is prohibited in the Northern District.
6. Employ a precautionary approach to chum salmon management.
7. Minimize the harvest of coho salmon by not allowing targeted pink salmon fishing in the Central and Northern districts until a pink salmon management plan is brought to the Alaska Board of Fisheries in 2002.
8. Directs the department to conduct habitat assessments to determine loss of riparian habitat by noncommercial fishermen.

5 AAC 21.365. **COOK INLET PINK SALMON MANAGEMENT PLAN** adopted in 2002 and amended in 2005, provides for even year pink salmon returns to be managed primarily for commercial uses while minimizing the harvest of Northern District and Kenai River coho salmon stocks. A commercial pink fishery is authorized if: pink stocks are sufficient, coho escapement goals in Upper Cook Inlet are being met and sport fishermen will have a reasonable opportunity to harvest coho salmon over the entire coho run, as measured by the frequency of inriver restrictions.

5 AAC 21.366. **NORTHERN DISTRICT KING SALMON MANAGEMENT PLAN** was adopted in 1985 and amended in 2005 by the BOF. This plan provides for the management of the commercial harvest of Chinook salmon in the Northern District as follows.

1. The season runs from the first Monday on or after May 25 through June 24; three periods will be allowed unless closed earlier by emergency order.
2. Fishing periods were 7:00 a.m. to 1:00 p.m. on Mondays. At the January 2005 BOF meeting, fishing time was extended to 12-hour periods, 7:00 a.m. to 7:00 p.m. on Mondays.
3. Harvest shall not exceed 12,500.
4. Set gillnets may not exceed 35 fathoms in length and 6 inches in mesh size.
5. No Commercial Fisheries Entry Commission (CFEC) permit holder may operate more than one set gillnet at a time.
6. No net shall be set within 1,200 feet of another.
7. No net shall be placed seaward of another.
8. May 25 though June 24 the area from 1 mile south of the Theodore River to the Susitna River is open the second regular Monday only.
9. If the Theodore, Lewis or Ivan River is closed to sport fishing, the area 1 mile south of the Theodore River to the Susitna River will be closed to commercial king fishing for the remainder of the season by emergency order.
10. If the Deshka River is closed to sport fishing the commercial king salmon fishery throughout the Northern District will close for the remainder of the season by emergency order.
11. If the Chuitna River is closed to sport fishing the area from 1 mile south of the Chuitna River to the Susitna River will be closed to commercial king fishing by emergency order for the remainder of the season.

*note: Although not directly part of this plan, the gear restriction (5 AAC 21.331(d)(2)) of two nets from August 1 to August 10 was repealed during the January 2005 BOF meeting.

5 AAC 21.370. **PACKERS CREEK SOCKEYE SALMON MANAGEMENT PLAN** directs the department not to base commercial fishing time in the Kalgin Island Subdistrict on enhanced run strength of Packers Creek sockeye salmon. The plan limits extra fishing time to no more than one additional fishing period per week.

5 AAC 61.060. **LITTLE SUSITNA RIVER COHO SALMON MANAGEMENT PLAN** was adopted by the BOF in 1990 and subsequently modified. The purpose of this plan is to ensure an adequate spawning escapement of coho salmon into the Little Susitna River and provide management guidelines to the department. The escapement goal is set at 10,100-17,700 coho salmon above the Parks Highway Bridge. The management plan also limits tackle to artificial lures from July 14 through August 5 and sets the bag and possession limit to 2 for coho 16 inches or greater.

5 AAC 75.210. **SPECIAL MANAGEMENT AREAS AND LIBERAL HARVEST OPPORTUNITIES FOR TROUT** (previously titled, Criteria for Establishing Special Management Areas for Trout) was adopted by the BOF in November 1996 from the Cook Inlet and Copper River Basin Rainbow/Steelhead Trout Management Policy. These criteria provide future Fisheries Boards, ADF&G managers, and the sport fishing public with the following:

1. Management policies and implementation directives for Cook Inlet rainbow and steelhead trout, and
2. A systematic approach to developing sport fishing regulations that includes a process for rational selection of waters for such special management as catch-and-release, trophy areas and high yield fisheries.

3. The Statewide Management Standards for Wild Trout (5 AAC 75.220), effective November 2003, directs the Department to manage wild stocks of rainbow trout for optimal sustained yield, based on management objectives that maximize benefits of the fisheries while maintaining genetic diversity, biologically desirable size composition, and abundance levels that do not require stocking to enhance or supplement the wild stocks.

4. Due to concerns over lack of stock status information and the potential for increased angler effort on wild stocks, the potential for loss of fishing opportunity, and the potential for over-exploitation, the BOF intends to manage wild rainbow trout stocks conservatively. Conservative management for areas of the state other than Southeast Alaska, means a bag and possession limit of 2 fish, of which only 1 may be 20 inches of greater in length with an annual limit of 2 fish 20 inches or greater in length. Note: no changes to NCI wild rainbow trout regulations were made during the January BOF with respect to statewide management standards because regulations within the NCIMA already complied with these standards.

5 AAC 61.014. **CRITERIA FOR ESTABLISHING SPECIAL MANAGEMENT AREAS FOR DOLLY VARDEN** provides guidelines for identifying and selecting special management areas that would diversify sport fishing opportunity for populations of wild Dolly Varden, such as catch-and-release, fly-fishing only, or trophy designation. Theses criteria are nearly identical to those listed for rainbow trout under 5 AAC 75.210.

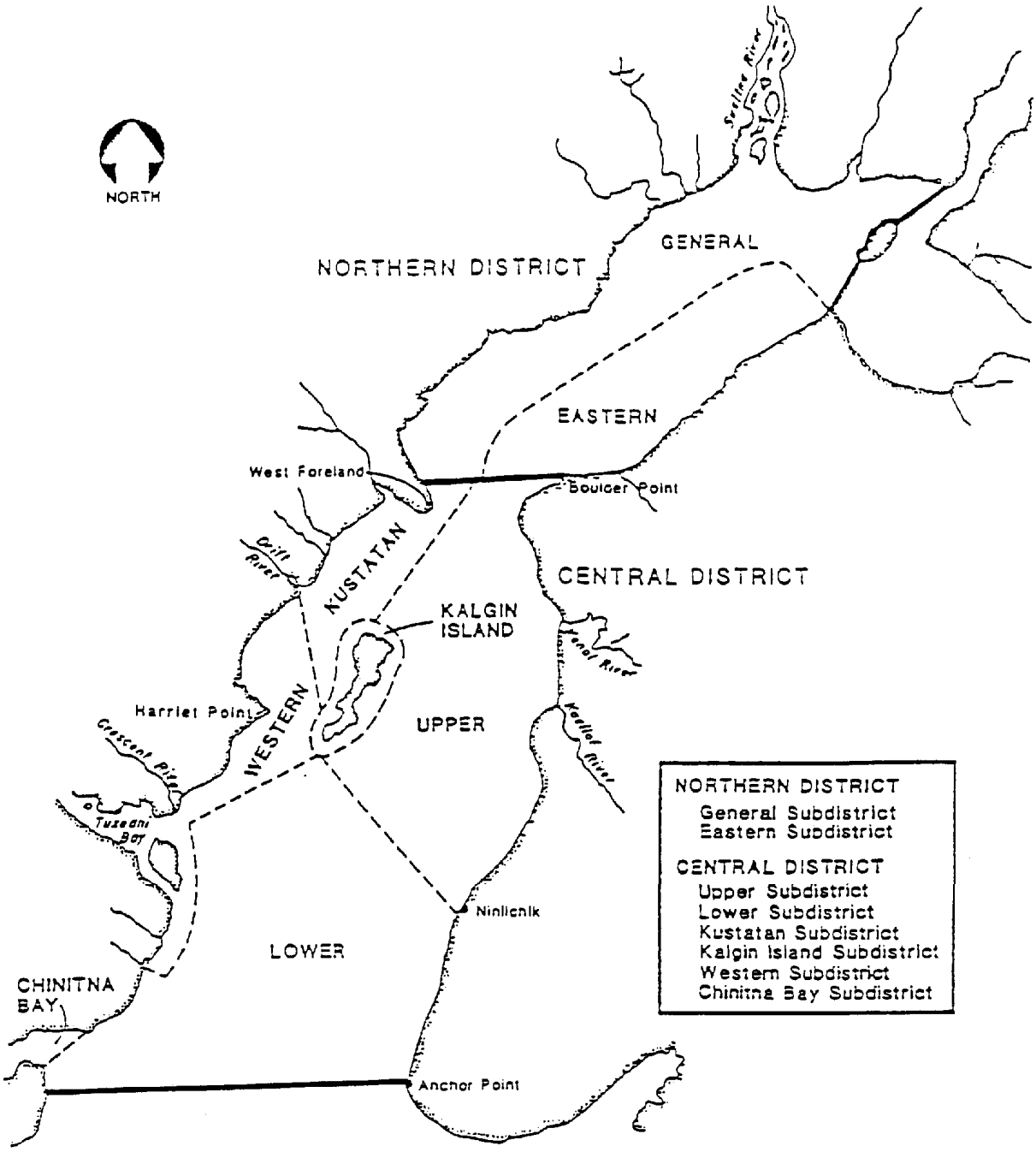
5 AAC 77.540. **UPPER COOK INLET PERSONAL USE SALMON FISHERY MANAGEMENT PLAN** establishes time, area, methods and means for taking salmon for personal use. This plan first went into effect during the 1996 season. Salmon harvest opportunity was established to replace the harvest opportunity previously provided through the Upper Cook Inlet Subsistence Salmon Management Plan which was repealed by the BOF in 1995. The Upper Cook Inlet Personal Use Salmon Fishery Management Plan provides for personal use dip net fisheries in the Kenai and Kasilof rivers and Fish Creek. Additionally, limited personal use gillnet fishing opportunity is provided near the terminus of the Kasilof River.

5 AAC 01.593. **UPPER YENTNA RIVER SUBSISTENCE SALMON FISHERY** establishes a subsistence fish wheel fishery for salmon other than king salmon in the Yentna River downstream of its confluence with the Skwentna River to the confluence of Martin Creek. A seasonal limit of 2,500 salmon was set. This fishery was implemented as a personal use fishery during the 1996 and 1997 seasons. State Supreme Court and BOF action changed it to a subsistence fishery beginning in 1998.

Fisheries for other species not covered by the above management plans or policies are managed to assure sustained yield of the targeted fish stock while assuring the continued, and where possible, the expanded opportunity to participate in the fishery.

Susitna Basin Recreation Rivers Act. In the spring of 1988, the Alaska legislature passed the Recreation Rivers Act (Sec. 41.23.400) and assigned oversight responsibilities related to this act to the Alaska Department of Natural Resources (ADNR). This act established six recreation rivers: Little Susitna River, Deshka River (including Moose and Kroto creeks), Talkeetna River, Lake Creek, Talachulitna River, and Alexander Creek. The legislation was enacted to insure that all state lands and waters within the six river corridors are maintained and enhanced for recreation and wildlife purposes. A 2-year planning process was completed, which included input from affected individuals, groups, agencies and officials throughout the area. The plan (ADNR 1991) was adopted as ADNR policy in the spring of 1991 following legislative review of the document. Regulations associated with the plan were available for public comment through January 7, 1994. Regulations went into effect for the 1996 season, but no funds have been allocated for enforcement.

APPENDIX D. UPPER COOK INLET COMMERCIAL SALMON FISHERY



Appendix D1.-Upper Cook Inlet commercial salmon fishing districts.

Appendix D2.-Commercial salmon catch from all Upper Cook Inlet districts, 1977-2006.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1977	14,790	2,052,291	192,593	553,855	1,233,436	4,046,965
1978	17,299	2,621,421	219,193	1,688,442	571,779	5,118,134
1979	13,738	924,406	265,164	72,980	649,758	1,926,046
1980	13,798	1,573,588	271,416	1,786,421	387,815	4,033,038
1981	12,240	1,439,262	484,405	127,143	831,977	2,895,027
1982	20,870	3,259,864	792,224	790,644	1,432,940	6,296,542
1983	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874
1984	10,062	2,106,714	449,993	617,452	680,726	3,864,947
1985	24,088	4,060,429	667,213	87,828	772,849	5,612,407
1986	39,254	4,791,562	757,319	1,300,939	1,134,817	8,023,891
1987	39,431	9,465,994	449,421	109,381	348,809	10,413,036
1988	29,069	6,834,833	560,948	471,076	710,615	8,606,541
1989	26,737	5,011,124	339,818	67,441	122,051	5,567,171
1990	16,105	3,604,259	501,643	603,434	351,123	5,076,564
1991	13,542	2,178,331	426,487	14,663	280,223	2,913,246
1992	17,171	9,108,353	468,930	695,861	274,303	10,564,618
1993	18,871	4,755,329	306,882	100,934	122,770	5,304,786
1994	19,954	3,565,586	583,793	523,434	303,177	4,995,944
1995	17,893	2,951,827	446,954	133,575	529,422	4,079,671
1996	14,306	3,888,922	321,668	242,911	156,501	4,624,308
1997	13,292	4,176,738	152,404	70,933	103,036	4,516,403
1998	8,124	1,219,242	160,660	551,260	95,654	2,034,940
1999	14,383	2,680,510	125,908	16,174	174,541	3,011,516
2000	7,350	1,322,482	236,871	146,482	127,069	1,840,254
2001	9,295	1,826,833	113,311	72,559	84,494	2,106,492
2002	12,714	2,773,118	246,281	446,960	237,949	3,717,022
2003	18,490	3,476,159	101,756	48,789	120,767	3,765,961
2004	27,476	4,926,220	311,056	357,939	146,164	5,768,855
1977-2004 Mean	18,249	3,630,183	373,951	420,351	467,844	4,910,579
2005	28,171	5,238,168	224,657	48,419	69,740	5,609,155
2006	18,029	2,192,730	177,853	404,111	64,033	2,856,756

Source: Commercial salmon catch data from Shields (2007), Appendix A6. Catch statistics prior to 2006 reflect minor adjustments to harvest database.

APPENDIX E. ACCESS PROJECTS

Fisheries Access Improvements 2005-2006

Providing new and upgrading existing angler access in order to increase fishing opportunities in NCIMA fisheries is an ongoing concern. Efforts are directed at a few stocked lakes each year. Appendix E1 lists completed access projects. Proposed projects are listed in Appendix E2. Appendix E3 summarizes access to NCIMA stocked lakes.

Current projections/projects include:

1. Signage identifying public access on an as-needed basis. Also providing small road, trail, and site maintenance on an as-needed basis.

2. Wolverine Lake ROW determination and public access land purchase. Initial investigation started (winter 06/07) by Alaska Department of Fish and Game, Habitat Division and Legal Access Shop to resolve dispute on RS2477 legal access trail with discontented property owners (Moore's). Presently, are proceeding to define/determine the legal access easement with the Moore's. Once legal access is reconciled present proposal to purchase approximately a 10' x 60' access corridor/easement through MHTLO property from one of two lakefront parcels (~6.25 acres) to insure continued public access to lake. This portion of the project is contingent upon securing/finalizing legal access to the lots by way of the RS2477 easement. Cost - approximate estimate $25K total for survey and corridor/easement purchase.

3. Eklutna Tailrace access facility improvements. The main project was completed in spring of 2005, which resulted in a safer entrance road, a 77-space parking lot, a wheelchair-accessible steel bridge, improved accessible trails, toilet screens, dumpster and trash receptacles, and many other improvements for sport anglers. As the Chinook and coho salmon fisheries expand this popular fishing area use is growing. Consequently, management/sanitation (portable latrine) issues have arisen the past two summers. Need a funding commitment from the **region** to purchase/install a double vault latrine to meet the every increasing demand at the raceway.

4. Leila Lake public access acquisition. The only undeveloped-access (gravel road) to this lake was recently purchased and is no longer available to the general public. The public had used this access site for more than 50 years. This lake is surrounded by public BLM property but there is no longer any public access road to the lake. This project would require acquiring an ILMA from BLM for a proposed 100 ft wide public access easement to construct a road to the lake. The project would include the cost of a design plan, permitting, survey and the construction of a 100-200 yard gravel road. This lake is the closest productive burbot and grayling lake to the Mat-Su and Anchorage area and public access is very important. This project could generate as many as 5,000 angler days per year.

5. Talkeetna Boat Launch. A shift in the flow of the Talkeetna River's main channel and flow to the side channel that provides water to the launch has resulted in decreased water flow and increased sediment deposition and erosion in the area of the boat ramp. The long-term solution for this project consists of dredging in the area of the mouth of the side channel on a annual basis in order to increase water volume at the launch and to help decrease sediment loading and allow for more mooring space.

6. Su Landing Launch Facility Improvements. Started initial phase of large CIP improvement project at boat launch facility to be finished in the fall 2007. Completed riverbank stabilization, and clearing and grubbing of camping loops B & C fall of 2006.

Appendix E1.-Completed access projects for Northern Cook Inlet Management Area, 2005 and 2006.

	Location [a]	Project/Manager [a]	Cost	Completed
	Non-Boating Projects			
1.	Maintenance of existing SFD access sites.	Toilets, waste removal, cleaning services, road grading and repairs, signage, and miscellaneous repairs.	$52,850.00	Seasonal 05-06 (May-September)
2.	Sheep Creek	Sheep Creek trail/fence upgrade design plan repair with cost estimate, kiosk and vault latrine repair, relocate fishing platform/bridge.	$5,500.00	May-September 06
3.	Eklutna Tailrace improvement project.	Project completed at Eklutna Tailrace day-use access site in spring of 2005, which resulted in a safer entrance road, a 77-space parking lot, a wheelchair-accessible steel bridge, improved accessible trails, toilet screens, dumpster and trash receptacles, and many other improvements for sport anglers.	$450,000.00	May 05
4.	Legal Access Research	Completed access research and resolved issues at multiple sites including in-field work investigating/defining legal access easements, e.g. historical trails verses granted/dedicated access etc.	$0.00	05-06
5.	Eklutna Park Ranger Position	Provide funds via RSA to State Parks for a ranger position to provide patrols of the facility	$11,780.00	Seasonal .05-.06 (May-September)
		TOTAL	$520,130.00	
	Boating Projects			
1.	Maintenance of existing SFD access sites.	Toilets, waste removal, cleaning services, dredging, road grading and repairs, signage, and miscellaneous repairs.	$25,500.00	Seasonal .05-.06 (May-September)
2.	Su Landing/ Kashwitna River Improvements. (CIP Total Project Costs - $2.3Mil)	Started initial phase of large CIP improvement project at boat launch facility to be finished in the fall 2007. Completed riverbank stabilization, and clearing and grubbing of camping loops B & C.	$431,000.00	Oct-Nov 06
3.	Talkeetna side channel maintenance.	Excavated mouth of side channel per permits to remove debris, which blocked the channel's mouth to increase the water flow and raise the water level at the boat launch. Coordinated with: DNR, MSB, COE, Habitat, FAA and DGC.	$2,300.00	April 05/06
4.	Little Susitna PUF operations.	Funded DPOR for 2005/2006 maintenance and operations.	$68,000 05 $85,000 06	June 30, 2005 June 30, 2006
5.	Su Landing / Kashwitna River Dyke repair	Emergency dyke repair at boat launch facility due to damage from high water event.	$10,000.00	July 06
6.	Bonnie Lake (MHT 9200237) land acquisition completed.	Completed Bonnie Lake phase I environmental audit, appraisal, final review and met standards for the Federal Uniform Act, final purchase agreement and deed language finalized and approved by USFWS, DNR MLW, MHT and ADF&G., payment approved and sent to MHTLO purchase finalized.	$185,000.00	May 06
7.	Su Landing / Kashwitna River flood repair damage.	Completed emergency repairs at boat launch facility due to August flood damage that was a federal declared disaster. Dredge/excavation work, debris removal, septic and electrical repairs to return facility back to pre-flood conditions.	$36,010.00	Aug-Oct 06
8.	Talkeetna River flood repair damage.	Completed emergency repairs at boat launch facility due to August flood damage that was a federal declared disaster. Dredge/excavation work/ repairs to return facility back to pre-flood conditions.	$20,500.00	Oct 06
9.	LSPUF flood repair damage.	Completed emergency repairs at boat launch facility due to August flood damage that was a federal declared disaster. Launch, bank and trail work/repairs to return facility back to pre-flood conditions.	$1,789.10	Sept 06
10.	Horseshoe Lake F-13-L-30 (Big Lake area) land acquisition completed.	Completed Horseshoe Lake final purchase agreement and deed language finalization/approval by USFWS, DNR MLW, MHT and ADF&G, payment approved and sent to MHTLO purchase finalized.	$80,000.00	April 05
		TOTAL	$948,099.10	

[a] DPOR = Department of Natural Resources Division of Parks and Outdoor Recreation
COE = Core of Engineers
SFD = Division of Sport Fish
LSPUF = Little Susitna Public Use Facility
WC = Division of Wildlife Conservation
DGC = Department Governmental Coordination
MSB = Mat Su Borough
FAA = Federal Aviation Administration
MHTLO –State of Alaska Mental Health Trust Land Office
DNR MLW – Department of Natural Resources
USFWS = United State Fish and Wildlife Service

Appendix E2.-Proposed access projects for Northern Cook Inlet Management Area in 2007.

	Location	Project/Manager [b]	Estimated Cost	Funding Year [b]
	Non-Boating Projects [a]			
1.	Region II Small Access Maintenance	Site maintenance contracts, signage, road grading & repair, and miscellaneous repair.	$39,500	SAM FY07/08
2.	Eklutna Tailrace	Install double vault latrine to meet the increased demand to the newly designed and upgraded facility.	$50,000	Regional funding commitment
3.	Stocked and Wild lakes and stream fishing access sites.	Conduct access site survey and construct/complete access improvements at Sheep Creek ($15,352) and X & Y Lake. Improvements consist of design plans and stairs, fencing and walkways.	$25,000	SAM FY07/08
4.	Wolverine Lake access parcels	Anchorage Legal Access Shop and DNR MLW need to resolve dispute on RS2477 legal access trail with discontented property owners (Moore's). To proceed possibly need AG's office involvement to step up process and spell-out legal determination in a registered letter to the Moore's. Once legal access is reconciled present proposal to purchase approximately a 10' x 60' access corridor/easement through MHTLO property from one of two lakefront parcels (~6.25 acres) to insure continued public access to lake. This portion of the project is contingent upon securing/finalizing legal access to the lots by way of the RS2477 easement. Cost - approximate estimate $25K total for survey and corridor/easement purchase.	$25,000	Regional funding commitment
		TOTAL	**$139,500**	
	Boating Projects [a]			
1.	Region II Small Access Maintenance	Road and site maintenance including annual dredge work.	$31,000	SAM FY07/08
2.	Little Susitna River Public Use Facility	RSA to fund State Parks for LSPUF operation.	$95,325 [c]	SAM FY07/08
3.	Susitna Landing Boat Launch Facility Improvements	Development/improvement project at existing boat launch facility. Project includes riverbank stabilization, parking expansion, improvements in camping loops A, B and C, (including electric and septic upgrades), showers, new gate and barriers. Construction started in the fall of FY07 and project completion scheduled for the fall FY08.	$2,300,000	CIP FY05/06/07
4.	Stocked and Wild lakes	Conduct access site survey.	$1000	SAM FY07/08
5.	Leila Lake public access	Lost access to lake through private property purchase. Need to establish legal public access by way of BLM property by securing an Inter-agency Land Management Agreement on said property and then develop a short access road to the lake. Cost - approximate estimate $25K total for a survey with design and construction cost for the road.	$25,000	CIP FY08/09
		TOTAL	**$2,590,825**	

[a] Completed access projects are listed in Appendix E.

[b] ADA=Americans with Disabilities Act; AG=Attorney General; CIAP=Coastal Impact Assistance Program; BLM-Bureau of Land Management; CIP=Capitol Improvement Project; DNR = Division of Natural Resources, MLW = Division of Mining, Land, and Water; DPOR=Division of Parks & Outdoor Recreation; FY=Fiscal Year; SFD=Division of Sport Fish; LSPUF=Little Susitna Public Use Facility; MHTLO= State of Alaska Mental Health Trust Land Office; MSB=Mat-Su Borough; RSA= Reimbursable Service Agreement; SAM=Small Access Maintenance; and SRA=State Recreation Area (managed by DPOR)

[c] RSA - Reimbursable Service Agreement amount fluctuates year-to-year depending on revenue receipt income received.

Appendix E3.-Northern Cook Inlet Management Area stocked lakes access summary.

LAKE	ACCESS ROUTE	EASEMENT [a] CLASSIFICATION	PARKING AREA	TRAIL CONDITION	% PUBLIC SHORELINE	COMMENTS
Barley	good	PUE	5 vehicle gravel	cleared section line	1%	100 yd. walk in
Bearpaw	good	PUA	5 vehicle gravel	gravel road to lake	50%	designated public park in plat maps
Benka	good	PUA	2 vehicle gravel	access rd. ends at lake	0.5%	no camping
Beverly	good	S/L (33')	5 vehicle gravel	swampy, ATV or foot access	15%	needs stock lake sign at "Y" in trail; State land
Big	good	SRA	20 vehicle gravel	concrete boat launches	2%	2 State Rec. Sites; camping
Big Beaver	good	Rd. ROW	5 vehicles gravel	MSB gravel road and launch	1%	discontinued stocking
Big No Luck	canoe trail	SRA	15 vehicle gravel	canoe trail: 1.5 miles	100%	Nancy Lake SRA; camping
Bruce	good	PUE (60')	5 vehicle gravel limited to road ROW	cleared easement	1%	shoreline muskeg; improve parking
Canoe	good	SRA	6 vehicle gravel	packed gravel	21%	dock, picnic tables, outhouse; K/B Rec.
Carpenter	good	PUE (150') MSB	3 vehicle, dirt	gravel access rd. ends at lake	0.7%	gravel boat launch; no camping
Christiansen	good	PUA MSB Park	6 vehicle gravel	access rd. ends at lake	0.4%	gravel boat launch; no camping
Coyote	good	PUE (50') MSB	2 vehicle gravel	good	100%	borough blocked rd. access to park
Crystal	good	PUE (60') MSB	10 vehicle gravel	access rd. ends at lake	0.4%	vehicle access blocked; no camping
Dawn	good	PUA MSB Park	8 vehicle gravel	needs boardwalk	5%	designated public park: Tract C
Diamond	good	PUE (50')	6 vehicle gravel	foot trail	36%	100 yd. walk in
Echo	good	Rd. ROW 100' Glenn Hwy.	4 vehicle paved pull-out	signed, gravel	15%	shoreline trees, brush; private access
Farmer	good	S/L	5 vehicle gravel	good	1%	shoreline muskeg;
Finger	good	SRA	30 vehicle gravel	access rd. ends at lake	5%	State Rec. Site, camping & fishing platforms ADA accessible
Florence	good	S/L (66')	2 vehicle pull-out ROW	good	0.8%	no camping
Homestead	need signs	ROW Ease. (50') (MSB dedicated) access	limited to access rd.	access rd. ends at lake	1%	shoreline swampy; no camping
Honeybee	need signs	PUA	limited to access rd.	needs work, swampy	6%	access road is not public; adj. State land
Ida	need signs	PUE (20')	4 vehicle gravel	steep, gravel	0.1%	no camping
Irene	good	SRA	4 vehicle gravel	gravel	15%	K/B Rec. Area
Kalmbach	good	S/L (33')	5 vehicle gravel	swampy, ATV or foot access	20%	need sign at "Y" in trail; adj. State land
Kashwitna	good	Rd. ROW	30 vehicle paved	access is by lake	10%	shoreline muskeg along ROW
Kepler/Bradley	good	SRA	30 vehicle gravel	marked, gravel	89.5%	Public launch, private camping
Klaire	good	SRA	30 vehicle gravel	.4 mile; needs sign	100%	brushy shoreline; K/B Rec. Area
Knik	good	PUA	2 vehicle gravel	access rd. ends at lake	0.6%	no camping

-continued-

LAKE	ACCESS ROUTE	EASEMENT[a] CLASSIFICATION	PARKING AREA	TRAIL CONDITION	% PUBLIC SHORELINE	COMMENTS
Lalen	good	PUE (20')	2 vehicle gravel	access rd. ends at lake	0.2%	gravel boat launch; no camping
Long (Mile 86)	good	SRA	15 vehicle gravel	access rd. ends at lake	90%	Vacant/abandoned - State Rec. Site; camping/no amenities
Long (K/B)	good	SRA	7 vehicle gravel	packed dirt, steep	100%	hook-&-release only; K/B Rec. Area
Little Lonely	good	S/L	limited to road ROW	short, dirt road	0.5%	access rd. can be 4WD; no camping
Lorraine	good	MSB property	6 vehicle gravel	muddy, rutted by 4WD	95%	surrounded by borough land
Loon	good	S/L (50')	5 vehicle gravel	access rd. ends at lake	0.4%	no camping
Lucille	good	PUE City of Wasilla	3 vehicle gravel	access rd. ends at lake	4%	2 access sites; camping and parking at Lucille Park
Lynne	need signs	PUA	2 vehicle dirt	access rd. ends at lake	2%	access rd. is not public; 2% is State land
Marion	good	PUA	4 vehicle gravel	steep dirt, some erosion	12%	adj. to MSB land
Matanuska	good	SRA	30 vehicle gravel	short gravel	35%	docks, picnicking outhouse; K/B Rec Area
Meirs (McLeod)	good	PUE	8 vehicle, can be muddy	steep, dirt	1%	no camping
Memory	good	S/L (33')	4 vehicle, gravel	access rd. ends at lake	0.3%	no camping
Mile 180	good	Rd. ROW	10 vehicle, paved pullouts	pullouts beside lake	40%	lakeshore muskeg
Morvro	fair	S/L (33')	limited to rd. ROW	swampy, foot trail	0.3%	needs work with trail & parking
North Friend (Montana)	good	Rd. ROW	10 vehicle gravel cross Parks	short trail to outlet	0.5%	access Parks ROW
Prator	good	PUA	4 vehicle gravel	access rd. ends at lake	2%	Castle Public Park; no camping
Ravine	fair	PUA	4 vehicle gravel	steep, worn	50%	adj. State land
Reed	good	PUE (10')	limited to rd. ROW	repairs made to drop-off, need timber steps	0.2%	improve parking; no camping
Rocky	good	SRA	30 vehicle gravel	access rd. ends at lake	5%	State Rec. Site; camping
Ruby	ATV, no signs	Trail Easement (50')	15 vehicle gravel	5 mile ATV trail	40%	new surveyed trail, adj. state land
Seventeenmile	good	PUA	8 vehicle gravel	access rd. ends at lake	0.6%	no camping
Seymour	good	S/L (83')	4 vehicle gravel	access rd. ends at lake	0.5%	MSB land adjacent
Slipper (Eska)	good	Rd. ROW	20 vehicle gravel	access rd. ends at lake	75%	last 1/4 mile rough
South Friend (Montana)	good	Rd. ROW	10 vehicle gravel	short, dirt	10%	shoreline swampy along ROW
South Rolly	good	SRA	20 vehicle gravel	access rd. ends at lake	100%	State Rec. Site; camping
Tigger	good	PUE	5 vehicle gravel	foot trail, needs sign	100%	new access acquired from MSB

-continued-

LAKE	ACCESS ROUTE	EASEMENT[a] CLASSIFICATION	PARKING AREA	TRAIL CONDITION	% PUBLIC SHORELINE	COMMENTS
Vera	good	S/L (50')	6 vehicle dirt	soft tundra	0.3%	no camping
Twin Island	good	State prop.	4 vehicle gravel	swampy	0.6%	MSB prop conflict/ mental health land
Victor	good	SRA	30 vehicle gravel	dirt, some mud	100%	brushy shoreline; K/B Rec. Area
Visnaw	good	S/L	3 vehicle gravel	access rd. ends at lake	0.4%	no camping
Walby	good	PUA MSB	6 vehicle gravel	access rd. ends at lake	1%	no camping
Wiener	good	Rd. ROW	(2) 4 vehicle pullouts	pullouts beside lake	25%	access along Glenn Hwy.
West Sunshine	good	PUE (20')	2 vehicle gravel limited rd. ROW	steep, dirt	0.4%	no camping
Willow	good	S/L (50')	30 vehicle gravel	access rd. ends at lake	0.4%	access by Willow Comm. Center
Wishbone	fair	State prop.	4 vehicle dirt	rough 4WD only	100%	hook-&-release only, State land
Wolf	good	SRA	10 vehicle gravel	short dirt	33%	vacant/abandoned SRA; no camping
"X"	good	State prop.	2 vehicle dirt	need boat	100%	hook-&-release only; State land
"Y"	good	Rd. ROW	2 vehicle dirt	short, steep	100%	brushy, State land

[a] ROW = right of way
S/L = section line easement (feet wide)
PUA = dedicated (or reserved) public use area (parcel platted for public recreation)
PUE = dedicated public use easement (feet wide)
SRA = state recreation area (parcel managed by State Parks)
MSB = Matanuska Susitna Borough

APPENDIX F. INFORMATION AND EDUCTION PROGRAM

Information and Education Program

As one of the original aquatic education tools, classroom salmon egg incubation activities have long been the backbone of the educational effort in Southcentral Alaska. This classroom program enables students, teachers and parents to witness and monitor the early development of a salmon from egg to fry and focuses on increasing awareness of salmonids life history including biology, anatomy and habitat requirements.

Since the educational program's origin at the Big Lake Hatchery in 1991 (Kraus 1999) Matanuska-Susitna Valley school participation has grown from 5 to 25 schools. In late September classes participate in a coho salmon egg take at Spring Creek with over 1,200 students attending in 2006. Here they witness the beginning of life for a salmon and collect up to 250 fertilized eggs, which they transport to their classroom aquarium and monitor throughout the winter. Presently most schools use 29-gallon aquariums with under gravel filter plates, power heads, aquarium gravel, and 1-inch Styrofoam insulation, refrigerated with a chiller unit, while a few schools still depend on 1-gallon aquariums placed inside a refrigerator to chill the water. The eggs eventually hatch and develop into fry at which point the class receives salmon food from the Fort Richardson Hatchery. The fry are then released in mid-May into landlocked Matanuska Lake near Palmer.

On May 9, 2006, the seventh annual salmon celebration was held at Matanuska Lake. This included salmon fry released by all the incubation program participants plus other district-wide K-6 grade classes not participating in the incubation program. Workshops were held for watershed modeling, spin and fly casting, macroinvertebrate identification, salmon life cycle, fish puzzles, fish identification, wildlife tracks identification, wildlife skulls and furs, and water safety, plus students were able to release catchable rainbow trout provided by the Fort Richardson Hatchery. Over 1,200 students participated in the event with 50 Colony Middle School students and 20 Wasilla High School students assisting at the booths and mentoring the younger students.

January 5 and 6, 2006 marked the ninth annual ice-fishing event at Finger Lake. Thirty-six classes, kindergarten to 8th grade, from 14 Mat-Su Borough schools participated in the event resulting in 818 students catching king salmon, rainbow trout, Arctic char and Arctic grayling. One hundred and three students caught their first fish and were awarded a First Fish Certificate.

Fish dissections have become an integral part of the program with 48 classes of 1,415 students participating in 2006.

Making presentations is one of the more conventional means of getting information out to interested groups. Activities may include fish dissections, watershed model demonstrations or design-a-fish games. Other related topics presented include: salmon life histories, biology, habitat requirements, anatomy, coded wire tag demonstrations, stream ecology, career opportunities, hatchery enhancement and fishing.

Appendix F1 contains a summary of classroom visits, presentations, egg takes, ice fishing, watershed and fly tying sessions for the Mat-Su region in 2005-2006. During these 2 years over 171 presentations were made in the Mat-Su area addressing 7,620 individuals. Of these 79% were conducted for elementary age children, 7% to middle school students, 11% to high school students and 3% to adult groups.

Appendix F1.-Classroom visits and presentations conducted for ADF&G Information and Education Program, 2005-2006.

Date	School (Organization)	# Students	Age Group	Subject
1/25/05	Sherrod	25	Elementary	Present 1st catch cards
1/25/05	Sherrod	25	Elementary	Watershed; Design a fish
1/28/05	Wasilla High	45	High School	Watershed presentation
1/28/05	Teeland Middle		Middle School	Deliver fish food; schedule dissection
1/28/05	4 Mat-Su Schools		Elementary	Deliver 1st catch cards
2/2/05	Big Lake	45	Elementary	Design a fish
2/2/05	4 Mat-Su Schools		Elementary	Deliver 1st catch cards
2/4/05	Cottonwood Creek	30	Elementary	Design a fish
2/5/05	Northstar Halfway	12	Middle/High	Ice fishing Finger Lake
2/11/05	BOW	12	Adult	Ice fishing Sport Lake
2/12/05	BOW	6	Adult	Fly tying
2/12/05	BOW	17	Adult	Ice fishing Sport Lake
2/13/05	BOW	6	Adult	Fly tying
3/31/05	Sutton	20	Elementary	Check incubator; Discuss salmon celebration
4/7/05	GASS	25	Adult	Stocked lakes presentation
4/9/05	GASS	60	Adult	Stocked lakes presentation
4/12/05	Wasilla Scouts	6	Middle School	Fly tying
4/16/05	Wasilla Sports Show	8	Adult	Stocked lakes presentation
4/18/05	Tanaina		Elementary	Repaired powerhead
4/19/05	Talkeetna	16	Elementary	Dissection
4/19/05	Talkeetna	16	Elementary	Watershed presentation
4/19/05	Talkeetna	16	Elementary	Design a fish
4/20/05	Talkeetna	16	Elementary	Fly tying
4/26/05	Susitna Valley	30	High School	2 Dissections
4/27/05	Tanaina		Elementary	Deliver fish for fish prints
4/27/05	Susitna Valley		High School	Supply career power point and handouts
4/29/05	Teeland	120	Middle School	4 Dissections
5/9/05	Teeland	45	Middle School	Training for salmon celebration
5/10/05	Mat-Su Schools	1,232	Elementary	Salmon celebration - Matanuska Lake
7/13/05	Burchell	18	High School	Career presentation

-continued-

Appendix F1.-Page 2 of 4.

Date	School (Organization)	# Students	Age Group	Subject
8/30/05	Lions Club - Palmer	35	Adult	Aquatic education presentation
9/14/05	Mid Valley	38	High School	Incubator setup, salmon life cycle
9/16/05	Sutton	37	Elementary	Incubator setup, salmon life cycle
9/27/05	Goose Bay		Elementary	Repair powerhead
9/28/05	Mat-Su Schools	349	Elem. - HS	School egg take – Spring Creek
9/29/05	Mat-Su Schools	410	Elementary	School egg take – Spring Creek
9/30/05	Mat-Su Schools	308	Elementary	School egg take – Spring Creek
10/20/05	Mid Valley	35	High School	2 Dissections
10/20/05	Mid Valley	20	High School	Career presentation
10/21/05	Big Lake	62	Elementary	Dissection
10/25/05	Cottonwood Creek	28	Elementary	Dissection
10/26/05	Pioneer Peak	50	Elementary	Dissection
10/27/05	Sherrod	53	Elementary	Dissection
10/28/08	Snowshoe	70	Elementary	2 Dissections
11/2/05	Houston	32	High School	Dissection
11/2/05	Houston	32	High School	Watershed presentation
11/3/05	Tanaina	90	Elementary	Dissection
11/4/05	Larson	42	Elementary	Dissection
11/4/05	Midnight Sun	40	Elementary	2 Dissections
11/9/05	Swanson	160	Elementary	4 Dissections
11/10/05	Finger Lake	80	Elementary	2 Dissections
11/15/05	Goose Bay	42	Elementary	Dissection
11/16/05	Butte	50	Elementary	Dissection
11/17/05	Sutton	35	Elementary	Dissection
11/18/05	Meadow Lakes	60	Elementary	Dissection
11/22/05	Wasilla	45	High School	2 Career & stocked lake presentations
12/8/05	Pioneer Peak		Elementary	Deliver fish food and fish for prints
1/5/06	Mat-Su Schools	376	Elementary	Ice fishing – Finger Lake
1/6/06	Mat-Su Schools	442	Elementary	Ice fishing – Finger Lake
1/9/06	Houston	250	High School	Career fair
1/11/06	Mid Valley	40	High School	2 Stocked lake presentations

-continued-

Appendix F1.-Page 3 of 4.

Date	School (Organization)	# Students	Age Group	Subject
1/12/06	Houston	35	High School	Fly tying
1/17/06	12 Mat-Su Schools		Elementary	Deliver 1st catch cards
1/23/06	Cottonwood Creek	30	Elementary	Watershed presentation
1/24/06	Big Lake	60	Elementary	Design a fish
1/30/06	Snowshoe	23	Elementary	Design a fish
2/6/06	Talkeetna, Su Valley		Elem., HS	Deliver fish food, schedule dissections
2/10/06	Teeland	120	Middle School	4 Dissections
2/13/06	Cottonwood Creek	30	Elementary	Check incubator
2/17/06	Pioneer Peak	55	Elementary	2 Watershed presentations
2/22/06	Sherrod	30	Elementary	Design a fish
2/23/06	Sherrod	28	Elementary	Design a fish
3/21/06	Pioneer Peak	22	Elementary	Design a fish
3/24/06	BOW	8	Adult	Ice fishing
3/25/06	BOW	5	Adult	Fly tying
3/25/06	BOW	12	Adult	Ice fishing
3/26/06	BOW	9	Adult	Fly tying
3/29/06	Snowshoe	24	Elementary	Watershed presentation
3/30/06	Sherrod	56	Elementary	2 Watershed presentations
3/31/06	Mat-Su Sports Show	18	Adult	Stocked lakes presentation
4/6/06	GASS	18	Adult	Stocked lakes presentation
4/8/06	GASS	28	Adult	Stocked lakes presentation
4/18/06	Mid Valley	40	High School	2 Watershed presentations
4/20/06	Talkeetna	18	Elementary	Dissection
4/20/06	Talkeetna	18	Elementary	Watershed presentation
4/20/06	Talkeetna	18	Elementary	Design a fish
4/21/06	Talkeetna	18	Elementary	Fly tying
4/26/06	Finger Lake		Elementary	Check incubator
4/27/06	Tanaina		Elementary	Deliver fish for fish prints
4/27/06	Larson		Elementary	Check incubator
4/27/06	Houston		Middle School	Deliver fish for dissection
4/28/06	Wasilla	50	High School	3 Watershed presentations

-continued-

Appendix F1.-Page 4 of 4.

Date	School (Organization)	# Students	Age Group	Subject
5/8/06	Colony	55	Middle School	Training for salmon celebration
5/9/06	Mat-Su Schools	1,170	Elementary	Salmon celebration - Matanuska Lake
5/23/06	Colony	22	Middle School	Watershed field trip – Little Susitna River
8/24/06	Alaska State Fair	450	All	Education trailer – fish, skulls, puzzle
9/11/06	Houston Middle	25	Middle School	Incubator setup, salmon life cycle
9/11/06	Tanaina	30	Elementary	Incubator setup, salmon life cycle
9/12/06	Larson	107	Elementary	Incubator setup, salmon life cycle
9/13/06	Correspondence		Elementary	Incubator setup
9/13/06	Iditarod	75	Elementary	Incubator setup, salmon life cycle
9/15/06	Pioneer Peak	25	Elementary	Incubator setup, salmon life cycle
9/19/06	Finger Lake		Elementary	Replace broken chiller
9/20/06	Mat-Su Schools	442	Elem. - HS	School egg take – Spring Creek
9/21/06	Mat-Su Schools	487	Elem. - HS	School egg take – Spring Creek
9/22/06	Mat-Su Schools	423	Elem. - HS	School egg take – Spring Creek
9/26/06	Midnight Sun		Elementary	Replace chiller thermostat
10/1706	Cottonwood Creek	23	Elementary	Dissection
10/18/06	Swanson	180	Elementary	3 Dissections
10/19/06	Pioneer Peak	75	Elementary	3 Dissections
10/20/06	Teeland	100	Middle School	4 Dissections
10/24/06	Sherrod	50	Elementary	Dissection
10/25/06	Houston High	25	High School	Dissection
10/26/06	Tanaina	60	Elementary	2 Dissections
10/27/06	Shaw	90	Elementary	2 Dissections
11/1/06	Larson	145	Elementary	2 Dissections
11/2/06	Finger Lake	75	Elementary	2 Dissections
11/7/06	Correspondence	30	Elementary	Dissection
11/8/06	Snowshoe	80	Elementary	2 Dissections
11/9/06	Butte	50	Elementary	Dissection
11/21/06	Iditarod	70	Elementary	2 Dissections
11/28/06	Midnight Sun	60	Elementary	2 Dissections
11/29/06	Big Lake	60	Elementary	2 Dissections
11/30/06	Goose Bay	50	Elementary	2 Dissections

APPENDIX G. EMERGENCY ORDERS

Appendix G1.-Emergency orders issued for Northern Cook Inlet Management Area waters, 2001-2006.

Emergency Orders issued in 2001:

1. E.O. No. 2-KS-2-03-01 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the fish counting weir.
2. E.O. No. 2-KS-2-04-01 allowed the use of bait in the first 17 miles of the Deshka River and within a ¼ mile radius of the mouth of the Deshka River with the Susitna River, June 12 through July 13, 2001.
3. E.O. No. 2-KS-2-09-01 extended king salmon fishing on the Chuitna River downstream of the cable crossing July 1 through July 5.
4. E.O. No. 2-KS-2-13-01 opened Willow Creek to king fishing June 29 at 12:01 a.m.
5. E.O. No. 2-KS-2-15-01 extended king salmon season in the Susitna River drainage upstream from its confluence with the Deshka River to its confluence with the Talkeetna River including Susitna River tributaries Willow Creek to Trapper Creek and the East Fork of the Chulitna River (including the first ¼ mile of Honolulu Creek only). These waters, which were scheduled to close on Monday July 2, were opened through Wednesday, July 4 at 12:00 midnight.
6. E.O. No. 2-RS-2-17-01 closed Fish Creek to dipnetting on July 12 at 11:00 p.m.

Emergency Orders issued in 2002:

1. E.O. No. 2-KS-2-03-02 increased the possession limit to two king salmon in all Westside Susitna River tributaries except Alexander Creek.
2. E.O. No. 2-KS-2-02-02 opened the entire Theodore and Lewis rivers to catch-and-release for king salmon through June 30. Single hook, no bait.
3. E.O. No. 2-KS-2-04-02 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the fish counting weir.
4. E.O. No. 2-KS-2-05-02 allowed the use of bait in the first 17 miles of the Deshka River and within a ¼ mile radius of the mouth of the Deshka River with the Susitna River, June 8 through July 13, 2002.
5. E.O. No. 2-KS-2-17-02 extended king salmon season in Willow, Sheep and Montana creeks 3 days, July 5-7 from 6:00 a.m. to 11:00 p.m.
6. E.O. No. 2-SS-2-29-02 in Fish Creek increased coho bag limit to 3 per day and allowed 24-hour per day fishing on Saturdays and Sundays beginning August 17 at 12:01 a.m. through December 31.

Emergency Orders issued in 2003:

1. E.O. No. 2-KS-2-01-03 closed the Deshka River to fishing from 1,000 yards downstream to 200 yards upstream of the fish counting weir.
2. E.O. No. 2-KS-2-05-03 increased the bag and possession limit of king salmon greater than 20 inches in the Deshka River from one per day and two in possession to two per day and four in possession.
3. E.O. No. 2-KS-2-07-03 rescinded EO 2-KS-2-01-03.
4. E.O. No. 2-KS-2-12-03 extended king salmon season in Willow, Sheep and Montana creeks 3 days, July 4-6 from 6:00 a.m. to 11:00 p.m.

Emergency Orders issued in 2004:

1. E.O. No. 2-RS-2-18-04 prohibited the retention of sockeye salmon while sport fishing in all waters of the Yentna River drainage beginning August 4.
2. E.O. No. 2-KS-2-06-04 increased the daily bag and possession limit for Chinook salmon on the Deshka River from one per day, two in possession to two per day, four in possession, June 12 to July 13.
3. E.O. No. 2-KS-2-04-04 allowed bait use in that portion of the Deshka River open to Chinook salmon fishing beginning May 28.
4. E.O. No. 2-KS-2-01-04 opened Eklutna Tailrace to Chinook salmon fishing on April 15.

Emergency Orders issued in 2005:

1. E.O. No. 2-RS-2-27-05 prohibited the retention of sockeye salmon in that portion of Fish Creek open to salmon fishing beginning August 13.
2. E.O. No. 2-RS-26-05 prohibited the retention of sockeye salmon while sport fishing in all waters of the Susitna River drainage effective July 24.
3. E.O. No. 2-KS-2-21-05 extended Chinook salmon season in the lower two miles of the Deshka River from July 14 to July 31.
5. E.O. No. 2-KS-2-03-05 increased the daily bag and possession limit for Chinook salmon on the Deshka River to two per day, four in possession, and increased fishing time to 24 hours per day May 27 to July 13.

Emergency Orders issued in 2006:

1. E.O. No. 2-KS-2-07-06 increased the daily bag and possession limit for Chinook salmon on the Deshka River to two per day, four in possession, and increased fishing time to 24 hours per day May 26 to July 13.
2. E.O. No. 2-RS-2-25-06 prohibited the retention of sockeye salmon while sport fishing in all waters of the Susitna River drainage effective July 15.
3. E.O. No. 2-RS-2-40-06 rescinded E.O. No. 2-RS-2-25-06 on August 11.
4. E.O. No. 2-SS-2-41-06 increased the daily bag limit of coho salmon to thee daily in that portion of the Little Susitna River open to salmon fishing beginning August 19.
5. E.O. No. 2-SS-2-44-06 increased salmon fishing time on Wasilla Creek to 24 hours per day while keeping the Saturday and Sunday, weekend only restriction and increased the bag limit for coho salmon to three daily in those waters open to salmon fishing on August 19.
6. E.O. No. 2-SS-43-06 increased salmon (other than king salmon) fishing time on Fish Creek to 24 hours per day while keeping the Saturday and Sunday, weekend only restriction and increased the bag limit for coho salmon to three daily in those waters open to salmon fishing on August 19.
7. E.O. No. 2-SS-2-42-06 increased salmon fishing time on Cottonwood Creek to 24 hours per day while keeping the Saturday and Sunday, weekend only restriction and increased the bag limit for coho salmon to three daily in those waters open to salmon fishing on August 19.

APPENDIX H. AUGUST 2006 FLOOD

Appendix H1.-Aerial assessment of flood damage at several major Northern Cook Inlet Management Area Chinook salmon spawning streams during the third week of August 2006.

Observer: Sam Ivey

Date: August 23, 2006

Streams: Little Susitna River, Willow Creek, Sheep Creek, Montana Creek, Clear Creek, Moose Creek (Deshka R), Lake Creek, Sucker Creek (Alexander Creek).

Method: Super cub. Four-hour flight over some major NCI king salmon spawning streams.

Notes:

- This survey took place approximately three days after flood waters had begun to subside.
- The Deshka River crew noted this flood matched that of the flood of 1986. The water level achieved during the present flood reached the level literally marked on the state cabin, located about one mile upstream of the mouth, during the 1986 flood. The crew of the Deshka River weir, located at RM 7, noted waters were over the bank and chest deep in camp on August 21, 2006.
- On Saturday, August 19, 2006, a USGS gauging station located on the Little Susitna River at the Parks Highway recorded a new record high stage of 13.78. The Little Susitna River weir, located at RM 71, was evacuated at 9 pm on August 19, as were many houses along King Author Road. The stage level sustained here did not flood the field camp, but did effectively surround it with floodwaters. Peak waters were observed near midnight on August 19 with two feet of water on King Author Road on a stretch near the Parks Highway. The tee at the end of Rainee Road was under approximately four feet of water (at the hood level of a standard size pick up truck) at this stage. Water begins to flow over this entrance road at a stage of about 10.
- News reports say one A-frame cabin and one car were lost to the flood where Petersville Road crosses Moose Creek. A small house floated down Willow Creek, piling up near the intertie power line above Deception Creek. Also on Willow Creek, Ghett's Bridge was lost and several houses were damaged. On the Little Susitna River, a couple small bridges were washed out around mile eight of Wasilla Fishhook Road. The Glenn Highway at mile 122, near Troublesome Creek, was closed for several days. A radio report claimed over 100 families would be taken in by the Red Cross as a result of this disaster. The Governor declared the area a state of disaster.

Survey Streams:

Little Susitna River

- Area: Palmer Fishhook Road to near the present weir site at RM 71.
- Assessment: major scouring likely and definite channelization in several places.

Willow Creek

- Area: barrier falls down to intertie power line.
- Assessment: major scouring likely, some channelization

Sheep Creek

- Area: near confluence with Goose Creek, then upstream about two miles.
- Assessment: no noticeable channelization. River still bank to bank with water.

Survey Streams (continued):

Montana Creek

- Area: Sawyer Creek to Yoder Road
- Assessment: moderate scouring likely; some channelization.

Clear Creek

- Area: mouth upstream two miles
- Assessment: Creek still bank to bank with water. No clear indications of deleterious impact.

Moose Creek (Deshka River)

- Area: Petersville Road downstream to Forks.
- Assessment: some channelization; major scouring likely.

Lake Creek

- Area: mouth upstream two miles above Bulchitna Lake.
- Assessment: no obvious signs of scouring although water was still high enough to flood several buildings near mouth. Lack of time prevented a thorough assessment of upper Lake Creek.

Alexander Creek

- Area: Sucker Creek and entire mainstem
- Assessment: No signs of channelization or scouring. Minimal impact. Wolverine Creek was still muddy and if any scouring occurred, it was likely here.

Overall Assessment: Parks Highway streams, including Little Susitna River, and Deshka River were hit hardest. Yentna area tributaries were hit second hardest. Alexander Creek appears the least impacted.

Signs of any negative effect sustained from this flood on king salmon returns to NCI area streams should begin in 2010 with a reduced number of age-1.2 fish in the Deshka Chinook escapement. It should be noted that another significant high water event occurred on the Deshka River during late August of 2005. The 2005 flood was much less destructive than the present flood, but should still be documented in the case that a low escapement of age-1.2 fish occurs in 2009.

APPENDIX I. SPORT FISHING GUIDES

Appendix I1.-List of Sport Fishing Guides in the Northern Cook Inlet Management Area by town.

Last Name	First Name	Street or PO Box	Town	State	Zip Code	Lic #	Phone
GABBERT	KEITH	PO BOX ACR	ALEXANDER CREEK	AK	99695	4209	9077332371
MARTIN JR	GREGOR	18621 FRANCE CIRCLE	ANCHORAGE	AK	99516	1237	9072434407
GILLIS	MELVIN	PO BOX 220247	ANCHORAGE	AK	99522	4036	9073448589
WILLIS	ANDY	PO BOX 230914	ANCHORAGE	AK	99523	1309	9073574220
GIROUX	BRADLEY	7201 DONENDA CIR	ANCHORAGE	AK	99507	10185	
ZIRKLE	JACOB	4612 SHELIKOF STREET	ANCHORAGE	AK	99507	4067	9079522474
DOUCET	DAVID	7374 KIDRON ST	ANCHORAGE	AK	99502	1213	9073333665
PIERCE	MIKE	11745 BIRCH KNOLL LOOP	ANCHORAGE	AK	99515	1225	9072434559
NICHOLSON	JOHN	11835 RAINBOW AVE	ANCHORAGE	AK	99516	4087	9073453445
KRAFT	BRIAN	PO BOX 231985	ANCHORAGE	AK	99523	4210	9072767605
HERROD	JERRY	5106 LIONHEART DR	ANCHORAGE	AK	99508	1392	9073370197
ERICKSON	DAREN	PO BOX 111249	ANCHORAGE	AK	99511	8592	9076946447
GAY	KIRK	PO BOX 190583	ANCHORAGE	AK	99519	8383	9072436096
STEPHENS	JAMES	4400 EDINBURGH DRIVE	ANCHORAGE	AK	99502	1210	9073462025
BENNETT	ANDREW	200 W 34TH AVE PMB 1130	ANCHORAGE	AK	99503	4206	9075568146
BARRETT	FRANK	2440 E TUDOR RD #1061	ANCHORAGE	AK	99507	4283	9077332063
BERUBE	AUDRENE	6931 HOWARD AVE	ANCHORAGE	AK	99504	2743	9073336386
REID	ADAM	3321 AMBER BAY LOOP	ANCHORAGE	AK	99515	1270	9072451185
STEPHENSON	WARD	3084 BETTLES BAY LP	ANCHORAGE	AK	99515	10131	9073493260
DEAVILLA	WILLIAM	1824 WICKERSHAM	ANCHORAGE	AK	99507	2882	9075613737
STUVEK	BOB	1060 NORMAN STREET	ANCHORAGE	AK	99504-1620	1206	9073375147
ZABOROSKIE	DAVID	PO BOX 111205	ANCHORAGE	AK	99511	1211	9072290957
ASH	CHARLES	11300 POLAR DRIVE	ANCHORAGE	AK	99516	8796	9073441340
ULRICH	CARL	7544 TIMBERWOLF CIRCLE	ANCHORAGE	AK	99507	1353	9077701162
BERTKE	DUKE	12840 SHELBURNE ROAD	ANCHORAGE	AK	99516	4208	9073457770
MUNROE	STEPHEN	10723 LAFAYETTE CIRCLE	ANCHORAGE	AK	99515	1263	9072482212
KREBS	BRUNO	PO BOX 100232	ANCHORAGE	AK	99510	4242	9072440512
HARDY SR	DANIEL	2440 W 70TH CIRCLE	ANCHORAGE	AK	99502	1219	9072454374
DUBE	DAN	PO BOX 210662	ANCHORAGE	AK	99521	3635	9073375390
BENNETT	ANDREW	200 W 34TH AVE PMB 1170	ANCHORAGE	AK	99503	4207	9075568146
FOX	NIGEL	8980 LITTLE BROOK ST	ANCHORAGE	AK	99507	10081	
FEJES	SAMUEL	PO BOX 111394	ANCHORAGE	AK	99511-1394	4309	9073494040
FRAUENFELDER	WERNER	9321 BLACKBERRY ST	ANCHORAGE	AK	99502	4081	9072720376
JOUES	RODNEY	2360 INNES CIRCLE	ANCHORAGE	AK	99515	1388	9073455443
TELFORD	CARLYLE	1303 W 33 # 201	ANCHORAGE	AK	99503	9922	9077447195
DECKER	MARTY	PO BOX 141521	ANCHORAGE	AK	99514	8590	9079293244
MAYE	LIONEL	11845, CIRCLE DRIVE	ANCHORAGE	AK	99507	10073	9073459412
ELMORE	JOHN	9351 ABBOTT LOOP RD	ANCHORAGE	AK	99507	8378	9075226663
OLIVER	JAMES	3705 ARCTIC BLVD #2858	ANCHORAGE	AK	99503	9848	
HODGE	JAMES	13836 LAKE OTIS PKWY	ANCHORAGE	AK	99516	8559	9073490520
MCCORMICK	JAMES	25065 RIVES COURT	ANCHORAGE	AK	99507	2868	9073493588

-continued-

Last Name	First Name	Street or PO Box	Town	State	Zip Code	Lic #	Phone
RAYNOR	PETER	4125 AIRCRAFT DRIVE	ANCHORAGE	AK	99502	8531	9072435448
ALBERT	JAMES	4125 AIRCRAFT DRIVE	ANCHORAGE	AK	99502	8350	9072435448
KEOGH	LYNN	4778 MILLS DRIVE	ANCHORAGE	AK	99508	4017	9073331803
BROYLES	JUSTIN	8260 SPRUCE ST	ANCHORAGE	AK	99507	10017	9072770277
SCHLEHOFER	DEAN	3359 MONTICELLO COURT	ANCHORAGE	AK	99503	10071	9072793474
HAAB	HANS HEIRI	8321 BLACKBERRY ST	ANCHORAGE	AK	99502	4245	9072720376
ARKLEY	ROB	3101 PENLAND PARKWAY STE M-02	ANCHORAGE	AK	99508	1243	9072741888
MCDOWELL	CLAUDE	520 E 24TH AVE	ANCHORAGE	AK	99503	1384	9072720209
WILSON	DAVID	PO BOX 210429	ANCHORAGE	AK	99521-0429	4212	9077337743
BRANTLEY	MILBURN	PO BOX 110792	ANCHORAGE	AK	99511	4053	9073444388
DRIVER	PHILIP	1306 E 26TH AVENUE	ANCHORAGE	AK	99508	1257	9072778829
TURNER	MICHAEL	3170 BRIDLE LANE	ANCHORAGE	AK	99517	4064	9074417768
SIMS	BILL	3851 CHINIAK BAY DR	ANCHORAGE	AK	99515	8493	9075223355
KENT	JON	PO BOX 190109	ANCHORAGE	AK	99519	8883	9072481303
WILLIAMS	PAUL	1902 CIRCLEWOOD DRIVE	ANCHORAGE	AK	99516	4012	9074409753
SCHUH	RODNEY	10000 COBRA STREET	ANCHORAGE	AK	99507	8458	9073463983
DEWAR	RANDY	2245 KISSEE COURT	ANCHORAGE	AK	99517	10065	9073502392
BRANHAM	CHRIS	BOX 190207	ANCHORAGE	AK	99519	4248	9072483256
SCHANHALS	GERALD	721 W 71ST AVE	ANCHORAGE	AK	99518	4041	9073496928
SCOTT	PAUL	4631 CARAVELLE DRIVE	ANCHORAGE	AK	99502	4086	9072484631
SHEFFREY	JON	PO BOX 201791	ANCHORAGE	AK	99520	8670	9072239141
MAHORIC	MARK	1803 ROOSEVELT DRIVE	ANCHORAGE	AK	99517	8591	9075625455
DOLPHIN-CHAVIE	AARON	2402 E 49TH COURT	ANCHORAGE	AK	99507	4034	9078303129
SCHUSTER	JOE	3316 LAKE PARK CIRCLE	ANCHORAGE	AK	99517	4271	9072483181
LLOYD	RJAY	PO BOX 190088	ANCHORAGE	AK	99519	1267	9077333447
ELISON	GLENN	6400 ANDOVER CIRCLE	ANCHORAGE	AK	99516	10083	9078687974
BRIGMAN	NICK	2700 NUGGET LANE	ANCHORAGE	AK	99516	1415	9073457017
DRAKE	NATHAN	3511 VIEW PARK CIRCLE #D	ANCHORAGE	AK	99502	4055	9072457343
FICK	TYSON	200 W 34TH #343	ANCHORAGE	AK	99503	8996	9076321382
WENDT	CORY	PO BOX 190243	ANCHORAGE	AK	99519	8767	9073015354
KING	GARY	2024 STONEGATE CIRCLE	ANCHORAGE	AK	99515	8430	9075221164
WILLIAMS	NILES	4400 E 7TH AVE	ANCHORAGE	AK	99508	1359	9073383313
DIXON	CARL	2463 COTTONWOOD ST	ANCHORAGE	AK	99508	4240	9072742710
KLEINKAUF	CECILIA	2220 NORTH STAR #2	ANCHORAGE	AK	99503	8571	9072747113
WILSON	JACOB	13251 PEAKVIEW CIRCLE	ANCHORAGE	AK	99516	4282	9075297891
HADDELAND	JHAN	PO BOX 520627	BIG LAKE	AK	99652	3360	9073577379
RICHMOND	PHILLIP	PO BOX 521278	BIG LAKE	AK	99652	8474	9073572002
MCMAHAN	RICHARD	PO BOX 156	CANTWELL	AK	99729	8775	9077681127
CARPENTER	JOE	18601 OLD GLENN HIGHWAY	CHUGIAK	AK	99567	10454	
HARMS	HARVEY	PO BOX 670071	CHUGIAK	AK	99567	8562	9076962484
LESSARD	THOMAS	21670 SNOWFLOWER LOOP	CHUGIAK	AK	99567	2759	9076881547

-continued-

Last Name	First Name	Street or PO Box	Town	State	Zip Code	Lic #	Phone
DUBIN-SCHEER	CLAIRE	23327 GREATLAND DRIVE	CHUGIAK	AK	99567	8846	9076881116
VREM	TRACY	PO BOX 670130	CHUGIAK	AK	99567	9884	9076882419
MULLICAN	JAMES	11224 CELESTIAL ST	EAGLE RIVER	AK	99577	9993	
HUNT	DAVID	18606 LITTLE CAPE CIRCLE	EAGLE RIVER	AK	99577	4251	9076942836
GONZALES	ORLANDO	12046 REGENCY DRIVE	EAGLE RIVER	AK	99577	1217	9076961393
MASKER	WILLARD	11153 KASKANAK DRIVE	EAGLE RIVER	AK	99577	8708	9076942173
MCCATHREN	BRIAN	PO BOX 771704	EAGLE RIVER	AK	99577	2833	9076945744
KRONBERGER	LANCE	12570 OLD GLENN HWY #C	EAGLE RIVER	AK	99577	1390	9076220630
TOMLINSON	ROBERT	7301 RIVER PARK CIRCLE	EAGLE RIVER	AK	99577	4042	9076964037
ZUNIGN	ORLANDO	PO BOX 5-443	FT RICHARDSON	AK	99505	1409	9072582172
THOMPSON	KATHY	11889 W. LITTLE JOHN DR.	HOUSTON	AK	99694	10841	9078925084
BLODGETT	RAYMOND	MILE 58 PARKS HWY	HOUSTON	AK	99694	10213	9078928707
MORTENSEN	KENNETH	PO BOX 940087	HOUSTON	AK	99694	3325	9078929020
CHON	JEFFREY	PO BOX 3144	PALMER	AK	99645	3382	9077462883
BENSON	DALE	8035 S AMERICAN WAY	PALMER	AK	99645	4051	9077458494
COUCH	ANDREW	PO BOX 155	PALMER	AK	99645-0155	3344	9077462199
PRALLE	JEFFORY	PO BOX 3033	PALMER	AK	99645	8031	9077462327
POGUE	PAUL	BOX 2802	PALMER	AK	99645	3388	9077466452
POLLOCK	WESLEY	PO BOX 1312	PALMER	AK	99645	3330	9077454036
WHITLATCH	JOHN	HC 02 BOX 7693-8	PALMER	AK	99645	2788	9072527335
TROTTER	DAN	3001 N SEAGULL DRIVE	PALMER	AK	99645	3331	9077463453
BOOTH	WILLIAM	PO BOX 3782	PALMER	AK	99645	3335	9077455464
MANNERS	DAVID	PO BOX 96	SKWENTNA	AK	99667	1262	9077331334
JOHNSON	ERIC	PO BOX 56	SKWENTNA	AK	99667	8537	9077333742
MILLER	MARK	TALACHULITNA RIVER	SKWENTNA	AK	99667	10507	
IVEY	JAMES	PO BOX 77	SKWENTNA	AK	99667-0077	3931	9077334212
VALENTINE	CHAD	15000 E BARGE DR.	TALKEETNA	AK	99676	10214	9077332462
JORGENSEN	CRAIG	34996 S HOPPER DRIVE	TALKEETNA	AK	99676	10323	
FITZGERALD	KEVIN	PO BOX 1068	TALKEETNA	AK	99676	8047	9077332704
WHITECAR	ROBERT	PO BOX 1061	TALKEETNA	AK	99676	10209	
MAHAY	STEPHEN	PO BOX 705	TALKEETNA	AK	99676	8643	9077332223
KASO	KELSEY	MILE 13 TALKEETNA SPUR ROAD	TALKEETNA	AK	99676	10504	9072233116
SOUSA	GERALD	PO BOX 922	TALKEETNA	AK	99676	1292	9077333355
SALMON	MARGARET	PO BOX 563	TALKEETNA	AK	99676	8068	9077332677
BUECHLE	TIMOTHY	PO BOX 118	TALKEETNA	AK	99676	3319	9073553597
MEALS	ROBERT	BOX 312	TALKEETNA	AK	99676	8943	9077332400
HOLTAN	KEITH	PO BOX 13062	TRAPPER CREEK	AK	99683	8550	9077331963
ACORD	GREG	7936 W. TIA TERRACE RD.	WASILLA	AK	99687	9981	9073760692
LEPPING	KURT	PO BOX 872181	WASILLA	AK	99687	3361	9073767713
KROLL	GARY	1830 E PARKS HWY STE A113 #228	WASILLA	AK	99654	3339	9073572265
HANSEN	PAUL	PO BOX 874570	WASILLA	AK	99687	3359	9073570251

-continued-

Last Name	First Name	Street or PO Box	Town	State	Zip Code	Lic #	Phone
VINETTE	JOHN	PO BOX 871128	WASILLA	AK	99687	9916	9073765563
ONEY	ANTHONY	1830 E PARKS HWY PMB 325	WASILLA	AK	99654	4027	9073607575
LOCKES	TROY	5421 W BIRCH HARBOR DR	WASILLA	AK	99654	1331	9073571019
BOY	MICHAEL	1100 HOLIDAY DR	WASILLA	AK	99654	1355	9073579916
EVENDEN	WAYNE	PO BOX 872719	WASILLA	AK	99687	1216	9073733679
SHOEMAKER	PHILIP	PO BOX 876110	WASILLA	AK	99687	8829	9075205009
DONELSON	PATRICK	1399 RIDGEVIEW DRIVE	WASILLA	AK	99654	3338	9073570131
LEWIS	DANIEL	6700 FINGER LAKE S VIEW DR	WASILLA	AK	99654	8437	9072298839
RILEY	HOWARD	PO BOX 874383	WASILLA	AK	99687	4080	9077464285
NAPFLIN	ERICH	PO BOX 873095	WASILLA	AK	99687	3369	9073552608
PIERSKALLA	NICOLAS	PO BOX 870834	WASILLA	AK	99687	4103	9073760502
KEETER	CHARLES	PB OX 870844	WASILLA	AK	99687	3366	9077467605
CHILDS	DAVID	PO BOX 298556	WASILLA	AK	99629	3334	9078928927
HAYNES	NORMAN	101 HYGRADE LANE	WASILLA	AK	99654	10165	
DEDAW	LANCE	4181 DEWANET	WASILLA	AK	99654	3349	9072529386
MCDOWELL	DANIEL	5801 YADON DRIVE	WASILLA	AK	99654	2796	9072328057
PETERSON	MATTHEW	1380 VALLEY SIDE CIR	WASILLA	AK	99654	10493	
SATER	RICHARD	1960 E PORCUPINE TR	WASILLA	AK	99654	2818	9073571784
GABRYSZAK	DANIEL	HC 34 BOX 2735	WASILLA	AK	99654	3365	9077332746
ORTMAN	GEORGE	BOX 261	WILLOW	AK	99688	3340	9074956515
QUINCY	RANDALL	PO BOX 442	WILLOW	AK	99688	3333	9074952880
NORTH	LINDA	PO BOX 926	WILLOW	AK	96688	3363	5098375268
CRAIG	JOBY	PO BOX 602	WILLOW	AK	99688	3378	9077334000
WILSON	RON	PO BOX 670	WILLOW	AK	99688	3342	9074957700
COUGHLIN	MICHAEL	PO BOX 886	WILLOW	AK	99688	9914	9074952699
DEAN	FARLEY	BOX 85	WILLOW	AK	99688	4104	9074956343

APPENDIX J. WEIR DATA

Appendix J1.-Little Susitna River weir data, 2005.

	Coho salmon					Chum salmon [a]					River Water		
	Passage		Sampled	Adipose fin		Passage		Daily passage			Stage	Temp.	
Date	Daily	Cum	(n)	Inspected	Clips	Daily	Cum	King	Pink	Red	(ft)	(C)	Comments
4-Aug	2	2	0										
5-Aug	5	7	0			650	650	4		1	1.88	12.0	weir fully deployed; fish tight by 5:00 PM
6-Aug	34	41	1			576	1,226	5	7	5	1.88	11.0	
7-Aug	22	63	0			463	1,689	5	5	37	1.98	11.0	
8-Aug	10	73	1	1	0	590	2,279	2	6	41	1.80	11.0	
9-Aug	12	85	2	2	0	506	2,785	3	8	44	1.70	10.0	
10-Aug	56	141	3	3	0	686	3,471	1	5	65	1.58	11.0	
11-Aug	65	206	4	4	0	752	4,223	1	1	138	1.55	11.0	
12-Aug	62	268	1	1	0	642	4,865	1	1	135	1.55	12.0	
13-Aug	144	412	7	7	0	587	5,452	1	1	99	1.55	12.0	
14-Aug	31	443	0	0	0	746	6,198	0	2	114	1.58	14.0	
15-Aug	26	469	2	2	0	331	6,529	0	2	26	1.58	13.0	
16-Aug	7	476	0	0	0	365	6,894	1	1	48	1.54	12.0	
17-Aug	0	476	0	0	0	288	7,182	0	0	25	1.50	10.5	
18-Aug	23	499	2	2	0	198	7,380	0	0	1	1.40	11.0	
19-Aug	47	546	1	1	0	308	7,688	0	0	13	1.34	10.0	
20-Aug	55	601	3	3	0	216	7,904	0	0	14	1.28	11.0	
21-Aug	446	1,047	20	20	0	175	8,079	0	0	10	1.28	11.0	
22-Aug	237	1,284	10	10	0	331	8,410	0	0	33	1.32	10.0	stage = 3.3 ft at 10:00 PM
23-Aug	1,562	2,846	40	40	0	83	8,493	0	0	42	ND[b]	9.0	over staff gage, but fish tight
24-Aug	110	2,956	10	10	0	175	8,668	1	0	211	2.70	9.0	stage = 3.3 ft again at 9:00 PM
25-Aug	229	3,185	10	10	0	38	8,706	0	0	65	ND[b]	9.0	over staff gage, but fish tight
26-Aug	189	3,374	20	20	0	56	8,762	0	0	75	3.00	9.0	
27-Aug	302	3,676	15	15	0	31	8,793	0	0	49	3.10	9.0	1 white fish and 1 northern pike; both dead
28-Aug	523	4,199	30	30	0	25	8,818	0	0	34	2.80	8.0	
29-Aug	425	4,624	20	20	0	17	8,835	0	0	35	2.46	8.0	
30-Aug	1,249	5,873	40	40	0	18	8,853	0	0	19	2.35	8.0	
31-Aug	1,637	7,510	40	40	0	22	8,875	0	0	22	2.65	8.0	
1-Sep	2,275	9,785	40	40	0	52	8,927	0	0	26	2.90	8.0	
2-Sep	272	10,057	20	20	0	87	9,014	0	0	19	3.30	8.0	
3-Sep	429	10,486	40	40	0	22	9,036	0	0	21	3.00	7.0	
4-Sep	318	10,804	0	0	0	18	9,054	0	0	10	2.80	8.0	
5-Sep	708	11,512	26	26	0	12	9,066	0	0	5	2.50	8.0	

-continued-

	Coho salmon					Chum salmon [a]					River Water		
	Passage		Sampled	Adipose fin		Passage		Daily passage			Stage	Temp.	
Date	Daily	Cum	(n)	Inspected	Clips	Daily	Cum	King	Pink	Red	(ft)	(C)	Comments
6-Sep	2,597	14,109	40	40	0	26	9,092	0	0	12	2.55	7.5	
7-Sep	1,647	15,756	0	0	0	17	9,109	0	0	49	2.44	8.0	
8-Sep	381	16,137	0	0	ND	16	9,125	0	0	67	ND[b]	8.0	parts of weir submerged
9-Sep	702	16,839	40	40	0	9	9,134	0	0	42	ND[b]	7.0	weir 100% up 1:30 PM
10-Sep	ND	ND	ND	ND	ND	16	9,150	0	0	48	ND[b]	8.0	water 4 inches above staff gauge
11-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
12-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
13-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
14-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
15-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
16-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
17-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
18-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
19-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	entire weir submerged
20-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	start weir removal
21-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	continue weir removal
22-Sep	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	complete weir removal by 1:00 PM
Total	16,839		488	487	0	9,150		25	39	1,700			

Note: Cum = cumulative; n = sample size (number of fish); Inspected = total number of fish examined for adipose fin clips; Clips = number of fish with adipose fin clips; King = Chinook salmon; Pink = pink salmon; Red = sockeye salmon; and ND = no data collected because no attempts were made to collect it.

[a] Chum salmon at Little Susitna Weir were not sampled for age-length-weight data.

[b] The staff gauge used to measure river stage was totally submerged by rising water.

Appendix J2.-Little Susitna River weir data, 2006.

	Coho salmon					Chum salmon [a]						River Water		
	Passage		Sampled	Adipose fin		Passage		Daily passage				Stage	Temp.	
Date	Daily	Cum	(n)	Inspected	Clips	Daily	Cum	King	Pink	Red	Other	(ft)	(C)	Comments
3-Aug	0	0	0	0		437	437	5	16	ND		ND	10.0	weir fully deployed; fish tight by 2:00 PM
4-Aug	0	0	0			549	986	1	26	7		1.64	8.5	
5-Aug	15	15	0			1,230	2,216	3	43	4		1.55	9.0	
6-Aug	51	66	5			1,003	3,219	3	33	5		1.58	9.0	
7-Aug	214	280	0			1,540	4,759	1	35	16		1.50	10.0	
8-Aug	315	595	8			1,633	6,392		51	7		1.50	10.0	
9-Aug	23	618	0			930	7,322		45	2		1.45	10.0	
10-Aug	44	662	2			418	7,740	1	31	0		1.50	9.0	
11-Aug	67	729	5	5	0	919	8,659	1	22	1		1.50	9.0	
12-Aug	266	995	4	4	0	1,159	9,818	0	18	3		1.66	9.0	
13-Aug	598	1,593	16	16	0	1,132	10,950	1	15	7		1.90	9.5	
14-Aug	1,185	2,778	0	0		780	11,730	0	7	0		>3.3	8.0	
15-Aug	67	2,845	19			64	11,794		5	2		<3.3	9.0	water level at top of trap
16-Aug	118	2,963	7			125	11,919		2	2		>3.3	8.0	
17-Aug	322	3,285	7	7	0	38	11,957	0	2	0		>3.3	8.0	weir still up, barely
18-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir 90% down at 1:00 PM
19-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
20-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
21-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
22-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
23-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
24-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
25-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
26-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
27-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
28-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
29-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir down
30-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir up and functional
31-Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir breached; not fish tight
1-Sep	278	3,563	22	22	0	1	11,958	0	0	0	0	ND	7.0	fish tight at noon, water 6"
2-Sep	1,142	4,705	40	40	0	7	11,965	0	0	0	0	ND	7.5	water 4" above staff guage
3-Sep	375	5,080	26	26	0	4	11,969	0	0	1	0	ND	7.0	water 3" above staff guage
4-Sep	130	5,210	10	10	0	1	11,970	0	0	3	0	>3.3	5.0	

-continued-

	Coho salmon					Chum salmon [a]		Daily passage				River Water		
	Passage		Sampled	Adipose fin		Passage						Stage	Temp.	
Date	Daily	Cum	(n)	Inspected	Clips	Daily	Cum	King	Pink	Red	Other	(ft)	(C)	Comments
5-Sep	181	5,391	10	10	0	3	11,973	0	0	1	0	3.20	7.0	
6-Sep	126	5,517	5	5	0	0	11,973	0	0	0	0	3.00	7.0	
7-Sep	151	5,668	10	10	0	0	11,973	0	0	0	0	2.90	6.0	
8-Sep	190	5,858	16	16	0	1	11,974	0	0	0	0	2.80	7.0	
9-Sep	174	6,032	20	20	0	0	11,974	0	0	0	1	2.64	7.0	Other = whitefish (species)
10-Sep	720	6,752	30	30	0	1	11,975	0	0	0	1	2.52	7.0	Other = whitefish (species)
11-Sep	655	7,407	40	40	0	2	11,977	0	0	1	0	2.50	7.5	
12-Sep	142	7,549	30	30	0	3	11,980	0	0	0	0	2.45	7.0	
13-Sep	131	7,680	0	ND	ND	4	11,984	0	0	0	0	2.30	6.0	
14-Sep	122	7,802	30	30	0	2	11,986	0	0	1	0	2.30	6.5	
15-Sep	295	8,097	20	20	0	0	11,986	0	0	1	0	2.32	7.0	
16-Sep	204	8,301	20	20	0	2	11,988	0	0	0	0	2.32	7.0	
17-Sep	133	8,434	20	20	0	4	11,992	0	0	0	0	2.22	6.0	
18-Sep	15	8,449	0	0	0	4	11,996	0	0	0	0	2.18	5.0	
19-Sep	42	8,491	10	10	0	2	11,998	0	0	0	0	2.10	5.0	
20-Sep	241	8,732	30	30	0	0	11,998	0	0	0	0	2.05	6.0	
21-Sep	54	8,786	0	0	0	0	11,998	0	0	0	0	2.00	6.0	
Total	8,786		462	421	0	11,998		16	351	64	2			

Note: Cum = cumulative; n = sample size (number of fish); Inspected = total number of fish examined for adipose fin clips; Clips = number of fish with adipose fin clips; King = Chinook salmon; Pink = pink salmon; Red = sockeye salmon; and ND = no data collected because no attempts were made to collect it.

[a] Chum salmon at Little Susitna Weir were not sampled for age-length-weight data.

Appendix J3.-Fish Creek (Big Lake drainage) weir data, 2005.

	Sockeye salmon					Coho salmon [a]					River water		
	Passage				Sampled	Passage		Daily passage			Stage	Temp.	
Date	Adults	Jacks	Daily	Cum	(n)	Daily	Cum	King	Pink	Chum	(ft)	(C)	Comments
6-Jul													weir fully deployed; fish tight by 12:30 PM
7-Jul	0	0	0	0	0	0	0				1.57	20.0	
8-Jul	0	0	0	0	0	0	0				1.56	18.0	
9-Jul	0	0	0	0	0	0	0				1.57	17.0	
10-Jul	0	0	0	0	0	0	0				1.55	18.0	
11-Jul	0	0	0	0	0	0	0				1.54	18.5	
12-Jul	0	0	0	0	0	0	0		1		1.52	16.0	
13-Jul	0	0	0	0	0	0	0					16.0	
14-Jul	0	0	0	0	0	0	0				1.50	15.0	
15-Jul	0	0	0	0	0	0	0				1.50	17.0	
16-Jul	0	0	0	0	0	0	0				1.48	18.0	
17-Jul	0	0	0	0	0	0	0				1.48	17.0	
18-Jul	0	0	0	0	0	0	0				1.48	15.0	
19-Jul	1,568	100	1,668	1,668	90	0	0				1.48	16.0	
20-Jul	994	86	1,080	2,748	43	0	0				1.48	16.0	
21-Jul	19	6	25	2,773	0	0	0				1.45	14.0	
22-Jul	334	5	339	3,112	56	1	1		1		1.42	15.0	
23-Jul	68	12	80	3,192	0	0	1	1			1.40	14.0	
24-Jul	0	0		3,192	0	0	1				1.39	14.0	
25-Jul	57	13	70	3,262	8	1	2				1.38	15.0	
26-Jul	761	114	875	4,137	45	13	15				1.37	16.0	
27-Jul	2,034	200	2,234	6,371	74	69	84	1		1	1.37	16.0	
28-Jul	1,848	144	1,992	8,363	41	43	127				1.36	16.5	
29-Jul	570	92	662	9,025	41	16	143				1.36	15.0	
30-Jul	458	21	479	9,504	40	7	150		1	1	1.37	14.0	
31-Jul	358	82	440	9,944	40	36	186		2		1.38	13.0	
1-Aug	267	49	316	10,260	20	34	220		2		1.47	13.0	
2-Aug	322	144	466	10,726	0	99	319		6		1.54	14.0	
3-Aug	179	89	268	10,994	35	69	388		2		1.53	14.0	
4-Aug	236	133	369	11,363	0	155	543		4		1.52	15.0	
5-Aug	152	69	221	11,584	8	51	594		2		1.51	15.0	
6-Aug	369	126	495	12,079	8	133	727			2	1.48	15.0	
7-Aug	253	86	339	12,418	0	80	807		2	4	1.48	16.0	

-continued-

	Sockeye salmon					Coho salmon [a]					River water		
	Passage				Sampled	Passage		Daily passage			Stage	Temp.	
Date	Adults	Jacks	Daily	Cum	(n)	Daily	Cum	King	Pink	Chum	(ft)	(C)	Comments
8-Aug	288	181	469	12,887	8	110	917		4	12	1.46	15.5	
9-Aug	219	123	342	13,229	0	310	1,227		5	6	1.43	16.5	
10-Aug	173	95	268	13,497	8	102	1,329		5	3	1.43	16.0	
11-Aug	167	84	251	13,748	0	147	1,476		4	3	1.43	16.0	
12-Aug	151	69	220	13,968	0	764	2,240		3		1.41	16.0	
13-Aug	96	42	138	14,106	0	400	2,640	1	5	1	1.39	16.0	
14-Aug	75	34	109	14,215	0	371	3,011		8	ND	1.39	17.0	
15-Aug [b]	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	weir pulled
Total	12,016	2,199		14,215	565	3,011		3	57	33			

Note: Jacks = salmon that return after 1 year in the ocean, smaller fish, predominately males (Groot and Margolis 1991); Cum = cumulative; n = sample size (number of fish); King = Chinook salmon; Pink = pink salmon; Chum = chum salmon; and ND = no data collected because no attempts were made to collect it.

[a] Coho salmon at Fish Creek Weir were not sampled for age-length-weight data or adipose fin clips.

[b] Fish tally from Fish Creek weir (rm 3.0) to intertidal area (rm 0.6) stream walk = 170 sockeye (153 live, 17 carcasses) and 825 coho (819 live, 6 carcasses) salmon.

Appendix J4.-Fish Creek (Big Lake drainage) weir data, 2006.

	Sockeye salmon					Coho salmon					River water		
	Passage				Sampled	Passage		Daily passage			Stage	Temp.	
Date	Adults	Jacks	Daily	Cum	(n)	Daily	Cum	King	Pink	Chum	(ft)	(C)	Comments
6-Jul	0	0	0	0	0	0	0				ND	ND	weir fully deployed; fish tight by 12:00 noon
7-Jul	0	0	0	0	0	0	0				ND	15.0	
8-Jul	0	0	0	0	0	0	0				1.00	14.0	
9-Jul	0	0	0	0	0	0	0				ND	14.0	
10-Jul	0	0	0	0	0	0	0				1.00	13.0	weir fish tight, but camp vacated noon to midnight
11-Jul	0	0	0	0	0	0	0				1.00	14.0	
12-Jul	0	0	0	0	0	0	0				1.00	15.0	
13-Jul	0	0	0	0	0	0	0				1.00	17.0	
14-Jul	0	0	0	0	0	0	0				ND	17.0	
15-Jul	0	0	0	0	0	0	0				ND	13.0	
16-Jul	1,150	0	1,150	1,150	0	7	7				1.20	13.0	
17-Jul	7	0	7	1,157	0	0	7		0		1.13	14.0	weir staffed 24 hrs.
18-Jul	395	12	407	1,564	23	8	15		0		1.12	14.0	
19-Jul	126	14	140	1,704	23	14	29		0		1.10	14.0	15 fish to Pioneer Home
20-Jul	4,607	70	4,677	6,381	53	58	87	1	0		1.00	15.0	17 fish to Nugen's Ranch
21-Jul	2,111	38	2,149	8,530	59	29	116	0	1	2	1.05	15.0	20 fish to Nugen's Ranch
22-Jul	1,027	26	1,053	9,583	2	9	125	0	0	0	1.05	14.0	
23-Jul	574	27	601	10,184	47	39	164	0	1	0	1.02	15.0	
24-Jul	613	34	647	10,831	48	64	228	0	0	0	1.02	15.0	25 fish to Pt MacKenzie
25-Jul	705	64	769	11,600	63	30	258	0	1	0	1.00	16.0	12 fish to Pt MacKenzie & 12 fish to Nugen's Ranch
26-Jul	2,262	84	2,346	13,946	56	244	502	0	0	0	1.00	14.0	10 fish to Pioneer Home & 11 fish to Nugen's Ranch
27-Jul	2,150	62	2,212	16,158	93	169	671	0	2	1	1.00	14.0	21 fish to Pt. MacKenzie & 14 fish to Nugen's Ranch
28-Jul	1,677	56	1,733	17,891	90	207	878	0	20	1	1.00	15.0	35 fish to Pt. MacKenzie
29-Jul	1,604	72	1,676	19,567	40	198	1,076	1	27	0	0.80	17.0	
30-Jul	2,153	85	2,238	21,805	37	300	1,376	0	58	0	0.50	15.0	
31-Jul	2,279	65	2,344	24,149	66	303	1,679	0	10	0	0.50	14.0	
1-Aug	685	33	718	24,867	0	305	1,984	0	51	0	0.80	15.0	
2-Aug	2,515	59	2,574	27,441	51	47	2,031	1	33	0	0.90	14.0	25 fish to Nugen's Ranch
3-Aug	689	33	722	28,163	0	82	2,113	0	19	0	0.80	14.0	
4-Aug	508	32	540	28,703	10	51	2,164	0	84	1	0.80	14.0	"Other" = 1 rainbow trout
5-Aug	792	26	818	29,521	19	92	2,256	0	15	0	0.80	13.0	"Other" = 6 rainbow trout
6-Aug	1,194	60	1,254	30,775	24	312	2,568	0	165	0	0.80	13.5	

-continued-

	Sockeye salmon					Coho salmon					River water		
	Passage				Sampled	Passage		Daily passage			Stage	Temp.	
Date	Adults	Jacks	Daily	Cum	(n)	Daily	Cum	King	Pink	Chum	(ft)	(C)	Comments
7-Aug	159	8	167	30,942	5	420	2,988	0	111	0	0.80	14.0	
8-Aug	237	15	252	31,194	5	1,009	3,997	1	238	3	0.80	14.0	
9-Aug	103	6	109	31,303	5	384	4,381	0	128	0	0.80	14.0	
10-Aug	100	5	105	31,408	0	33	4,414	0	41	0	0.80	13.5	
11-Aug	547	52	599	32,007	0	106	4,520	0	126	2	0.90	13.5	"Other" = 1 rainbow trout
12-Aug	230	18	248	32,255	5	196	4,716	0	62	3	1.00	14.0	
13-Aug	166	11	177	32,432	0	113	4,829	0	41	1	1.00	15.0	heavy rain and wind
14-Aug	125	5	130	32,562	0	138	4,967	0	26	0	1.10	14.0	
15-Aug [a]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	weir pulled
Total	31,490	1,072	32,562		824	4,967		4	1,260	14			

Note: Jacks = salmon that return after 1 year in the ocean, smaller fish, predominately males (Groot and Margolis 1991); Cum = cumulative; n = sample size (number of fish); King = Chinook salmon; Pink = pink salmon; Chum = chum salmon; and ND = no data collected because no attempts were made to collect it.

[a] Fish tally from Fish Creek weir (rm 3.0) to intertidal area (rm 0.6) stream walk = 51 sockeye (41 live, 3 carcasses) and 756 coho (753 live, 3 carcasses) salmon. Stream survey conditions were poor (e.g., visibility bad, high discharge, and turbid water).

Appendix J5.-Deshka River weir data, 2005.

	Chinook salmon					Coho salmon				Daily passage				River water			Boat	
	Passage		Sampled		Harvest	Passage		Sampled	Harvest					Stage	Temp.	Clarity	traffic	
Date	Daily	Cum	n	Female	above weir	Daily	Cum	(n)	above weir	Red	Chum	Pink	Pike	(ft)	(^{o}C)	(cm)	thru weir	Comments [a]
27-May	0	0			0													weir fully deployed; fish tight by 1:30 PM
28-May	0	0			6												9	
29-May	97	97			1									1.98			11	no temp.
30-May	113	210			1									1.88	13.0	101	7	
31-May	79	289	5	2	0									1.80	13.5	99	5	1st axillary sample
1-Jun	49	338			0								1	1.74	13.0	94	4	
2-Jun	184	522	0		0									1.66	13.5	92	10	
3-Jun	25	547	15	10	0									1.60	13.5	92	16	
4-Jun	721	1,268	0		3									1.57	14.0	89	20	
5-Jun	543	1,811	5	3	4									1.47	14.5	88	13	
6-Jun	823	2,634	9	4	2									1.39	15.5	85	10	3 genetics samples
7-Jun	1,365	3,999	19	8	7									1.47	15.0	89	8	
8-Jun	560	4,559	5	2	8									1.61	15.0	91	7	discharge -10 ?
9-Jun	1,715	6,274	20	13	6									1.49	15.0	87	8	
10-Jun	966	7,240	20	7	14									1.41	14.5	87	35	
11-Jun	1,004	8,244	20	13	26						0	0		1.36	15.0	85	15	
12-Jun	1,431	9,675	20	14	9						0	0	1	1.34	15.5	84	12	
13-Jun	702	10,377	20	12	6						0	0		1.49	16.0	88	11	
14-Jun	1,372	11,749	20	11	19						0	0		1.35	16.5	83	14	total genetic samples = 50
15-Jun	1,022	12,771	20	10	13						0	0		1.26	17.0	81	17	discharge 645 cfs at -13"
16-Jun	2,279	15,050	6	3	15						0	0		1.20	19.0	80	18	
17-Jun	972	16,022	20	6	46						0	0		1.18	18.0	77	28	
18-Jun	852	16,874	15	6	27						0	0		1.16	18.0	76	18	
19-Jun	774	17,648	29	9	11						0	0		1.18	16.0	77	14	
20-Jun	1,706	19,354	32	16	24						0	0		1.22	15.0	80	11	
21-Jun	1,913	21,267	25	8	10						0	0		1.28	16.0	82	10	
22-Jun	507	21,774	10	0	10						0	0		1.15	17.0	78	10	discharge 608 cfs at -13.5"
23-Jun	979	22,753	20	14	18						0	0		1.06	16.0	76	17	
24-Jun	683	23,436	10	4	17						0	0		0.98	17.0	73	17	
25-Jun	1,919	25,355	30	14	33						0	0		0.94	17.0	71	14	
26-Jun	1,919	27,274	30	16	10						0	0		0.88	18.0	69	14	
27-Jun	1,023	28,297	20	11	13						0	0		0.94	20.0	71	7	
28-Jun	347	28,644	9	4	16						0	0		1.02	20.0	72	8	
29-Jun	1,349	29,993	20	9	11						0	0	4	0.94	20.0	71	4	discharge 338 cfs at -17.5"
30-Jun	466	30,459	7	2	12						0	0		0.86	20.0	69	8	
1-Jul	548	31,007	10	2	9						0	0		0.87	18.5	69	13	
2-Jul	674	31,681	22	6	18						0	0		1.03	18.0	75	16	
3-Jul	582	32,263	24	4	19						0	0		1.01	18.5	73	6	
4-Jul	1,579	33,842	8	1	18						0	0		1.13	19.0	77	7	
5-Jul	576	34,418	27	11	9						0	0		1.37	19.0	84	9	
6-Jul	369	34,787	7	2	8						0	0		1.03	19.0	76	3	discharge 530 cfs at -14.5"
7-Jul	473	35,260	10	3	3						0	0		0.94	19.5	71	7	
8-Jul	18	35,278	0	0	10						0	4		0.86	19.0	69	15	
9-Jul	178	35,456	4	2	9						0	3		0.82	20.0	67	8	
10-Jul	186	35,642	5	3	17	3	3				0	7	1	0.84	19.5	68	3	
11-Jul	2	35,644	0		11	0	3				0	0		0.82	19.0	66	6	

-continued-

	Chinook salmon					Coho salmon								River water			Boat	
	Passage		Sampled		Harvest	Passage		Sampled	Harvest	Daily passage				Stage	Temp.	Clarity	traffic	
Date	Daily	Cum	n	Female	above weir	Daily	Cum	(n)	above weir	Red	Chum	Pink	Pike	(ft)	(°C)	(cm)	thru weir	Comments [a]
12-Jul	122	35,766	3	1	3	5	8				0	7		0.84	19.0	67	3	
13-Jul	304	36,070	7	2	3	3	11				0	10		0.76	19.0	66	2	discharge 403 cfs at -16.5
14-Jul	224	36,294	0		0	7	18				0	14		0.74	19.0	65	2	
15-Jul	153	36,447	6	1	0	2	20	0	0	1	0	5		0.80	19.0	65	6	
16-Jul	74	36,521	9	5	0	0	20			0	0	3	1	0.70	19.0	64	4	
17-Jul	35	36,556	0		0	1	21			0	0	51		0.69	19.0	64	5	
18-Jul	28	36,584			0	0	21			0	0	44	1	0.65	19.0	62	2	
19-Jul	91	36,675			0	2	23			0	0	39		0.65	19.0	62	2	
20-Jul	16	36,691			0	15	38			0	0	73		0.70	19.0	64	2	discharge 338 cfs at -17.5"
21-Jul	132	36,823			0	64	102		1	1	0	854		0.70	19.0	64	2	
22-Jul	73	36,896			0	12	114			1	0	281		0.60	19.0	61	5	
23-Jul	40	36,936			0	51	165	3		0	0	560		0.54	19.0	59	4	
24-Jul	23	36,959			0	7	172		1	3	0	266		0.50	19.0	58	3	
25-Jul	11	36,970			0	5	177		0	0	0	137		0.49	20.0	58	3	
26-Jul	3	36,973			0	1	178		0	0	0	16		0.48	19.0	57	1	
27-Jul	31	37,004			0	18	196		0	1	0	217	1	0.48	19.0	57	1	
28-Jul	10	37,014			0	3	199		0	0	0	28	1	0.50	18.0	58	5	discharge unknown, at -23"
29-Jul	37	37,051			0	53	252		0	1	0	349		0.49	17.0	58	7	
30-Jul	12	37,063			0	12	264	3	0	0	1	193	3	0.57	17.0	60	5	
31-Jul	14	37,077			0	368	632		0	0	0	441		0.59	16.0	60	1	
1-Aug	12	37,089				349	981	8	2	0	0	234		0.73	16.0	65	2	
2-Aug	26	37,115				215	1,196	18	0	3	0	243		0.86	16.0	66	1	
3-Aug	3	37,118				252	1,448	0	4	0	0	371		0.73	17.0	65	1	
4-Aug	34	37,152				804	2,252	26	0	4	0	540		0.81	17.0	67	1	
5-Aug	13	37,165				523	2,775	20	1	3	0	387		0.76	17.0	66	2	
6-Aug	19	37,184				565	3,340	20	7	1	0	401		0.67	18.0	63	3	
7-Aug	8	37,192				177	3,517	10	3	1	0	79		0.62	18.0	61	2	4 muskrats
8-Aug	16	37,208				617	4,134	20	0	3	0	139	1	0.56	18.0	60	4	
9-Aug	13	37,221				526	4,660	20	0	1	0	72		0.55	18.0	59	2	
10-Aug	8	37,229				204	4,864	10	14	0	0	83		0.49	18.0	57	3	
11-Aug	30	37,259				534	5,398	0	15	0	0	119		0.47	19.0	56	3	
12-Aug	17	37,276				549	5,947	9	10	0	0	115		0.40	19.0	55	5	
13-Aug	22	37,298				394	6,341	10	1	0	0	184		0.38	19.0	54	4	
14-Aug	3	37,301				24	6,365	10	39	0	0	23		0.36	19.0	53	11	
15-Aug	11	37,312				22	6,387	10	0	0	0	16	1	0.39	18.0	55	1	
16-Aug [b]	6	37,318				27	6,414	10	7	2	0	23		0.37	18.0	53	4	weir breached by boat collision
17-Aug	16	37,334				107	6,521	2	0	0	0	148		0.37	17.0	53	1	rock -24.5"
18-Aug	62	37,396				604	7,125	25	6	2	2	46		0.40	17.0	55	5	
19-Aug	33	37,429				473	7,598	20	4	3	1	17	2	0.46	17.0	57	8	
20-Aug	60	37,489				534	8,132	20	6	1	2	31	4	0.48	16.0	57	2	
21-Aug	72	37,561				11,117	19,249	60	6	1	1	95	1	0.52	15.0	58	2	
22-Aug	20	37,581				9,327	28,576	60	1	0	4	37	1	0.80	15.0	67	2	
23-Aug	21	37,602				5,738	34,314	60	9	0	2	26		1.00	16.0	72	7	
24-Aug	21	37,623				8,558	42,872	60	0	0	0	19		1.20	15.0	80	3	
25-Aug	13	37,636				2,804	45,676	30	0	0	0	11	2	2.00	15.0	62	2	
26-Aug	18	37,654				933	46,609	20	24	1	0	6		1.99	14.0	48	10	
27-Aug	15	37,669				171	46,780	0	12	1	1	3		1.79	14.0	58	17	
28-Aug	8	37,677				29	46,809	0	0	0	0	2		1.51	14.0	69	1	
29-Aug	6	37,683				131	46,940	0	11	1	0	4		1.35	14.0	78	1	

-continued-

	Chinook salmon					Coho salmon				Daily passage				River water			Boat	
	Passage		Sampled		Harvest	Passage		Sampled	Harvest					Stage	Temp.	Clarity	traffic	
Date	Daily	Cum	n	Female	above weir	Daily	Cum	(n)	above weir	Red	Chum	Pink	Pike	(ft)	(^{o}C)	(cm)	thru weir	Comments [a]
30-Aug	15	37,698				359	47,299	0	0	0	0	9		1.98	13.0	61	1	
31-Aug	7	37,705				172	47,471	0	0	0	0	2		2.90	12.5	41	3	
1-Sep	4	37,709				118	47,589	0	0	0	0	0		2.18	12.5	67	1	
2-Sep	6	37,715				92	47,681	0	2	2	1	1		1.81	11.0	85	14	
3-Sep	3	37,718				33	47,714	0	0	0	1	0	1	1.50	12.0	90	6	
4-Sep	4	37,722				58	47,772	0	1	2	0	0		1.46	11.5	89	2	
5-Sep	3	37,725				85	47,857	10	0	1	ND	0		2.20	11.0	89	2	
6-Sep	0	37,725				30	47,887	0	0	ND	ND	0		2.91	11.0	72	1	weir down (10 panels) early AM; 3 rafts
7-Sep	ND	ND				ND	ND	ND	ND	ND	ND	ND		3.55	11.0	68	ND	9/6 last day due to flooding
8-Sep	ND	ND				ND	ND	ND	ND	ND	ND	ND		4.10	11.0	ND	ND	
Total	37,725		623	274	535	47,887		574	187	41	16	7,088	27				728	

Note: Cum = cumulative; n = sample size (number of fish); Female = number of female fish in the sample; Red = sockeye salmon; Chum = chum salmon; Pink = pink salmon; Pike = northern pike; and ND = no data collected because no attempts were made to collect it.

[a] Measurements used to calculated discharge were taken from an old USGS station reference mark (i.e., the high point of a large 4 ft boulder located 200 ft downstream from an old USGS gauging station and 30 ft offshore from the left bank).

[b] On August 16 a boat collided with the Deshka River weir causing 12 weir panels to be displaced and an estimated maximum of 200 coho salmon escaped through the breach in the weir.

Appendix J6.-Deshka River weir data, 2006.

	Chinook salmon					Coho salmon				Daily passage				River water			Boat	
	Passage		Sampled		Harvest	Passage		Sampled	Harvest					Stage	Temp.	Clarity	traffic	
Date	Daily	Cum	n	Female	above weir	Daily	Cum	(n)	above weir	Red	Chum	Pink	Pike	(ft)	(°C)	(cm)	thru weir	Comments [a]
25-May																		
26-May	10	10	0		0									1.90	14.5		13	weir fully deployed; fish tight by 2:00 PM
27-May	0	10	0		0									1.80	15.0	70	25	
28-May	23	33	0		0									1.65	14.5	87	18	
29-May	18	51	0		2									1.49	14.0	98	36	8 boat passage due to upstream accident
30-May	7	58	0		0								1	1.37	14.0		10	water clear- no measurement
31-May	0	58	0		0								1	1.28	13.0	98	7	
1-Jun	10	68	0		1									1.41	12.0	78	9	water dark and rising fast
2-Jun	3	71	2	1	0									2.34	11.0	98	5	
3-Jun	61	132	0		0									2.08	12.0	98	17	
4-Jun	10	142	0		0									1.78	11.0	96	14	
5-Jun	234	376	1	0	0									1.50	11.0	91	7	
6-Jun	55	431	6	4	0									1.32	11.8	86	19	
7-Jun	16	447	0		4								1	1.20	12.0	82	9	rock -12"
8-Jun	1	448	0		0									1.16	12.0	82	5	
9-Jun	371	819	7	4	2									1.15	12.0	80	16	
10-Jun	704	1,523	5	2	0									1.13	11.5	80	10	
11-Jun	1,164	2,687	20	9	10									1.10	12.0	80	20	
12-Jun	1,340	4,027	20	12	6									1.10	12.0	80	8	
13-Jun	1,316	5,343	12	5	1								1	1.10	12.5	83	10	
14-Jun	878	6,221	13	7	20									1.05	14.5	89	28	rock -13.75"
15-Jun	1,392	7,613	30	21	17								1	0.99	14.0	78	6	
16-Jun	1,859	9,472	50	32	35									1.02	14.0	76	15	
17-Jun	2,947	12,419	60	33	43									1.12	14.8	80	18	
18-Jun	1,392	13,811	30	21	50									1.32	14.9	86	19	
19-Jun	949	14,760	20	11	33									1.18	14.8	81	32	
20-Jun	861	15,621	20	14	37									1.08	14.8	78	22	
21-Jun	989	16,610	30	22	25									1.00	14.0	76	24	rock -14.5"
22-Jun	1,340	17,950	30	13	27									1.00	14.0	76	24	
23-Jun	1,389	19,339	30	15	54									1.29	13.0	80	35	
24-Jun	1,738	21,077	40	18	57									1.78	12.0	89	48	
25-Jun	1,242	22,319	20	13	26									1.63	13.0	92	30	
26-Jun	223	22,542	20	9	28									1.43	13.5	82	13	
27-Jun	88	22,630	5	2	44									1.31	13.0	85	12	
28-Jun	462	23,092	5	1	46									1.22	13.5	80	24	rock -10.5"
29-Jun	1,001	24,093	25	11	62									1.14	15.0	80	10	
30-Jun	652	24,745	15	9	11									1.06	14.5	78	19	
1-Jul	382	25,127	10	3	16	0	0					1		1.08	13.5	80	25	
2-Jul	1,132	26,259	30	16	50	0	0					0		1.26	14.5	86	17	
3-Jul	271	26,530	5	2	14	0	0					1		1.16	16.0	81	13	
4-Jul	682	27,212	14	7	26	5	5					2		1.06	16.5	80	10	
5-Jul	465	27,677	10	5	14	6	11					0		0.96	17.0	74	8	rock -15"
6-Jul	418	28,095	2	1	16	18	29		2			1		0.94	17.5	74	5	
7-Jul	61	28,156	12	3	8	2	31		0			0		0.90	16.0	76	6	
8-Jul	208	28,364	0	0	4	40	71		2			4		0.90	14.5	79	14	
9-Jul	69	28,433	1	0	26	57	128	6	4			3		0.91	15.0	75	11	
10-Jul	282	28,715	0	0	10	125	253	0	2			3		1.10	17.0	74	8	
11-Jul	344	29,059	3	1	10	144	397	2	7			4		0.97	17.5	72	11	
12-Jul	55	29,114	0	0	21	94	491	0	21			21		0.89	17.0	70	10	rock -16"
13-Jul	229	29,343	5	4	15	93	584	2	2			21		0.80	18.0	66	4	

-continued-

	Chinook salmon					Coho salmon				Daily passage				River water			Boat	
	Passage		Sampled		Harvest	Passage		Sampled	Harvest					Stage	Temp.	Clarity	traffic	
Date	Daily	Cum	n	Female	above weir	Daily	Cum	(n)	above weir	Red	Chum	Pink	Pike	(ft)	(^{o}C)	(cm)	thru weir	Comments [a]
14-Jul	224	29,567	0		0	35	619	0	0	2		25		0.80	18.0	68	1	
15-Jul	157	29,724	0		0	131	750	2	0	0		84		0.94	15.0	74	1	
16-Jul	627	30,351			0	726	1,476	10	7	0		84		1.30	15.0	84	3	
17-Jul	252	30,603				685	2,161	10	25	0	1	64		1.56	14.5	92	6	
18-Jul	54	30,657				273	2,434	5	0	0	0	122		1.38	15.0	87	2	
19-Jul	36	30,693				367	2,801	7	0	0	1	468		1.24	15.0	83	4	rock -12"
20-Jul	13	30,706				127	2,928	0	13	1	1	594		1.12	16.0	79	4	
21-Jul	11	30,717				119	3,047	0	6	0	1	1,826		0.98	16.0	70	10	
22-Jul	10	30,727				184	3,231	10	0	2	0	1,463		0.90	16.0	70	21	
23-Jul	6	30,733				125	3,356	10	35	0	0	993		0.81	16.0	70	22	
24-Jul	21	30,754				254	3,610	10	0	3	0	4,315		0.77	17.0	70	5	
25-Jul	12	30,766				169	3,779	0	0	4	1	6,371		0.72	16.0	70	3	
26-Jul	9	30,775				333	4,112	0	5	9	0	8,168		0.75	15.0	70	4	rock - 18.5"
27-Jul	8	30,783				1,403	5,515	20	9	2	0	5,070		0.77	15.0	70	2	
28-Jul	15	30,798				578	6,093	10	20	0	0	5,598		0.74	17.0	67	12	
29-Jul	20	30,818				610	6,703	10	34	6	0	8,759		0.65	17.0	65	19	
30-Jul	6	30,824				673	7,376	10	48	4	1	7,914		0.63	16.0	63	6	
31-Jul	9	30,833				541	7,917	10	6	7	0	4,896		0.60	15.0	63	7	
1-Aug	11	30,844				403	8,320	10	16	7	1	7,082		0.58	15.0	62	5	
2-Aug	2	30,846				176	8,496	5	15	1	2	4,051	1	0.58	15.0	62	4	rock -19.5"
3-Aug	11	30,857				105	8,601	0	0	0	0	2,577		0.56	15.5	62	1	
4-Aug	13	30,870				312	8,913	10	0	3	1	3,280		0.59	14.5	62	12	
5-Aug	8	30,878				718	9,631	10	24	1	2	2,729		0.65	14.5	60	12	
6-Aug	7	30,885				519	10,150	10	43	1	0	1,677		0.60	16.0	60	11	
7-Aug	4	30,889				146	10,296	0	7	0	1	590		0.57	16.5	62	4	
8-Aug	9	30,898				160	10,456	0	8	0	0	391		0.54	16.5	60	9	
9-Aug	16	30,914				106	10,562	7	4	5	4	774		0.45	16.5	60	7	
10-Aug	24	30,938				367	10,929	5	21	1	0	1,031		0.47	16.0	60	4	rock -20.5"
11-Aug	15	30,953				491	11,420	10	12	1	2	644		0.53	14.5	62	15	
12-Aug	72	31,025				4,346	15,766	40	0	0	2	750		0.98	14.0	74	4	
13-Aug	57	31,082				29,524	45,290	40	36	0	2	881		1.08	13.5	78	1	
14-Aug	49	31,131				13,110	58,400	50	4	0	3	115		1.40	14.0	89	1	
15-Aug	19	31,150				1,019	59,419	15	45	ND	ND	7		2.10	13.0	60	3	water rising
16-Aug [a]	0	31,150				0	59,419	ND	21	ND	ND	0		3.20	12.0	47	6	100 year flood event - see footnote-b
17-Aug [b]	0	31,150				0	59,419	ND	10	ND	ND	0		3.30	ND	ND	5	100 year flood event - see footnote-c
18-Aug [c]	ND	ND				ND	ND	ND	3	ND	ND	ND		2.65	13.0	71	8	100 year flood event - see footnote-d
19-Aug [d]	ND	ND				ND	ND	ND	ND	ND	ND	ND		3.10	11.0	43	4	100 year flood event - see footnote-e
20-Aug [e]	ND	ND				ND	ND	ND	ND	ND	ND	ND		4.40	105.0	24	ND	100 year flood event - see footnote-f
21-Aug [f]	ND	ND				ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	100 year flood event - see footnote-g
22-Aug	ND	ND				ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	water receding, still 2 ft of water in camp
Total	31,150		608	331	871	59,419		346		60	26	83,454	6				1,027	

-continued-

Note Cum = cumulative; n = sample size (number of fish); Female = number of female fish in the sample; Red = sockeye salmon; Chum = chum salmon; Pink = pink salmon; Pike = northern pike; and ND = no data collected because no attempts were made to collect it.

[a] Measurements used to calculated discharge were taken from an old USGS station reference mark (i.e., the high point of a large 4 ft boulder located 200 ft downstream from an old USGS gauging station and 30 ft offshore from the left bank).

[b] Boat gate and 7 weir panels submerged under at least 12 inches of water; rock at + 7.0 ft.

[c] Boat gate and 12 weir panels submerged.

[d] Boat gate and 15 were panels submerged; heavy rain and wind.

[e] The entire Deshka River weir submerged beneath flood waters.

[f] 11:00 AM cage, platforms, and tripod float down stream; 9:00 PM weir camp floods.

[g] Lower sections of camp submerged 4 to 6 ft underwater.

APPENDIX K. FISH STOCKING

Appendix K1.-Number of fish (actual and planned) stocked in Northern Cook Inlet Management Area waters, 2005-2007.

Species/Life Stage/Site	2005 (Actual)	2006 (Actual)	2007 (Planned)	FTP #[a]	Expiration Date
Chinook Salmon Anadromous					
Eklutna Tailrace (Knik River)	164,586	213,250	150,000	05A-0051	12/31/09
Willow Creek[b]	163,016	50,426	150,000	02A-0057	12/31/07
Total	327,602	263,676	300,000		
Eklutna Tailrace (Knik River)	132,149	132,212	120,000	05A-0091	12/31/09
Total	132,149	132,212	120,000		
Coho Salmon Landlocked Fingerlings					
Barley Lake	1,900	1,908	900	05A-0090	12/31/07
Bear Paw Lake	4,500	4,500	4,500	05A-0090	12/31/07
Carpenter Lake	21,437	15,022	15,000	05A-0090	12/31/07
Christiansen Lake	13,078	15,230	15,200	05A-0090	12/31/07
Diamond Lake	11,000	11,000	11,000	05A-0090	12/31/07
Echo Lake	2,300	25,490	2,300	05A-0090	12/31/07
Johnson Lake	1,000	1,005	1,000	05A-0090	12/31/07
Kalmbach Lake	10,000	10,000	11,000	05A-0090	12/31/07
Klaire Lake	900	907	900	05A-0090	12/31/07
Loberg (Junction) Lake	1,100	1,100	1,100	05A-0090	12/31/07
Victor Lake	2,700	2,722	2,700	05A-0090	12/31/07
Total	69,915	88,884	65,600		
Chinook Salmon Landlocked Catchables					
Finger Lake	33,925	0	30,000	00A-0002	12/31/09
Knik Lake	3,705	0	3,200	00A-0002	12/31/09
Matanuska Lake	2,197	0	2,800	00A-0002	12/31/09
Memory Lake	1,800	0	2,000	00A-0002	12/31/09
Prator Lake	0	0	0	00A-0002	12/31/09
Victor Lake	0	0	0	00A-0002	12/31/09
Total	41,627	0	38,000		
Chinook Salmon Landlocked Fingerling					
Finger Lake	0	52,843	0	00A-0002	12/31/09
Knik Lake	0	59,395	0	00A-0002	12/31/09
Matanuska	0	19,724	0	00A-0002	12/31/09
Memory Lake	0	0	0	00A-0002	12/31/09
Victor	0	2,000	0	00A-0002	12/31/09
Total	0	133,962	0		
Rainbow Trout Landlocked Catchables					
Bearpaw Lake	0	126	0	06A-0001	12/31/10
Bruce Lake	750	330	1,000	06A-0001	12/31/10
Canoe Lake	1,470	1,055	2,000	06A-0001	12/31/10
Coyote Lake	216	0	300	06A-0002	12/31/10

-continued-

Species/Life Stage/Site	2005 (Actual)	2006 (Actual)	2007 (Planned)	FTP #[a]	Expiration Date
Rainbow Trout Landlocked Catchables (cont.)					
Echo Lake	1,129	500	1,500	06A-0001	12/31/10
Gate Lake	295	0	500	06A-0002	12/31/10
Irene Lake	2,077	999	1,800	06A-0001	12/31/10
Kashwitna	2,388	1,862	3,750	06A-0002	12/31/10
Kepler/Bradley Lake	6,224	1,353	4,850	06A-0001	12/31/10
Knik Lake	1,372	628	2,000	06A-0001	12/31/10
Knob Lake	1,982	1,468	2,900	06A-0001	12/31/10
Loberg (Junction) Lake	750	330	1,000	06A-0001	12/31/10
Long Lake (Mile 86 Glenn Hwy)	8,589	1,667	4,000	06A-0001	12/31/10
Lucille Lake	4,058	2,406	6,450	06A-0003	12/31/10
Matanuska Lake	4,050	1,900	5,700	06A-0001	12/31/10
Meirs Lake	959	397	1,200	06A-0001	12/31/10
Memory Lake	1,732	0	2,500	06A-0001	12/31/10
Mile 180 Lake	1,244	0	2,200	06A-0002	12/31/10
North Knob Lake	0	0	750	06A-0001	12/31/10
Ravine Lake	1,065	426	1,250	06A-0001	12/31/10
Rocky Lake	773	396	1,200	06A-0001	12/31/10
Slipper (Eska) Lake	864	0	1,500	06A-0002	12/31/10
South Rolly Lake	2,940	2,702	5,400	06A-0003	12/31/10
Tanaina Lake	2,430	0	2,500	06A-0003	12/31/10
Walby Lake	712	503	1,500	06A-0002	12/31/10
Weiner Lake	821	1,144	2,000	06A-0002	12/31/10
Willow Lake	2,430	633	3,750	06A-0002	12/31/10
Total	51,320	20,825	63,500		
Rainbow Trout Landlocked Fingerlings					
Barley Lake	1,463	1,901	1,900	06A-0004	12/31/10
Bear Paw Lake	2,299	1,000	2,300	06A-0004	12/31/10
Bench Lake	1,699	0	1,700	06A-0005	12/31/10
Benka	4,500	5,648	6,000	06A-0004	12/31/10
Beverly Lake	4,200	1,000	4,200	06A-0005	12/31/10
Big Beaver Lake	12,075	10,208	16,100	06A-0005	12/31/10
Boot Lake	2,400	2,852	3,200	06A-0004	12/31/10
Brocker Lake	1,640	0	2,100	06A-0005	12/31/10
Butterfly Lake	7,504	6,000	10,000	06A-0005	12/31/10
Carpenter Lake	21,743	16,656	22,400	06A-0005	12/31/10
Caswell #3 Lake	2,250	0	3,000	06A-0006	12/31/10
Christiansen Lake	8,699	12,984	11,600	06A-0004	12/31/10
Cranberry Lake	0	0	0	06A-0005	12/31/10
Crooked Lake	7,230	6,770	10,200	06A-0005	12/31/10
Crystal Lake	12,975	0	17,300	06A-0006	12/31/10
Dawn Lake	1,800	1,666	2,400	06A-0006	12/31/10
Diamond Lake	13,125	11,816	13,900	06A-0004	12/31/10
Farmer Lake	2,359	2,196	1,100	06A-0004	12/31/10
Finger Lake	25,877	28,212	33,200	06A-0004	12/31/10
Florence Lake	4,125	3,999	5,500	06A-0004	12/31/10
Golden Lake	1,499	1,000	1,500	06A-0004	12/31/10

-continued-

Species/Life Stage/Site	2005 (Actual)	2006 (Actual)	2007 (Planned)	FTP #[a]	Expiration Date
Rainbow Trout Landlocked					
Fingerlings (continued)					
Homestead Lake	1,275	1,458	1,700	06A-0006	12/31/10
Honeybee Lake	5,100	5,792	6,800	06A-0004	12/31/10
Ida Lake	6,588	4,601	5,100	06A-0004	12/31/10
Johnson Lake	0	0	2,000	06A-0004	12/31/10
Kalmbach Lake	1,499	7,900	12,500	06A-0004	12/31/10
Kashwitna Lake	0	0	0	06A-0005	12/31/10
Lalen Lake	8,500	2,000	9,200	06A-0005	12/31/10
Little Beaver Lake	3,300	3,750	4,400	06A-0005	12/31/10
Little Lonely Lake	6,300	0	8,400	06A-0004	12/31/10
Long Lake (K/B)	5,260	5,398	7,000	06A-0004	12/31/10
Loon Lake	13,000	4,000	14,300	06A-0006	12/31/10
Lorraine Lake	9,914	11,215	13,200	06A-0004	12/31/10
Lynne Lake	8,250	5,826	11,000	06A-0004	12/31/10
Marion Lake	10,950	9,605	11,300	06A-0004	12/31/10
Morvro Lake	0	0	0	06A-0006	12/31/10
North Friend Lake	6,075	5,495	8,100	06A-0005	12/31/10
North Rolly Lake	9,150	5,005	12,200	06A-0005	12/31/10
Peggy Lake	0	0	0	06A-0004	12/31/10
Reed Lake	1,486	2,000	2,000	06A-0004	12/31/10
Rhein Lake	5,250	5,005	10,200	06A-0005	12/31/10
Ruby Lake	0	2,000	0	06A-0005	12/31/10
Seventeenmile Lake	7,010	8,496	10,000	06A-0004	12/31/10
Seymour Lake	20,007	8,000	22,900	06A-0006	12/31/10
South Friend Lake	6,600	5,714	5,600	06A-0005	12/31/10
Threemile Lake	0	0	0	06A-0005	12/31/10
Tigger Lake	1,875	2,500	2,500	06A-0004	12/31/10
Twin Island Lake	22,822	5,000	15,100	06A-0005	12/31/10
Vera Lake	8,325	9,000	11,100	06A-0005	12/31/10
Visnaw Lake	10,436	5,779	13,100	06A-0005	12/31/10
West Beaver	6,608	4,583	8,250	06A-0005	12/31/10
West Sunshine Lake	0	0	4,500	06A-0005	12/31/10
Wishbone Lake	0	0	2,600	06A-0005	12/31/10
Wolf Lake	6,971	9,340	9,300	06A-0006	12/31/10
"X" Lake	0	5,185	0	06A-0004	12/31/10
"Y" Lake	3,000	3,518	4,000	06A-0004	12/31/10
Total	328,713	262,109	417,950		
Arctic Grayling Landlocked					
Fingerling					
Bruce Lake	0	0	0	05A-0089	12/31/09
Canoe Lake	2,000	13,505	4,000	05A-0089	12/31/09
Finger Lake	0	24,009	8,000	05A-0089	12/31/09
Florence Lake	1,000	1,000	1,000	05A-0089	12/31/09
Ida Lake	1,000	0	3,700	05A-0089	12/31/09
Kepler/Bradley Lake	3,000	0	3,000	05A-0089	12/31/09
Knik Lake	0	1,008	2,000	05A-0089	12/31/09
Lorraine Lake	725	3,803	4,600	05A-0089	12/31/09
Meirs Lake	0	12,003	2,000	05A-0089	12/31/09
Reed Lake	1,000	1,281	4,000	05A-0089	12/31/09
Total	8,725	56,609	32,300		

-continued-

Species/Life Stage/Site	2005 (Actual)	2006 (Actual)	2007 (Planned)	FTP #[a]	Expiration Date
Arctic Char Landlocked Catchables					
Benka Lake	1,425	0	1,000	00A-0001	12/31/08
Carpenter Lake	0	1,552	0	00A-0001	12/31/08
Echo Lake	0	500	0	00A-0001	12/31/08
Finger Lake	3,758	5,646	1,500	00A-0001	12/31/08
Irene Lake	0	0	750	00A-0001	12/31/08
Johnson Lake	0	0	0	00A-0001	12/31/08
Long Lake	318	2,181	0	00A-0001	12/31/08
Lynne Lake	0	863	0	00A-0001	12/31/08
Marion Lake	875	0	900	00A-0001	12/31/08
Matanuska Lake	1,328	0	1,100	00A-0001	12/31/08
Memory Lake	0	356	0	00A-0001	12/31/08
Prator Lake	0	432	0	00A-0001	12/31/08
Rush Lake	0	150	0	00A-0001	12/31/08
Seventeenmile Lake	570	0	800	00A-0001	12/31/08
Total	8,274	11,680	6,050		
Arctic Char Landlocked Fingerlings					
Carpenter Lake	13,473	0	0	00A-0001	12/31/08
Finger Lake	5,550	0	0	00A-0001	12/31/08
Irene Lake	0	11,050	0	00A-0001	12/31/08
Johnson Lake	0	5,000	0	00A-0001	12/31/08
Long Lake	136,014	20,000	0	00A-0001	12/31/08
Lynne Lake	9,868	0	0	00A-0001	12/31/08
Matanuska Lake	0	22,837	0	00A-0001	12/31/08
Seventeenmile Lake	0	82,859	0	00A-0001	12/31/08
Total	164,905	141,746	0		
Total Anadromous Stockings	459,751	359,888	420,000		
Total Landlocked Stockings	673,665	715,815	623,400		
Total Stockings	1,133,416	1,075,703	1,043,400		

[a] FTP# = fishery transportation permit number.

[b] Willow Creek drainage (including Deception Creek).

APPENDIX L. MATANUSKA-SUSITNA BOROUGH LAKE MANAGEMENT PLAN

Appendix L1.-Matanuska-Susitna Borough lake management plans.

Lake		Regulations	
Name	Characteristics	Details	Date adopted
Big Lake	Surface Area: 2,495 acres Maximum Depth: 89 feet Mean Depth: 30 feet	Personal Watercraft Prohibited on Meadow Creek Quiet Hours: 11:00 p.m. - 8:00 a.m. Sun. - Sat. Ice House Registration No Wake Zone: 150 feet from shoreline	Aug-98
Blodgett Lake	Surface Area: 57.6 acres Maximum Depth: 29 feet Mean Depth: 10.7 feet	Horsepower Limit: 10 Personal Watercraft Prohibited Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun. - Thurs. 11:00 p.m. - 8:00 a.m. Fri. - Sat.	Sep-97
Bonnie Lake Area	Surface Area: 105 acres	Electric Motors Only	Nov-96
Upper Bonnie Lake	Maximum Depth: 35 feet Mean Depth: Not Available	Personal Watercraft Prohibited	
Bonnie Lake	Surface Area: 99.8 acres Maximum Depth: 35 feet Mean Depth: Not Available	Personal Watercraft Prohibited	
Ravine Lake	Surface Area: 12 acres Maximum Depth: 25 feet Mean Depth: 12 feet	Horsepower Limit: 10 Personal Watercraft Prohibited	
Christiansen Lake	Surface Area: 179 acres Maximum Depth: 82 feet Mean Depth: 22 feet	Personal Watercraft prohibited 15 HP limit Quiet Hours: 10:00 p.m. to 8:00 a.m., Sunday - Sat. Special permit: To accommodate building construction, early season testing of river boats & other special uses. HP limit maybe waived by Special permit.	Sep-99
Crooked Lake	Surface Area: 250 acres Maximum Depth: 35 feet Mean Depth: 14 feet	No Wake Zone: 50 feet from shoreline at the public dock	Aug-95
Crystal Lake	Surface Area: 132 acres Maximum Depth: 24 feet Mean Depth: 11.7 feet	Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun. - Sat.	Aug-96
Diamond Lake	Surface Area: 139 acres Maximum Depth: 23 feet Mean Depth: 7.6 feet	Horsepower Limit: 10 Quiet Hours: 10:00 p.m. – 8:00 a.m. Sun. –Sat. Ice House Registration No Wake Zone: 100 feet from ordinary high water mark	Apr-99
Fish Lake	Surface Area: 59 acres Maximum Depth: Not Mean Depth: Not Available	Horsepower Limit: 5	Aug-97
Honeybee Lake	Surface Area: 58 acres Maximum Depth: 35 feet Mean Depth: 13.5 feet	Electric Motors Only Quiet Hours: 7:00 p.m. – 9:00 a.m. Sun. – Sat.	Nov-97

-continued-

Lake		Regulations	
Name	Characteristics	Details	Date adopted
Island & Doubloon Island Lake	Surface Area: 85 acres Maximum Depth: Not Mean Depth: Not Available	Personal Watercraft Prohibited	Aug-96
Doubloon Lake	Surface Area: 14 acres Maximum Depth: Not Mean Depth: Not Available	Personal Watercraft Prohibited	
Jean Lake	Surface Area: 51 acres Maximum Depth: 30 feet Mean Depth: 3-5 feet	Personal Watercraft Prohibited Electric Motors Only Quiet Hours: 10:00 p.m. – 8:00 a.m. Sun.–Sat. Commercial floatplane operations are discouraged.	Jan-06
John Lake	Surface Area: 52 acres Maximum Depth: Not Mean Depth: Not Available	Horsepower Limit: 10 Quiet Hours: 10:00 p.m. – 8:00 a.m. Sun. – Sat. (electric and trolling motors allowed during quiet hours)	Aug-96
Knik Lake	Surface Area: 50 acres Maximum Depth: 37 feet Mean Depth: 19 feet	Horsepower Limit: 5 Quiet Hours: 10:00 p.m. – 8:00 a.m. Sun. – Thurs. 11:00 p.m. – 8:00 a.m. Fri. – Sat.	Aug-95
Liten Lake	Surface Area: 57 acres Maximum Depth: 10+ feet Mean Depth: 4-6 feet	Motorized Watercraft Prohibited Personal Watercraft Prohibited No Wake Zone: Lake Wide Quiet Hours: 10:00 p.m. – 8:00 a.m. Sun.–Sat. Public access to lake is discouraged. Commercial floatplane operations are discouraged.	Jan-06
Little Lonely Lake	Surface Area: 56 acres Maximum Depth: 63 feet Mean Depth: 20 feet	Personal Watercraft Prohibited Horsepower Limit: 10 No Wake Zone: Lake Wide Quiet Hours: 10:00 p.m. – 8:00 a.m. Sun.–Sat. Ice House Registration Commercial floatplane operations are discouraged.	May-05
Long Lake (Houston)	Surface Area: 44 acres Maximum Depth: 17 feet Mean Depth: 8.8 feet	Personal Watercraft Prohibited Horsepower Limit: 10 No Wake Zone: 100 feet from ordinary high water mark Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun - Sat	Nov-01
Marilee Lake	Surface Area: 33.8 acres Maximum Depth: 18 feet Mean Depth: 7.3 feet	Horsepower Limit: 5	Sep-98

-continued-

Lake		Regulations	
Name	Characteristics	Details	Date adopted
Marion Lake	Surface Area: 113 acres Maximum Depth: 42 feet Mean Depth: 20.6 feet	Personal Watercraft Prohibited Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun.- Sat. No Wake Zone: 100 feet from ordinary high water mark. Time Share: A lake-wide no wake speed except on Thursdays, Fridays, Saturdays, and all 3-day weekends mandated by federal holiday (Memorial Day, Fourth of July, and Labor Day).	Nov-00
Memory Lake	Surface Area: 84 acres Maximum Depth: 20 feet Mean Depth: 7.2 feet	Horsepower Limit: 10 Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun.- Sat. Access to be day use only	Sep-98
Neklasen Lake	Surface Area: 72 acres Maximum Depth: 67 feet Mean Depth: 16 feet	Personal Watercraft Prohibited Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun.- Sat. No Wake Zone: 100 feet from shoreline except when a is leaving dock or shoreline. Timeshare: Lake-wide No Wake Zone except Thursdays, Fridays, first and Saturdays of the month, national holidays, and three-day resulting from national holidays.	Jan-00
Lower Neklasen Lake	Surface Area: 36 acres Maximum Depth: unknown Mean Depth: less than 5 feet	All Motorized Water Craft Prohibited	Jan-00
Question Lake	Surface Area: 80 acres Maximum Depth: unknown Mean Depth: unknown	Horse Power Limit: 5 Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun - Sat Motor Vehicles prohibited during winter months when lake is frozen	Sep-98
Little Question Lake	Surface Area: 25 acres Maximum Depth: unknown Mean Depth: unknown	Non-motorized Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun - Sat Motor Vehicles prohibited during winter months when lake is frozen	Sep-98
Lake Five and Unnamed Lakes	Surface Area: unknown Maximum Depth: unknown Mean Depth: unknown	Non-motorized Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun - Sat All these lakes allow for a special permit to exceed motor limits for building construction Motor Vehicles prohibited during winter months when lake is frozen Ice House Registration	Sep-98
Rainbow Lake	Surface Area: 72.3 acres Maximum Depth: Not Mean Depth: Not Available	Horsepower Limit: 10 Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun - Sat	Nov-95
Toad Lake	Surface Area: 50 acres Maximum Depth: unknown Mean Depth: 10 feet	Electric motors only	Sep-98

-continued-

Lake		Regulations	
Name	Characteristics	Details	Date adopted
Twin Island Lake	Surface Area: 151 acres Maximum Depth: 61 feet Mean Depth: 14.8 feet	Horsepower Limit: 10 Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun - Thurs 11:00 p.m. - 8:00 a.m. Fri - Sat Walk-in only access	Jul-97
Walby Lake	Surface Area: 54 acres Maximum Depth: 18 feet Mean Depth: 5.4 feet	Horsepower Limit: 10 Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun. - Sat. Motor Vehicles prohibited during winter months when lake is frozen	Sep-98
West Papoose Lake	Surface Area: 212 acres Maximum Depth: Not Mean Depth: Not Available	Personal Watercraft Prohibited Quiet Hours: 11:00 p.m. - 8:00 a.m. Sun - Sat No Wake Zone: 100 feet from ordinary high water mark	Aug-96
Wolf Lake	Surface Area: 62 acres Maximum Depth: 17 feet Mean Depth: 6.8 feet	Horsepower Limit: 6 Motor Vehicles prohibited during winter months when lake is	Jul-97
Wolverine Lake	Surface Area: 55 acres Maximum Depth: 7 feet Mean Depth: 2.2 feet	Personal Watercraft Prohibited Quiet Hours: 10:00 p.m. - 8:00 a.m. Sun. - Sat. Electric motors only Commercial Floatplane Operations Prohibited.	Aug-04
Cottonwood Lake		Mufflers, cowlings, exhaust systems Quiet Hours: 11:00 p.m. - 8:00 a.m., Sun. - Sat. No Wake Zone: 100 feet from shoreline Special Events Permits	1995
Finger Lake		Mufflers, cowlings, exhaust systems Quiet Hours: 11:00 p.m. - 8:00 a.m., Sun. - Sat. No Wake Zone: 100 feet from shoreline Special Events Permits	1995
Wasilla Lake		Mufflers, cowlings, exhaust systems Quiet Hours: 11:00 p.m. - 8:00 a.m., Sun. - Sat. No Wake Zone: 100 feet from shoreline Special Events Permits	1995
Cottonwood Creek		Non-motorized.	1995

APPENDIX M. NORTHERN PIKE

Appendix M1.-Northern Cook Inlet Management Area northern pike waters.

Location classification			Northern pike presence	
Primary	Secondary	Site	Documented	Suspected
Susitna Basin Lakes	Alexander Creek	Alexander Lake	X	
Susitna Basin Lakes	Alexander Creek	Sucker Lake	X	
Susitna Basin Lakes	Alexander Creek	Trail Lake	X	
Susitna Basin Lakes	Alexander Creek	Rabbit Lake	X	
Susitna Basin Lakes	Lower Susitna	Flathorn Lake	X	
Susitna Basin Lakes	Lower Susitna	Figure 8 Lake	X	
Susitna Basin Lakes	Mid Susitna	Witsoe Lake	X	
Susitna Basin Lakes	Mid Susitna	Witsol Lake	X	
Susitna Basin Lakes	Mid Susitna	Lockwood Lake	X	
Susitna Basin Lakes	Mid Susitna	Lady Slipper	X	
Susitna Basin Lakes	Mid Susitna	Unnamed	X	
Susitna Basin Lakes	Mid Susitna	Unnamed	X	
Susitna Basin Lakes	Mid Susitna	Unnamed	X	
Susitna Basin Lakes	Mid Susitna	Vern Lake	X	
Susitna Basin Lakes	Mid Susitna	Ding Dong	X	
Susitna Basin Lakes	Mid Susitna	Yensus Lake		X
Susitna Basin Lakes	Yentna River	Whiskey Lake	X	
Susitna Basin Lakes	Yentna River	Bulchitna Lake	X	
Susitna Basin Lakes	Yentna River	Fish Creek Lake 1	X	
Susitna Basin Lakes	Yentna River	Fish Creek Lake 2	X	
Susitna Basin Lakes	Yentna River	Fish Creek Lake 3	X	
Susitna Basin Lakes	Yentna River	Fish Creek Lake 4	X	
Susitna Basin Lakes	Yentna River	Donkey Lake	X	
Susitna Basin Lakes	Yentna River	Hewitt Lake	X	
Susitna Basin Lakes	Yentna River	No Name (Big Bend)	X	
Susitna Basin Lakes	Yentna River	Chelatna Lake	X	
Susitna Basin Lakes	Yentna River	Cabin Lake (Big Bend)	X	
Susitna Basin Lakes	Yentna River	Pear Lake (Upper Skwenta)	X	
Susitna Basin Lakes	Yentna River	Stickleback Lake	X	
Susitna Basin Lakes	Skwentna River	Eight Mile Lake	X	
Susitna Basin Lakes	Skwentna River	Seven Mile Lake	X	
Susitna Basin Lakes	Skwentna River	No Name (Herk Strip)	X	
Susitna Basin Lakes	Skwentna River	One Stone Lake	X	
Susitna Basin Lakes	Skwentna River	Shell Lake	X	
Susitna Basin Lakes	Deshka River	Parker Lake	X	
Susitna Basin Lakes	Deshka River	Trapper Lake	X	
Susitna Basin Lakes	Deshka River	No Name Lake	X	
Susitna Basin Lakes	Deshka River	Ambler Lake	X	
Susitna Basin Lakes	Deshka River	Rocky Lake	X	
Susitna Basin Lakes	Deshka River	Neil Lake	X	
Susitna Basin Lakes	Deshka River	Kroto Lake	X	
Susitna Basin Lakes	Deshka River	No Name 1mi SW Parker	X	
Susitna Basin Lakes	Deshka River	No Name 2 mi SW Parker	X	
Susitna Basin Lakes	Upper Susitna	Kashwitna Lake		X
Susitna Basin Lakes	Upper Susitna	Caswell Lake		X
Susitna Basin Lakes	Upper Susitna	Fish Lake (Birch Ck)		X
Susitna Basin Lakes	Upper Susitna	Sawmill Lake		X
Susitna Basin Lakes	Upper Susitna	Swan Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Nancy Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Redshirt Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Lynx Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Cow Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Little Chicken Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Big No Luck Lake	X	
Susitna Basin Lakes	Nancy Lake Area	South Rolly Lake	X	
Susitna Basin Lakes	Nancy Lake Area	North Rolly Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Denaina Lake (Tanaina)	X	
Susitna Basin Lakes	Nancy Lake Area	Milo Lake	X	

-continued-

Location classification			Northern pike presence	
Primary	Secondary	Site	Documented	Suspected
Susitna Basin Lakes	Nancy Lake Area	Frazer Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Little Frazer Lake	X	
Susitna Basin Lakes	Nancy Lake Area	James Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Owl Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Char Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Ardaw Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Phoebe Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Chicken Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Echo Pond #1	X	
Susitna Basin Lakes	Nancy Lake Area	Echo Pond #2	X	
Susitna Basin Lakes	Nancy Lake Area	Echo Pond #3	X	
Susitna Basin Lakes	Nancy Lake Area	Candle Stick Lake	X	
Susitna Basin Lakes	Nancy Lake Area	Bains Pond #1	X	
Susitna Basin Lakes	Nancy Lake Area	Bains Pond #2	X	
Susitna Basin Lakes	Nancy Lake Area	Bains Pond #3	X	
Susitna Tributaries		Fish Creek (Flathorn)	X	
Susitna Tributaries		Fish Creek (Kroto)	X	
Susitna Tributaries		Lake Creek	X	
Susitna Tributaries		Fish Lake Creek	X	
Susitna Tributaries		Alexander Creek	X	
Susitna Tributaries		Trappers Creek	X	
Susitna Tributaries		Sucker Creek	X	
Susitna Tributaries		Montana Creek	X	
Susitna Tributaries		Rolly Creek	X	
Susitna Tributaries		Moose Creek	X	
Susitna Tributaries		Bottle Creek	X	
Susitna Tributaries		Hewitt Creek	X	
Susitna Tributaries		Donkey Creek	X	
Susitna Tributaries		Indian Creek (Yentna)	X	
Susitna Tributaries		Indian (Chulitna)		X
Susitna Tributaries		Rabideux Creek	X	
Susitna Tributaries		Fish Lake Creek	X	
Susitna Tributaries		Kutna Creek (Yentna)	X	
Susitna Tributaries		Shell Creek	X	
Susitna Tributaries		Eightmile Creek	X	
Susitna Tributaries		Caswell Creek	X	
Susitna Tributaries		Witsoe Creek	X	
Susitna Tributaries		Trapper (Talkeetna)		X
Susitna Tributaries		Talachulitna Creek		X
Susitna Tributaries		Johnson Creek	X	
Susitna Tributaries		Otter Creek	X	
Susitna Tributaries		Unnamed (Lower Su)	X	
Susitna Tributaries		Sunshine Creek		X
Susitna Tributaries		Anderson Creek		X
Susitna Tributaries		Wiggel Creek		X
Susitna Tributaries		Birch Creek		X
Susitna Tributaries		Yentna River	X	
Susitna Tributaries		Skwentna River	X	
Susitna Tributaries		Chulitna River		X
Susitna Tributaries		Tokositna	X	
Susitna Tributaries		Deshka River	X	
Knik Arm Drainage	Big Lake Drainage	Fish Creek (Big Lake)		X
Knik Arm Drainage	Big Lake Drainage	Meadow Creek (Big Lake)		X
Knik Arm Drainage	Big Lake Drainage	Big Lake	X	
Knik Arm Drainage	Big Lake Drainage	Blodgett Lake		X
Knik Arm Drainage	Big Lake Drainage	West Beaver Lake		X
Knik Arm Drainage	Big Lake Drainage	Rainbow Lake		X

-continued-

Location classification			Northern pike presence	
Primary	Secondary	Site	Documented	Suspected
Knik Arm Drainage	Cottonwood Creek	Cottonwood Creek		X
Knik Arm Drainage	Cottonwood Creek	Cottonwood Lake		X
Knik Arm Drainage	Cottonwood Creek	Andersen Lake	X	
Knik Arm Drainage	Cottonwood Creek	Wasilla Lake		X
Knik Arm Drainage	Cottonwood Creek	Mud Lake		X
Knik Arm Drainage		Little Susitna River	X	
Knik Arm Drainage	Little Susitna River	Horseshoe Lake (Little-Su)		X
Knik Arm Drainage	Knik River	Swan Lake		X
Knik Arm Drainage	Knik River	Jim Lake/Jim Creek		X
Knik Arm Drainage		Knik Lake	X	
Knik Arm Drainage		Mink Creek	X	
Knik Arm Drainage		Fire Creek	X	
West Cook Inlet		Chuit River	X	
West Cook Inlet		Chuitbunga Lake	X	
West Cook Inlet		Threemile Creek	X	
West Cook Inlet	Threemile Creek	Threemile Lakes	X	
West Cook Inlet		Tukallah Lake	X	
West Cook Inlet		Nikolai River	X	
Mat-Valley Lakes		Big Lake cut-off Lake	X	
Mat-Valley Lakes		Crystal Lake (Willow)	X	
Mat-Valley Lakes		Shirley Lake (Willow)		X
Mat-Valley Lakes		Long Lake (Willow)	X	
Mat-Valley Lakes		Prator Lake	X	
Mat-Valley Lakes		Memory Lake	X	
Mat-Valley Lakes		Finger Lake		X
Mat-Valley Lakes		Wallace Lake	X	
Anchorage Lakes		Sand Lake	X	
Anchorage Lakes		Delong Lake	X	
Anchorage Lakes		Lower Fire Lake	X	
Anchorage Lakes		Upper Fire Lake	X	

APPENDIX N. HABITAT PERMITS

Appendix N1.-Northern Cook Inlet Management Area habitat permit applications, 2006.

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Cottonwood Creek	Holler, Leo	Bridge Construction	DNR	FH05-IV-0279	1/1/2006	5/1/2007
Wal-Mart	Geis, Ms.	Habitat & Permitting Authority	DNR	FH05-IV-0272	12/15/2005	X
Susitna Flats State Game Refuge	Sullivan, Faye	Maintenance Operations	ADF&G	FG95-II-0493	12/22/2005	12/31/2007
Susitna Flats State Game Refuge X 2	Sullivan, Faye	Pretty Creek Pad Tank Installation Project	ADF&G	FG05-II-0068	12/29/2005	3/15/2006
Kroto , Chijuk, Joan, Kahiltna, Lake & Yenlo Creek	Ellis, Ed	Vehicle Equipment Ford	DNR	FH05-IV-0290	12/29/2005	12/31/2006
Various Streams Crossing the Alaska Railroad	Kearney, Christie	Debris Removal	DNR	FH04-II-0291	1/5/2006	12/31/2010
Alaska Coastal Zone	Bethe, Mike	Water Right Application	DNR	FH05-IV-0282	12/27/2005	X
Horseshoe Lake	Bailey, Bonnie	Utility Line Placement Application	DNR	FH05-IV-0284	12/23/2005	10/1/2006
Alaska Coastal Zone & Matanuska Susitna Coastal District X 2	Bethe, Mike	Temporary Water Use Authorization	DNR	FH05-IV-0286	12/27/2005	X
Kroto, Peters, Bear Creek	Adler, Kevin	Vehicle Stream Crossings	DNR	FH06-IV-0010	1/13/2006	12/31/2006
Lower Susitna Basin	Bethe, Mike	Veritas South Susitna 2D Seismic Program	ADF&G	X	1/13/2006	X
North Slope Borough, Northwest Arctic Borough & Bering Straits	General	Equipment Crossing of Streams	X	X	X	X
Gravel Creek	General	Recreational Cabin Sites Staking Area	DNR	X	1/13/2006	X
Deep Creek	Crowley, Dane	Bridge Construction	DNR	FH06-IV-0008	1/9/2006	5/31/2006
Palmer Hay Flats State Game Reguge	General	Off-Road Vehicle Use & Aircraft Landings	ADF&G	FG06-II-GP05	1/1/2006	12/31/2006
Redoubt Bay Critical Habitat Area	Trupp, Rick	West Foreland 3D Seismic Surveys	ADF&G	FG05-II-0079	1/24/2006	3/31/2006
Susitna Flats State Game Refuge	Trupp, Rick	Middle Lake 2D Seismic Surveys	ADF&G	FG05-II-0078	1/24/2006	3/31/2006
Kashwitna River	Rutz, Tom	Bank Stabilization	DNR	FH05-IV-0261	1/24/2006	12/31/2006
Trapper Creek	Crowley, Dane	Vehicle Equipment Ford	DNR	FH06-IV-0024	1/24/2006	5/1/2006
Big River Lake	Brewer, Doug	Brewer Handicap Accessible Boat	DNR	X	1/17/2006	X
Northern & Southcentral, Susitna Basin Recreation Rivers	General	Winter & Summer Cross Country Movement of dozers, ect.	DNR	GCD-19	X	X
North Slope Borough, Northwest Arctic Borough & Bering Straits	General	Winter Ice Crossings of Resident Fish Streams	DNR	GCD-5	X	X
Matanuska Susitna Borough Susitna River & Rabideux Creek	General	Vehicle & Equipment Fords	DNR	FH06-IV-0005GP	1/1/2006	12/31/2006
Matanuska Susitna Borough Moose Creek Trail	General	Vehicle & Equipment Fords	DNR	FH06-IV-0007GP	1/1/2006	12/31/2006
Susitna River	Boydston, Mark	Susitna River Bridge Repair	DNR	FH05-IV-0281-2	1/25/2006	X
Matanuska Susitna Borough	General	Construction, Maintenance & Use of Docks onSpecified Anadromous Lakes	DNR	FH06-IV-0001GP	1/1/2006	12/31/2006
Matanuska Susitna Borough, Bodenbrug & Jim Crk, Knik Riv. & Friday Creek	General	Vehicle & Equipment Fords	DNR	FH06-IV-0003GP	1/1/2006	12/31/2006
Matanuska Susitna Borough, Peters, Willow, Nugget & Thunder Creek	General	Vehicle & Equipment Fords	DNR	FH06-IV-0004GP	1/1/2006	12/31/2006
Glenn Highway Milepost 97-100	Nickeson, Burrell	Pinochle Creek Streambed Relocation	DNR	FH06-IV-0030	1/27/2006	X
Mat-Su Medical Center	Walton, Michael	Temporary Water Use Authorization	DNR	FH06-IV-0041	1/20/2006	X
Lower Susitna Basin	Fink, Mark	Conduct onshore 2D Seismic Surveys	ADF&G	X	2/1/2006	X
Susitna Flats State Game Refuge	Lopez, Manny	Beluga Natural Gas Transmission Pipeline Relocation	ADF&G	FG05-II-0076	02-02-069	3/31/2006
Unnamed Creek x2	Elder, Robert	Stream Rehabilitation	DNR	FH05-IV-0213	2/2/2006	3/1/2006
Wasilla Creek	Besse, Richard	Culvert Removal	DNR	FH06-IV-0009	2/3/2006	7/1/2006
Cache Creek	Mr & Mrs. K. Lee	Placer Mining, Water Withdrawal & Stream Ford	DNR	FH06-IV-0013	2/6/2006	12/31/2007
Goose Creek	Crowley, Dane	Snow Bridge	DNR	FH06-IV-0039	2/3/2006	3/30/2006
Granite Creek	Crowley, Dane	Snow Bridge Construction	DNR	FH06-IV-0040	2/3/2006	3/15/2006
Big Lake	Bailey, Bonnie	Utility Line Placement Application	DNR	FH06-IV-0037	1/30/2006	12/31/2006

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Cache Creek	Hartman, Daniel	Placer Mining, Water Withdrawal & Stream Ford	DNR	FH06-IV-0014	2/6/2006	12/31/2007
Lower Susitna Basin x2	Greene, Ben	Conduct onshore 2D Seismic Surveys	DNR	FH05-IV-0275	2/2/2006	X
Lower Susitna Basin X 2	Bethe, Mike	Conduct onshore 2D Seismic Surveys	ADF&G	X	2/1/2006	X
Peters Creek	Zobel, Dick	Placer Mining	DNR	FH06-IV-0033	2/6/2006	12/31/2007
Three Mile Creek	Bettis, Patricia	Temporary Water Use Authorization	DNR	FH06-IV-0027	1/31/2006	X
Matanuska-Susitna Borough	General	Vehicle Movement on Frozen Water Surfaces	DNR	FH06-IV-0002GP	1/1/2006	12/31/2006
Cottonwood Creek	Bailey, Bonnie	Utility Line Placement Application	DNR	FH06-IV-0046	2/2/2006	9/30/2006
Jacobsen Lake	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0044	2/7/2006	X
Twin, Mills, Camp, Lake, Kahiltna River and Peters Creek	Bartel, Gordon	Equipment Crossing of Streams	DNR	FH06-IV-0032	2/9/2006	12/31/2006
Gold Creek X 2	Bauer, Todd	Placer Mining Eldorado & Gold Creeks	DNR	FH06-IV-0029	2/13/2006	5/15/2007
Nob Island, Big Lake	Bailey, Bonnie	Utility Line Placement Application	DNR	FH06-IV-0051	2/13/2006	9/30/2006
Cache Creek	Weathers, Mr. & Mrs.	Placer Mining	DNR	FH06-IV-0049	2/14/2006	12/31/2006
3 X Gate Creek	Engstrom, Thomas & Marilyn	Vehicle Ford	DNR	FH06-IV-0052	2/14/2006	12/31/2007
Susitna, Kahiltna & Yentna River	Trupp, Rick	Conduct onshore 2D Seismic Surveys	DNR	FH05-IV-0275	2/17/2006	5/30/2006
Peters Creek	Wolff, Gordon	Placer Mining	DNR	FH06-IV-0048	2/14/2006	12/31/2006
Big Lake, Mud Lake, Flat Lake & Horseshoe Lake	Fisher's Fuel	Fuel Delivery Across Frozen Lakes	DNR	FH06-IV-0053	2/16/2006	3/31/2006
Matanuska-Susitna Borough X2	General	Vehicle Movement on Frozen Water Surfaces	DNR	FH06-IV-0002GP	1/1/2006	12/31/2006
Fish Creek, Fish Lake Village Subdivision	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0054	2/21/2006	X
Big Lake, Mud Lake, Flat Lake & Nancy Lake	La Vigne, Ronald J.	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0056	2/21/2006	3/31/2006
Black, Pickle Creek & Kahiltna River & Summit Creek X2	Dean, Farley	Vehicle Movement on Frozen Water Surfaces	DNR	FH06-IV-0072	2/27/2006	3/31/2006
Poddle Creek	Olson, Harold	Water Withdrawal & Vehicle & Equipment Stream Crossing	DNR	FH06-IV-0069	2/27/2006	12/31/2006
Kashwitna River	Simpson, Ellen	Agency Comments, Municipal/Borough Land Use Planning	DNR	FH06-IV-0063	2/27/2006	X
Middle Fork Chulitna River, Jack River & Mirror Lake X2	Williams, Dave	Water Withdrawal	DNR	FH06-IV-0068	2/27/2006	10/31/2007
Crooked Lake X2	Bailey, Bonnie	Utility Line Placement Application	DNR	FH06-IV-0083	3/3/2006	9/30/2006
Big Lake	Seime, Craig	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0088	2/9/2006	4/30/2006
Nancy Lake	Sapp, Butch	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0089	2/9/2006	3/30/2006
Hurricane Gulch & Gragie Creek	Westbrook, Ricky	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0094	3/10/2006	7/15/2006
Various Rivers, Lakes & Streams within Mat-Su Borough	General	Vehicle Movement on Frozen Water Surfaces X 5	DNR	FH06-IV-0002-GP	1/1/2006	12/31/2006
Seward Meridian	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0074	3/2/2006	X
Unnamed Lakes, Pt. MacKenzie Agricultural Area	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0076	3/2/2006	X
Big Lake	Neitzey, Duane	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0078	3/6/2006	3/31/2006
Big Lake	Kelly, Tom	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0080	3/6/2006	3/31/2006
Fairbanks Meridian, Cantwell, AK.	Luttio, Kathy	Public &Charitable Use Lease	DNR	FH06-IV-0082	3/6/2006	X
Big Lake	Barksdale, Kevin	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0084	3/7/2006	3/31/2006
Nancy Lake	Currey, Kirk	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0085	3/7/2006	3/31/2006
Big Lake, Mud Lake, Flat Lake & Horseshoe Lake	Fisher's Fuel	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0086	3/7/2006	3/31/2006
Unnamed Lakes X2	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0091	3/15/2006	X
The Little Susitna River	Provo, William	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0117	3/23/2006	7/15/2006
Big Lake	Gittlein, Paul	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0095	3/21/2006	4/5/2006
Wasilla Creek	Dudley, Tim	Water Withdrawal	DNR	FH06-IV-0012	3/21/2006	10/15/2006
Rabbit Slough	Von Hippel, Frank	Fisheries Research-Weir	DNR	FH06-IV-0099	3/21/2006	12/31/2007
Wasilla Lake	Dudley, Tim	Water Withdrawal	DNR	FH06-IV-0107	3/21/2006	10/15/2006
Big Lake	Johnson, Johnnie L.	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0108	3/21/2006	4/5/2006

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
North Long Lake	Cavanaugh, Darrell	Watercraft Launch/Access Channel	DNR	FH06-IV-0118	3/24/2006	12/31/2006
Rabideux Creek & Susitna River	Crafton, Roger	Vehicle Ford	DNR	FH06-IV-0114/FH06-IV-0119	3/24/2006	11/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River X 2	Cannatra, Michael A.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0139	4/3/2006	7/15/2006
Big Lake	Kaucic, Chuck	Culvert Replacement	DNR	FH06-IV-0096	3/24/2006	8/31/2006
Big Lake	Kaucic, Chuck	Culvert Replacement	DNR	FH06-IV-0067	3/24/2006	8/31/2006
Knik River	Simpson, Ellen	Agency Comments, Municipal/Borough Land Use Planning	DNR	FH06-IV-0100	3/20/2006	X
Various Rivers, Lakes & Streams within Mat-Su Borough X3	General	Vehicle Movement on Frozen Water Surfaces	DNR	FH06-IV-0002-GP	1/1/2006	12/31/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Fawcett, Gerald	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0110	3/22/2006	7/15/2006
Big Lake, Mud Lake, Flat Lake & Nancy Lake	La Vigne, Ronald J.	Equipment Move Across Frozen Lakes	DNR	FH06-IV-0056	3/30/2006	4/8/2006
Cottonwood Creek	Norton, Dave	Bridge Construction	DNR	FH06-IV-0113	3/30/2006	12/31/2006
Trapper Creek	Renfrew, Kristie	Water Withdrawal	DNR	FH06-IV-0106	3/11/2006	9/30/2006
Rabbit Slough	Von Hippel, Frank	Fisheries Research-Weir	DNR	FH06-IV-0099	3/21/2006	12/31/2007
Peters Creek, Little Susitna River, The Matanuska River	Wisdom, Steven	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0105	3/17/2006	7/15/2006
Susitna River & Willow Creek	Broneske, Debby	Bank Revegetation	DNR	FH06-IV-0061	3/21/2006	12/31/2006
Trading Bay State Game Refuge	Bear, Steve	Bunitlana Lake Administrative Cabin & Dock	ADF&G	FG06-II-0010	4/4/2006	12/31/2010
Wasilla Creek	Dudley, Tim	Water Withdrawal	DNR	FH06-IV-0012	3/21/2006	10/15/2006
Wasilla Creek	Walton, Michael	Temporary Water Use Authorization	DNR	FH06-IV-0012	4/5/2006	X
Childers Subdivision	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0140	4/5/2006	X
Unnamed Tributary, Susitna River	Kearney, Christie	Replace Bridge with two culverts at APR Milepost 233.3	DNR	FH06-IV-0077	4/10/2006	X
Trapper Creek	Frost, Will	Water Withdrawal	DNR	FH06-IV-0142	4/7/2006	12/31/2006
Unnamed Susitna Tributary	Kearney, Christie	Replacement of Bridge with 2 ea. 8-foot diameter culverts	DNR	FH05-IV-0258	4/6/2006	Life of Culvert
Crooked Lake	Sutton, Marcy	Utility Line Placement Application	DNR	FH06-IV-0144	4/10/2006	9/30/2006
Big River Lake, Redoubt Bay Critical Habitat Area	Schweitzer, Melinda	Commercial Recreational Boat Storage	ADF&G	FG05-II-0040	4/11/2006	5/1/2007
Middle Fork Chulitna River	Kearney, Christie	Bridge Replacement	DNR	FH06-IV-0120	4/6/2006	7/31/2006
Matanuska Watershed, Including Moose Creek X2	Winnestaffer, Brian	Stream Restoration	ADF&G	SF-2006-076	4/15/2006	12/31/2006
Matanuska Watershed, Including Moose Creek	Winnestaffer, Brian	Permit Application	ADF&G	X	4/1/2006	X
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Mc Mahill, Larry	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0149	4/13/2006	7/15/2006
Big River Lake	Brewer, Doug	Brewer Handicap Accessible Boat Application	ADF&G	FG06-II-0004	4/14/2006	X
Big River Lake	Brewer, Doug	Brewer Handicap Accessible Boat	ADF&G	FG06-II-0004	4/14/2006	9/30/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Hanson, Dave L.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0156	3/17/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Westphale, Chuck	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0158	3/17/2006	7/15/2006
Long Lake & Weiner Lake	Walton, Michael	Temporary Water Use Authorization	DNR	FH06-IV-0146	4/19/2006	X
Airstrip Subdivision	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0148	4/19/2006	X
Meadow Lakes Subdivision	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0162	4/19/2006	X
Little Susitna Public Use Facility	General	Susitna Flats State Game Refuge	ADF&G	FH06-II-GP01	4/11/2006	12/31/2007
Susitna Flats State Game Refuge	General	Camping & Protection of Restoration Sites	ADF&G	FG06-II-GP04	4/11/2006	12/31/2007
Willow Mountain Critical Habitat Area	General	Off-Road Vehicle Use	ADF&G	FG06-II-GP08	4/11/2006	12/31/2007
Goose Bay State Game Refuge	General	Off-Road Vehicle Use	ADF&G	FG06-II-GP09	4/11/2006	12/31/2007
Trading Bay State Game Refuge	General	Off-Road Vehicle Use	ADF&G	FG06-II-GP15	4/11/2006	12/31/2007

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Redoubt Bay Critical Habitat Area	General	Off-Road Vehicle Use	ADF&G	FG06-II-GP16	4/11/2006	12/31/2007
Glennallen to Palmer Spur Line	Mc Lean, Robert	Alaska Natural Gas Development Authority	ADF&G	X	4/21/2006	X
Upper Cook Inlet	General	Strategies, Tools & Criteria for 2005 UCI Sport & Commercial Fishing Season	ADF&G	X	4/27/2006	X
Susitna River, Flathorn & Sunshine x 2	Yanusz, Richard	Fisheries Research - Fishwheels	DNR	FH06-IV-0174	4/21/2006	12/31/2009
Rabbit Slough	Von Hippel, Frank	Fisheries Research - Weir	DNR	FH06-IV-0099	4/21/2006	12/31/2007
Judd, Shell, Hewitt, Chelatna, Larson, Stephan & Byers Lake	Fandrei, Gary	Fisheries Research - Weir	DNR	FH06-IV-0167-0173	4/20/2006	12/31/2009
Middle Fork Chulitna River	Kearney, Christie	Bridge Replacement	DNR	FH06-IV-0120	4/28/2006	7/31/2007
Portage Creek	Kearney, Christie	Bridge Replacement	DNR	FH06-IV-0184	4/27/2006	7/15/2007
Gold Mine Creek	Kearney, Christie	Bridge Replacement	DNR	FH06-IV-0060	4/27/2006	Life of Structure
Beyers Crk, Beyers Lake, Pass Creek & Honolulu Creek x2	Koenig, Gerald	Water Withdrawal/Intake Structure	DNR	X	4/28/2006	12/31/2006
Birch Creek	Kearney, Christie	Bridge Piling Removal	DNR	FH06-IV-0212	5/12/2006	7/15/2006
Question Creek	Kearney, Christie	Bridge Piling Removal	DNR	FH06-IV-0211	5/12/2006	7/15/2006
Kustatan River	Johnson, Tom	Commercial Recreational Boat Storage	ADF&G	FG06-II-0029	5/9/2006	5/1/2007
Big River Lake	Johnson, Tom	Commercial Recreational Boat Storage	ADF&G	FG06-II-0027	5/9/2006	5/1/2007
Kustatan River	Johnson, Tom	Commercial Recreational Boat Storage	ADF&G	FG06-II-0028	5/9/2006	5/1/2007
Cottonwood Creek	MTA	Utility Line Placement Application	DNR	FH06-IV-0191	5/3/2006	9/30/2006
Texas Subdivision x2	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0195	5/4/2006	X
Peters Creek & The Little Susitna River	Searles, Harry A.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0194	5/1/2006	7/15/2006
Crimson View Homeowners Association	Tatlow, Wendy	Agency Comments, Water Right Amendment LAS 13907	DNR	FH06-IV-0197	5/5/2006	X
Theodore River	Sullivan, Faye	Water Withdrawal	DNR	FH06-IV-0166	5/21/2006	12/31/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Limstrom, Robert	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-218	5/21/2006	7/15/2006
Peters Creek, The Matanuska River & The Knik River	Brashear, Kelly	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-208	5/23/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & Other	Alexander, Chris	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0206	5/19/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Berry, Harold	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0207	5/19/2006	7/15/2006
Wasilla Creek	Besse, Richard	Water Withdrawal/Intake Structure	DNR	FH06-IV-0179	5/26/2006	10/31/2006
Peters Creek & The Little Susitna River	Zeiler, Robert	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0240	5/26/2006	7/15/2006
Crocker Creek x2	Ackles, Robert	Culvert Replacement	DNR	FH06-IV-0145	5/19/2006	7/31/2006
Theodore River	Sullivan, Faye	Water Withdrawal	DNR	FH06-IV-0166	5/21/2006	12/31/2006
Question Creek	Kearney, Christie	Bridge Piling Removal	DNR	FH06-IV-0211	5/12/2006	7/15/2006
Birch Creek	Kearney, Christie	Bridge Piling Removal	DNR	FH06-IV-0212	5/12/2006	7/15/2006
Peters Creek & The Little Susitna River & Matanuska River x 2	Rondifer, Randahl	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0204	5/17/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River x 2	Broberg, Cort	Recreational Mining w/a Suction Dredge	DNR	FH06-II-0205	5/18/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & Other	Alexander, Chris	Recreational Mining w/a Suction Dredge	DNR	FH06-II-0206	5/19/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River & Other	Berry, Harold	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0207	5/19/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & Other	Kelly, Dan	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0203	5/17/2006	7/15/2006
Peters Creek & The Little Susitna River	Kataiva, Ken	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0202	5/17/2006	7/15/2006
Peters Creek, The Little Susitna River & Other	Decarlo, Joseph	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0201	5/15/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River & Other	Shelling, Giles Jr.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0200	5/15/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Little, Charles	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0230	5/4/2006	7/15/2006
Wasilla Lake	Satterfield, Cynthia & Gary	Water Withdrawal	DNR	FH06-IV-0239	5/26/2006	9/30/2006
Cottonwood Creek	Hirschmann, Randi & Fred	Water Withdrawal	DNR	FH0-IV-0226	5/23/2006	9/30/2006
Wasilla Creek x 2	Besse, Richard	Water Withdrawal/Intake Structure	DNR	FH06-IV-0179	5/26/2006	10/31/2006

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Susitna Flats State Game Refuse	Elder, Robert	Forest Oil Middle Lake No.1 Cleanup	ADF&G	FG06-II-0032	5/26/2006	6/30/2006
Wasilla Creek	Walton, Michael	Agency Comments, Temporary Water Use Authorization	DNR	FH06-IV-0179	5/26/2006	X
Peters Creek & The Little Susitna River	Bowman, James	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0277	6/9/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River & Other	Aivano, Michael	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0261	6/7/2006	7/15/2006
Trading Bay State Game Refuge	Curry, John M.	Nikolai Creek Bridge Closure	ADF&G	FG06-II-0040	6/16/2006	12/31/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River	Kleman, Bruce & Berry, Harold	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0260	6/13/2006	7/15/2006
Cottonwood Creek	Davis, Troy	Stream Ford	DNR	FH06-IV-0231	6/12/2006	10/31/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River & Other	Roadifer, Randahl D.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0262	6/15/2006	7/15/2006
Montana Creek	Lewis, Becky	Vehicle Equipment Ford	DNR	FH06-IV-0275	6/30/2006	7/15/2006
Seward Meridian	Wright, Keith	Land Fill Access to Unnamed Pond	DNR	FH06-IV-0237	6/16/2006	X
Seward Meridian	Hovden, George	Culvert Installation, Unnamed Creek	DNR	FH06-IV-0281	6/16/2006	X
Seward Meridian	Lopez, Manny	Rainbow Subdivision, Installation of 2-" Gas Line	DNR	FH06-IV-0234	6/16/2006	X
S. Birch Creek Rd. & Yoder Rd.	Holt, Glen	Operations for Forest Harvest Activities	DNR	FH06-IV-0235 & 236	6/7/2006	X
Unnamed Creek x2	Taylor, George	Waterbody, Construct Check Dams Downstream of Two Perched Borough Culverts	DNR	FH06-IV-0137	6/19/2006	11/1/2006
Pass Creek	Holmes, Thomas V.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0298	6/22/2006	7/15/2006
Byers Creek	Evans, Brian	Boom Deployment & Spill Cleanup	DNR	FH06-II-0191	6/21/2006	12/31/2006
Permit Determination	Ballard, Christine	Access Easement w/Culvert	DNR	FH06-IV-0233	6/20/2006	X
Granite Creek	Crowley, Dane	Equipment Ford	DNR	FH06-IV-0300	6/26/2006	8/15/2006
Mc Dougal Slough & Yentna River x 2	Conway, Noel G.	Bank Restoration & Stabilization	DNR	FH06-IV-0147	6/26/2006	7/15/2007
Deadhorse Creek	Alaska Railroad Corp.	Water Withdrawal	DNR	FH06-IV-0298	6/15/2006	9/30/2006
Cache Creek, Nugget Creek & Thunder Creek	Newcomb, Kurt M.	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0299	5/23/2006	7/15/2006
Moose Creek	Dryden, Jessica	Temporary Stream Diversion	DNR	FH06-IV-0279	6/13/2006	7/15/2006
Secluded Meadows	Simpson, Ellen	Revised Preliminary Plat	DNR	FH06-IV-0074	6/13/2006	X
Lee Subdivision	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0255	6/13/2006	X
Paradise Lake	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0256	6/13/2006	X
Susitna Flats State Game Refuge	Sullivan, Faye	Stream Stabilization/Temporary Stream Diversion Theodore River Bridge	ADF&G	FH06-II-0044	6/28/2006	7/17/2006
Peters Creek	Walker, Dennis & Roger Rif?	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0264	6/26/2006	7/15/2006
Peters Creek	Weylin, Buzby	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0287	6/27/2006	7/15/2006
Peters Creek, Little Susitna River, Matanuska River & Knik River, Alfred Creek & Upper Caribou Crk.	Flam, Thomas	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0286	6/27/2006	7/15/2006
Peters Creek, Little Susitna River, Matanuska River & Knik River	Ewing, Keremy	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0288	6/27/2006	7/15/2006
2x Cloudy Lake, Knik River, Cornelius Lake, Wasilla Lake, Memory Lake	Dudley, Tim	Water Withdrawal	DNR	X	6/27/2006	9/30/2006
Wasilla Creek	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0303	6/27/2006	X
Copper River Meridian	Miller, Shannon	Agency Comments, Land Use Permit Application	DNR	FH06-IV-0293	6/26/2006	X
Peters Creek & Bird Creek & Thunder Creek	Marsh, Bernard	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0289	6/29/2006	7/15/2006
Peters Creek, Little Susitna River, Matanuska River & Knik River	Armagest, Alexander	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0311	6/29/2006	7/15/2006
Morrison Subdivision	Cameron, Nancy	Public Access Easement Vacation	ADF&G	X	6/6/2006	X
Cottonwood Slough x2	Tanner, Jesse	Culvert REplacement	DNR	FH06-IV-0291	7/5/2006	7/31/2006
Peters Creek	Oldham, Bernard	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0318	7/7/2006	7/15/2006
Peters Creek	Jones, Kerry	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0308	7/7/2006	7/15/2006
Peters Creek	Manley, John	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0313	7/3/2006	7/15/2006
Peters Creek & The Little Susitna River	Davis, Bruce & Kristine	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0290	6/3/2006	7/15/2006

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Dinity Lake & Lake Louise x2	Trammell, Tom	Culvert Installation	DNR	FH06-IV-0251	7/11/2006	8/30/2006
Wasilla Lake	Western Construction	Application for Water Withdrawal	DNR	FH06-IV-0307	7/5/2006	9/30/2006
Triple Crown Estates	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments	DNR	FH06-IV-0320	7/11/2006	X
Wasilla Creek Commons	Cameron, Nancy	Master Plan	ADF&G	X	7/12/2006	X
Peters Creek x 2	Jones, Kerry	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0308	7/7/2006	7/15/2006
Big Lake	James, Lynda	Wetland Restoration	DNR	FH05-IV-0264	7/13/2006	3/31/2007
Peters Creek, Little Susitna River, The Matanuska River & The Knik River & Other	Dillon, Tom	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0263	6/20/2006	7/15/2006
Seward Meridian	Ballard, Christine	Permit Determination, Access Easement w/Culvert	DNR	FH06-IV-0233	6/20/2006	X
Rainey Pass	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments Weather Camera	DNR	FH06-IV-0333	7/14/2006	X
Big Lake	Simpson, Ellen	Municipal & Borough Land Use & Planning Comments,Marshall Addition ROW Vacation & Replacement Public Use Easement	DNR	FH06-IV-0334	7/14/2006	X
Moose Creek	Forland, Sasha	Bridge Piling Removal	DNR	FH06-IV-0183	7/14/2006	10/31/2006
Moose Creek	Forland, Sasha	Steambank Restoration	DNR	FH06-IV-0228	7/14/2006	10/31/2006
Carpenter Lake	Spain & Sons	Water Withdrawals/Intake St	DNR	FH06-IV-0322	7/14/2006	9/30/2008
Barley Lake	Spain & Sons	Water Withdrawals/Intake St	DNR	FH06-IV-0339	7/14/2006	9/30/2008
Knik Lake	Spain & Sons	Water Withdrawals/Intake St	DNR	FH06-IV-0340	7/14/2006	9/30/2008
Goose Creek	Spain & Sons	Water Withdrawals/Intake St	DNR	FH06-IV-0341	7/14/2006	9/30/2008
Knik Goose Ba/Point Mac	Walton, Michael	Temporary Water Use Authorization	DNR	FH06-IV-0322	7/14/2006	X
South Birch Creek Road	Holt, Glenn	Partial Timber Harvest	DNR	X	7/11/2006	X
Goose Creek	Crowley, Dane	Vehicle Equipment Ford	DNR	FH06-IV-0354	7/31/2006	10/31/2006
Cottonwood Creek	Thieman, Dempsey	Bridge Installation	DNR	FH06-IV-0026	7/25/2006	12/31/2006
Willow Creek	Western Construction	Permit Application for Water Withdrawal	DNR	FH06-IV-0331	7/21/2006	9/30/2006
Matanuska River	Nickeson, Burrell	Gravel Extraction Site & Access Road Construction	DNR	Amendment I	7/27/2006	12/31/2006
Matanuska River	Harris, John	Dike Construction	DNR	FH06-IV-0249	7/19/2006	12/31/2006
Peters Creek	Tait, Robert D.	Vehicle Stream Crossings	DNR	FH06-IV-0352	7/26/2006	10/15/2006
Paymer Hay Flats State Game Refuge	Taylor, George	Cotton Creek Access Upgrades	ADF&G	X	7/31/2006	X
Carpenter Lake	J.A. Spain & Sons	Water Withdrawal/Intake Structure	DNR	Fish Habitat Permit	7/14/2006	9/30/2006
Barley Lake	J.A. Spain & Sons	Water Withdrawal/Intake Structure	DNR	Fish Habitat Permit	7/14/2006	9/30/2006
Knik Lake	J.A. Spain & Sons	Water Withdrawal/Intake Structure	DNR	Fish Habitat Permit	7/14/2006	9/30/2006
Goose Creek	J.A. Spain & Sons	Water Withdrawal/Intake Structure	DNR	Fish Habitat Permit	7/14/2006	9/30/2006
Fish Creek	Yoder, Charles Lieut.	Appreciation of your Staff's assistance	ADF&G	X	7/21/2006	X
Trapper Creek	Frost, Will	Culvert Removal	DNR	FH06-IV-0329	7/19/2006	12/31/2006
Trapper Creek	Frost, Will	Bridge Installation	DNR	FH06-IV-0309	7/19/2006	12/31/2006
Trapper Creek	Frost, Will	Equipment Stream Crossing	DNR	FH06-IV-0343	7/19/2006	12/31/2006
Trapper Creek	Frost, Will	Streambank Restoration	DNR	FH06-IV-0344	7/19/2006	12/31/2006
Tyone Creek	Dewan, John T.	Water Withdrawal/Intake Structure	DNR	FH06-IV-0321	7/19/2006	12/31/2006
Unnamed Creek	Kincaid, Brian	Culvert Installation and Culvert Removal	DNR	FH06-IV-0216	7/18/2006	10/31/2006
Peters Creek	Daehnke, Kim	Vehicle Equipment Ford	DNR	FH06-IV-0335	7/18/2006	8/31/2006
Unnamed Creek x2	Hanson, Craig	Culvert Installation	DNR	FH06-IV-0347	7/25/2006	8/31/2006
Moose Creek	Forland, Sasha	Bridge Piling Removal	DNR	FH06-IV-0183	5/23/2006	7/15/2006

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Moose Creek	Forland, Sasha	Streambank Restoration	DNR	FH06-IV-0228	5/23/2006	7/15/2006
Moose Creek	Forland, Sasha	Bridge Piling Removal	DNR	FH06-IV-0183	5/23/2006	7/15/2007
Moose Creek	Forland, Sasha	Streambank Restoration	DNR	FH06-IV-0228	5/23/2006	7/15/2006
Matanuska River	Nickeson, Burrell	Gravel Extraction Site & Access Road Construction	DNR	FH05-IV-0215	5/22/2006	12/31/2008
Glenn Highway Milepost 97 Hicks Creek	Nickeson, Burrell	Temporary Bridge Comstruction-Hicks Creek	DNR	FH06-IV-0164	5/22/2006	12/31/2008
Glenn Highway Milepost 97 Pinochle Creek	Nickeson, Burrell	Temporary Bridge Comstruction-Hicks Creek	DNR	FH06-IV-0165	5/22/2006	12/31/2008
Glenn Highway Milepost 97 Pinochle Creek	Nickeson, Burrell	Equipment Stream Crossing	DNR	FH06-IV-0233	5/22/2006	12/31/2008
Glenn Highway Milepost 97 Hicks Creek	Nickeson, Burrell	Equipment Stream Crossing	DNR	FH06-IV-0224	5/22/2006	12/31/2008
Glenn Highway Milepost 97 Pinochle Creek	Nickeson, Burrell	Culvert Installation	DNR	FH06-IV-0163	5/22/2006	12/31/2008
Glenn Highway Milepost 97 Pinochle Creek	Nickeson, Burrell	Culvert Removal/Stream Re-Channelization	DNR	FH06-IV-0209	5/22/2006	12/31/2008
Twister Creek	Ruehle, Jerry	Talkeetna Airport Improvements	DNR	FH06-IV-0177	5/30/2006	X
Moose Creek	Dryden, Jessica	Temporary Stream Diversion	DNR	FH06-IV-0112	5/30/2006	7/15/2006
Moose Creek	Dryden, Jessica	Stream Bank Restoration	DNR	FH06-IV-0265	5/30/2006	7/15/2006
Hurricane Gulch	Larry	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0222	5/26/2006	7/15/2006
Hurricane Gulch	Anthony Crewle	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0221	5/26/2006	7/15/2006
The Knik River	John Derendinger	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0220	5/26/2006	7/15/2006
Peters Creek, Little Susitna River, The Matanuska River & The Knik River & Other	Donoho, Kevin	Recreational Mining w/a Suction Dredge	DNR	FH06-IV-0242	5/30/2006	7/15/2006
Carpenter Lake	Peltz, Rebecca	Utility Easement	DNR	FH06-IV-0332	7/21/2006	X
Meadow Creek Drainage	Holt, Glenn	Selective Timber Cut	DNR	FH06-IV-0323	7/26/2006	X
Meadow Creek Drainage	Holt, Glenn	Selective Timber Cut	DNR	FH06-IV-0324	7/26/2006	X
Parks Highway Corridor	Bethune, Stephen	Land Use Permit Application	DNR	FH06-IV-0350	7/27/2006	X
Matanuska River	Sorenson, Kevin	ATV/Footbridge Installation	DNR	FH06-IV-0280	8/14/2006	12/31/2006
Susitna River	Arthur, Greg	Transmission Line Repair	ADF&G	FG06-II-0049	8/18/2006	10/31/2006
Big River Lake	DeSaw, Lance	Commercial Recreational Boat Storage	ADF&G	FG06-II-0034	8/18/2006	5/1/2007
Lilly Creek Drainage	Holt, Glenn	Timber Sale Houston	DNR	FH06-IV-0330	8/1/2006	X
Cameron Acres	Ballard, Christine	Applicant Construction Machinery	DNR	FH06-IV-0379	8/25/2006	X
Hart Lake Loop	Ballard, Christine	Applicant John Bradley	DNR	FH06-IV-0378	8/25/2006	X
Lake Creek	Ballard, Christine	Applicant MEA	DNR	FH06-IV-0377	8/5/2006	X
Nancy Lake	Ballard, Christine	Applicant Tom & Valerie Ouellette	DNR	FH06-IV-0370	8/25/2006	X
Crocker Creek x2	Ballard, Christine	Applicant Settlers Bay Golf CourseLLC	DNR	FH06-IV-0360	8/25/2006	X
Yentna River	Ballard, Christine	Agency Comments (Memo)	DNR	FH06-IV-0358	8/17/2006	X
Susitna Flats State Game Refuge	Crotty, Rob	North Alexander No.1, Helicopter Site Inspection	ADF&G	FG-06-II-0048	8/31/2006	9/30/2006
Sawyer Creek at Anaconda Road	Kaucic, Chuck	Bridge Abutment Replacement	DNR	FH06-IV-0383	9/15/2006	9/30/2006
Willow Creek	Kaucic, Chuck	Debris Removal	DNR	FH06-IV-0401	9/18/2006	10/6/2006
Willow Creek	Kaucic, Chuck	Debris Removal	DNR	FH06-IV-0402	9/18/2006	10/6/2006
Montana Creek	Sworts, Brad	Stream Diversion	DNR	FH06-IV-0374	9/8/2006	09-31-07
Montana Creek	Sworts, Brad	Debris Removal	DNR	FH06-IV-0394	9/8/2006	09-31-07
Montana Creek	Sworts, Brad	Equipment Crossing	DNR	FH06-IV-0395	9/8/2006	09-31-06
M & M View Estates	Roberts, Claudia	Requests Public Access	ADF&G	X	9/8/2006	X
Palmer Hay Flats State Game Reguge	Abshire, Kris	Cotton Creek Access Upgrades	ADF&G	X	9/8/2006	X
Goose Creek	Ballard, Christine	Culvert Installation	DNR	FH06-IV-0393	9/7/2006	X

-continued-

Project location	Applicant's name	Reason for habitat permit	Dept	Permit #	Date Issued	Date Expires
Hatcher Pass Estates	Simpson, Ellen	Rehearing of Platting Request	DNR	FH06-IV-0369	9/8/2006	X
Hatcher Pass Ranch	Hewitt, Jack	Notice of Violation of Work Completed	EPA	X	9/7/2006	X
Willow Creek	Glenn, Becky	Permit Application for Utility Line Placement	DNR	FH06-IV-0385	9/7/2006	11/30/2006
Finger Lake	Glenn, Becky	Permit Application for Utility Line Placement	DNR	FH06-IV-0384	9/7/2006	9/30/2007
Stephan Lake	Ballard, Christine	Permit Application for Utility Line Placement	DNR	FH06-IV-0363	8/11/2006	9/30/2007
Willow Creek	Ballard, Christine	Streambank Restoration	DNR	FH06-IV-0186	9/1/2006	X
Lynx Lake Creek x2	Ballard, Christine	Midnight Sun Bible Camp	DNR	FH06-IV-0182	8/29/2006	X
Wolverine Lake	Roberts, Claudia	Preliminary Plat and Section line Easement Vacation	DNR	FH06-IV-0380	8/25/2006	X
Little Susitna River	Sworts, Brad	Bridge Construction	DNR	FH06-IV-0381	9/1/2006	9/15/2006
Goose Bay State Game Refuge	Means, Sam	Goose Bay Correctional Facility Site Countouring and Revegetation	ADF&G	FG06-IV-0051	9/1/2006	10/31/2006
Unnamed Creek	Prins, Doug	Water Withdrawel/Intake Structure	DNR	FH06-IV-0388	9/11/2006	12/31/2008
Chunilna (Clear) Creek	Tunnell, James R.	Installation of Cribbing to Salvage Home	DNR	FH06-IV-0392	9/20/2006	3/31/2007
Middle Fork Chulitna River	Forland, Sasha	Bridge Replacement	DNR	FH06-IV-0120	9/22/2006	7/21/2007
Poddle Creek	Groff, George	Culvert Removal & Bridge Installation	DNR	FH06-IV-0355	9/22/2006	10/15/2006
Cloudy Lake	Simpson, Ellen	Request to Subdivide	DNR	FH06-IV-0387	9/11/2006	X
Big Lake, Willow, Yentna Station, Skwentna, Houston & Wasilla	Ballard, Christine	Seeking to Provide Marked Winter Access Trails	DNR	FH06-IV-0398	9/21/2006	X
Skwentna	Ballard, Christine	Seeking to Trp Fur Bearing Animals During Trapping Season	DNR	FH06-IV-0404	9/20/2006	X
Seward Meridian	Tatlow, Wendy	Agency Comments, Water Rights Appropriation Amendment	DNR	FH06-IV-0388	9/11/2006	X
Horseshoe Lake	Simpson, Ellen	Request to Subdivide	DNR	FH06-IV-0396	9/21/2006	X
Horseshoe Lake	Ballard, Christine	Seeking to Fill Wetlands	DNR	FH06-IV-0403	9/21/2006	X
Cottonwood Creek Mall	Bucaria, Garvan P.	Violation of Plat Note 9	X	X	9/21/2006	X
Sunrise Lake	Simpson, Ellen	Request to Subdivide Tracts	DNR	FH06-IV-0406	9/25/2006	X
Kahlitna River	Griffin, Daniel P.	Material Extraction	DNR	FH06-IV-0362	9/22/2006	9/22/2007
Unnamed Tributary, Kroto Creek	Bylo, Ken	Bank Restoration & Stabilization	DNR	FH06-IV-0292	10/3/2006	12/31/2007
Crocker Creek	Ackles, Robert	Culvert REplacement	DNR	FH06-IV-0360	10/4/2006	7/15/2007
Kroto Creek	Kaucic, Chuck	Debris Removal	DNR	FH06-IV-0410	9/27/2006	10/6/2006
Unnamed Tributary to Moose Creek	Kaucic, Chuck	Debris Removal	DNR	FH06-IV-0411	9/27/2006	10/6/2006
Deadhorse Creek	Not Available	Water Withdrawal	DNR	FH06-IV-0296	9/27/2006	12/31/2006
Susitna Flats State Game Refuge	General	Off Road Vehicle Use and Aircraft Landings Permit	ADF&G	FH06-II-GP02	1/1/2006	12/31/2006
Willow Creek (near W. Deneki Dr.)	Kaucic, Chuck	Debris Removal	DNR	FH06-IV-0401	9/18/2006	10/6/2006
Willow Creek (Near Shirley Town Bridge)	Kaucic, Chuck	Debris Removal	DNR	FH06-IV-0402	9/18/2006	10/6/2006
West Bryant Road at Outlet of Anna Lake	Kaucic, Chuck	Culvert Installation	DNR	FH06-IV-0412	9/27/2006	10/31/2006
Channel of the Little Susitna River	Not Available	Utility Line Placement Application	DNR	FH06-IV-0408	9/27/2006	12/31/2006
Channel of the Little Susitna River	R. Glenn	Utility Line Placement Application	DNR	FH06-IV-0408	9/22/2006	12/31/2006
Yentna River	Moore, Kara	Bank Restoration & Stabilization	DNR	FH06-IV-0358	10/5/2006	12/31/2007
Yentna River	Moore, Kara	Ladder/Steps	DNR	FH06-IV-0415	10/5/2006	12/31/2006
Sections 21 & 28	Giefer, Joe	60-Foot Wide Public Use Easement Right of Way	DNR	FH06-IV-0416	10/5/2006	X
Cloudy Lake	Giefer, Joe	Create Lot ! Mindy Subdivision	DNR	FH06-IV-0417	10/5/2006	X
Cottonwood Creek	Giefer, Joe	Request to Create 4-New Commercial Tracts	DNR	FH06-IV-0418	10/5/2006	X
Susitna Flats State Game Refuge	Sullivan, Faye	Glycol Conversion Project	ADF&G	FG06-II-0055	10/5/2006	12/31/2007
Trading Bay State Game Refuge	Smith, Scott	Notice of Violation - Off-Road Vehicle Use	ADF&G	X	10/12/2006	X
Montana Creek	Batac, Claire	Application for Fish Habitat Permit for Mushers Club	DNR	FH06-IV-0423	10/16/2006	X

Note: ADF&G = Alaska Department of Fish and Game; DNR = Alaska Department of Natural Resources; EPA = US Environmental Protection Agency; and X = unknown.