

AK LEGISLATURE SPECIAL COMMITTEE FILES SCOMM 156 3337
21

Definitions (cont.)

Angler Expenditures include:

Fishing trip-related expenditures in Alaska

(licenses, fuel, guide/charter fees, bait, ice, processing, & travel expenses such as lodging, food, etc.)

Sportfishing equipment purchases in Alaska

(rods, reels, fishing tackle, coolers, boat, etc.)

Other purchases in Alaska for the primary

purpose of supporting sportfishing activities
(fishing magazines, equipment maintenance, etc.)

Study Approach

- Angler expenditure surveys to collect spending amounts by trip in 2007 (~7,000 surveys, 40% response rate)
- Licensed guide/charter business surveys--how expenses distributed (~500, 35% response rate)
- IMPLAN Economic model—customized for Alaska using business survey

Economic Measures Produced

Statewide & for each region:

- Total expenditures for sportfishing by residency and water type (freshwater, saltwater)
- Avg expenditures per day of sportfishing by residency, water type, and guided/non-guided fishing
- Total full and part-time jobs generated
- Total wages and salaries generated
- Total govt. tax receipts generated
- Total combined economic impact (of resident and nonresident spending) to Alaska

****Breakdown by species groups (salmon vs. bottomfish) may be possible at statewide level only—data dependent**

Information NOT Provided By Study

- Economic benefits by species or specific fisheries (maybe in future with more \$)
- Total economic value of sport fishing in Alaska
- Direct comparisons of the economic benefits/values of sport and commercial fisheries in Alaska

Project Timeline

Project Timeline

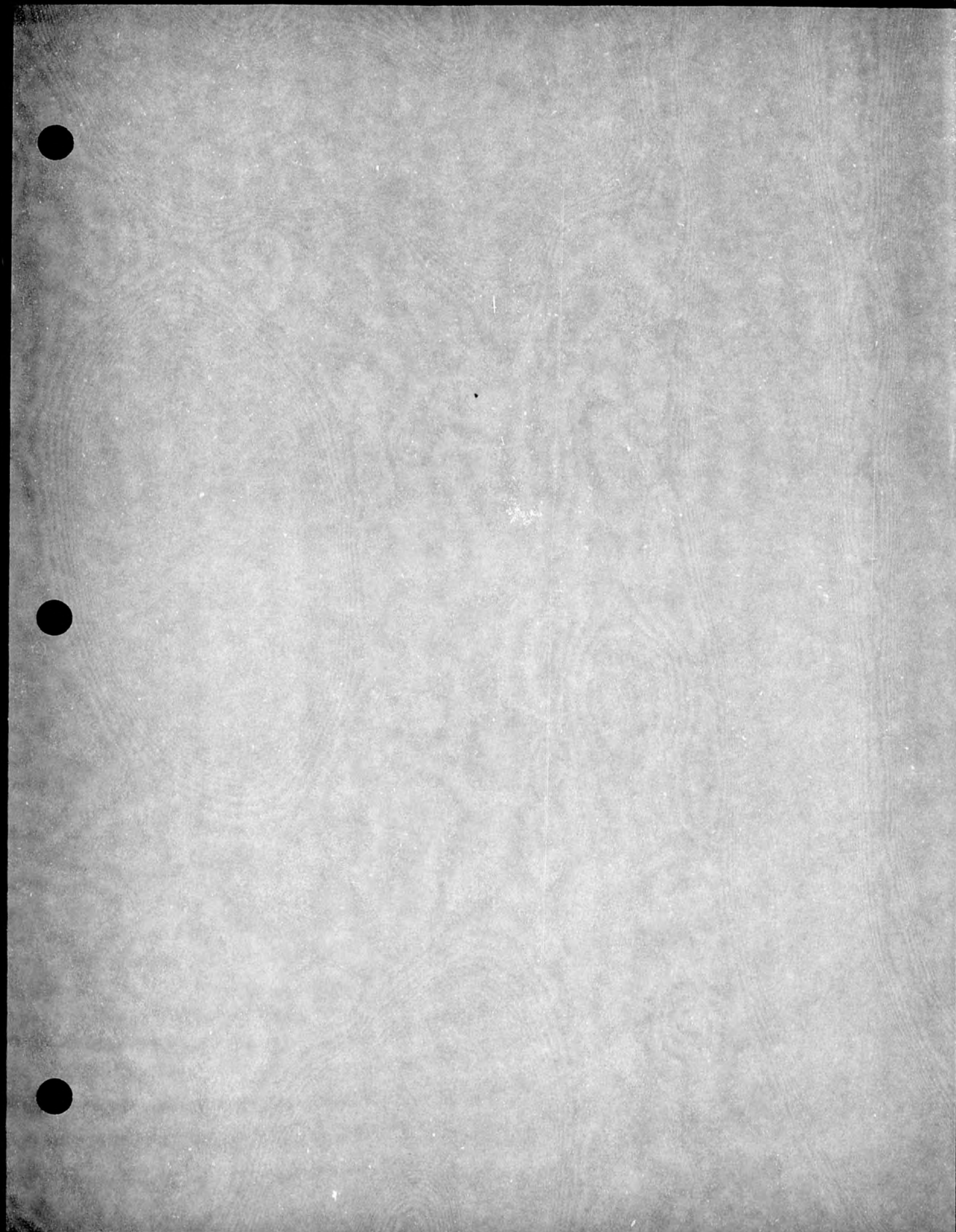
- Project proceeding per RFP timeline, report(s) by Dec 31, 08
- Spring 2006: Division receives additional funding to conduct updated economic study
- Summer 2006: Detailed Request for Proposals (RFP) developed—with independent review by outside economist
- Fall 2006: Division releases RFP
Division evaluates/scores bid proposals
- Jan/Feb 2007: Southwick Associates proposal wins competitive bid proposal process and contract is issued.

Project Timeline (cont.)

- Feb-May 2007: ADF&G and Southwick Associates develop and sign detailed research plan
- July 2007 – Feb 2008: Angler expenditure surveys, Guide Business survey
- Feb-July 2008: Data entry, editing, analysis, and economic modeling with review/oversight by ADF&G team.
- Sept 2008: Draft reports to ADF&G
- **Dec 31, 2008**: Final reports to ADF&G for distribution, communication of results to staff and other stakeholders

Project Information & Updates

- The project webpage
<http://www.sf.adfg.state.ak.us/Statewide/economics/2007Study.cfm>
- Technical Questions about the project
contact Bill Romberg at 907-267-2366
- Alternative contacts:
 - Bob Clark, 907-267-2222
 - Lisa Evans 907-267-233



Management and Stock Status of Northern and Western Cook Inlet Sport Fisheries



A Report to the Legislative Salmon Task Force

Department of Fish & Game
Sport Fish Division,
By: *Dave Rutz*

The Northern & Western Cook Inlet Management Area

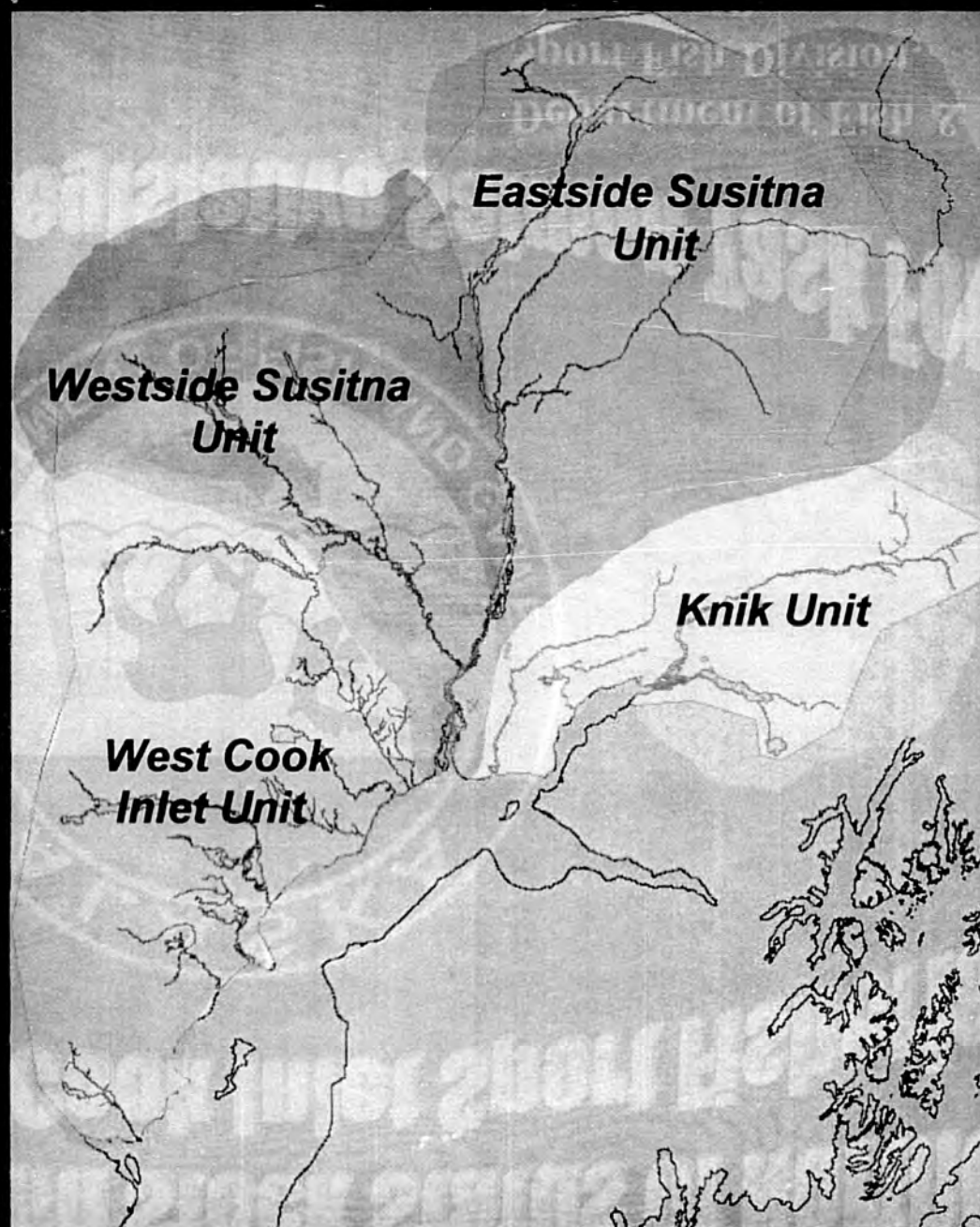


Figure 1. Sport Fishing Effort in Angler Days for Northern and Western Cook Inlet For All Species, 1990-2006

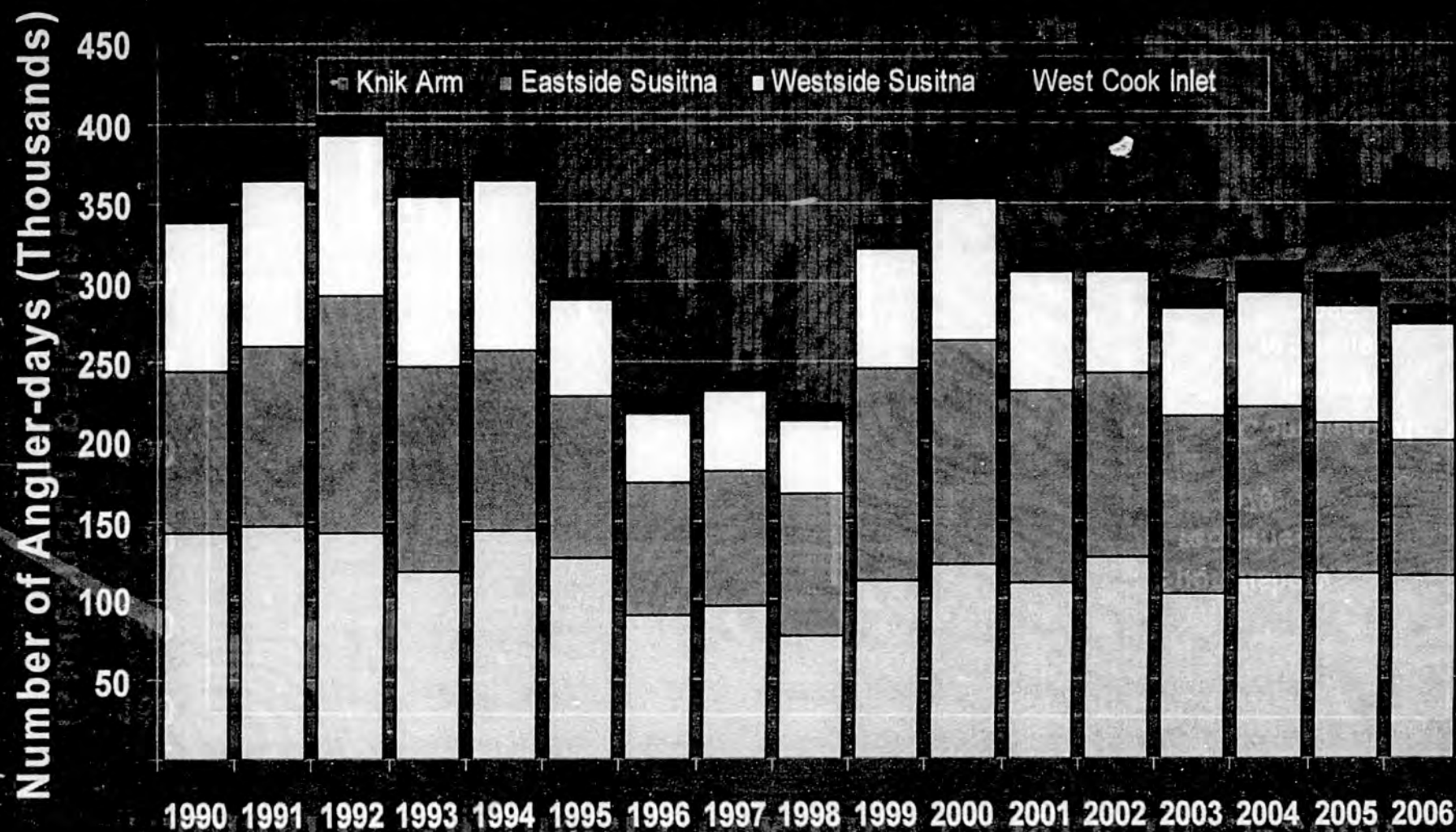


Figure 2. Estimated Harvests by All User Groups of King Salmon of Northern Cook Inlet Origin, 1893-2006

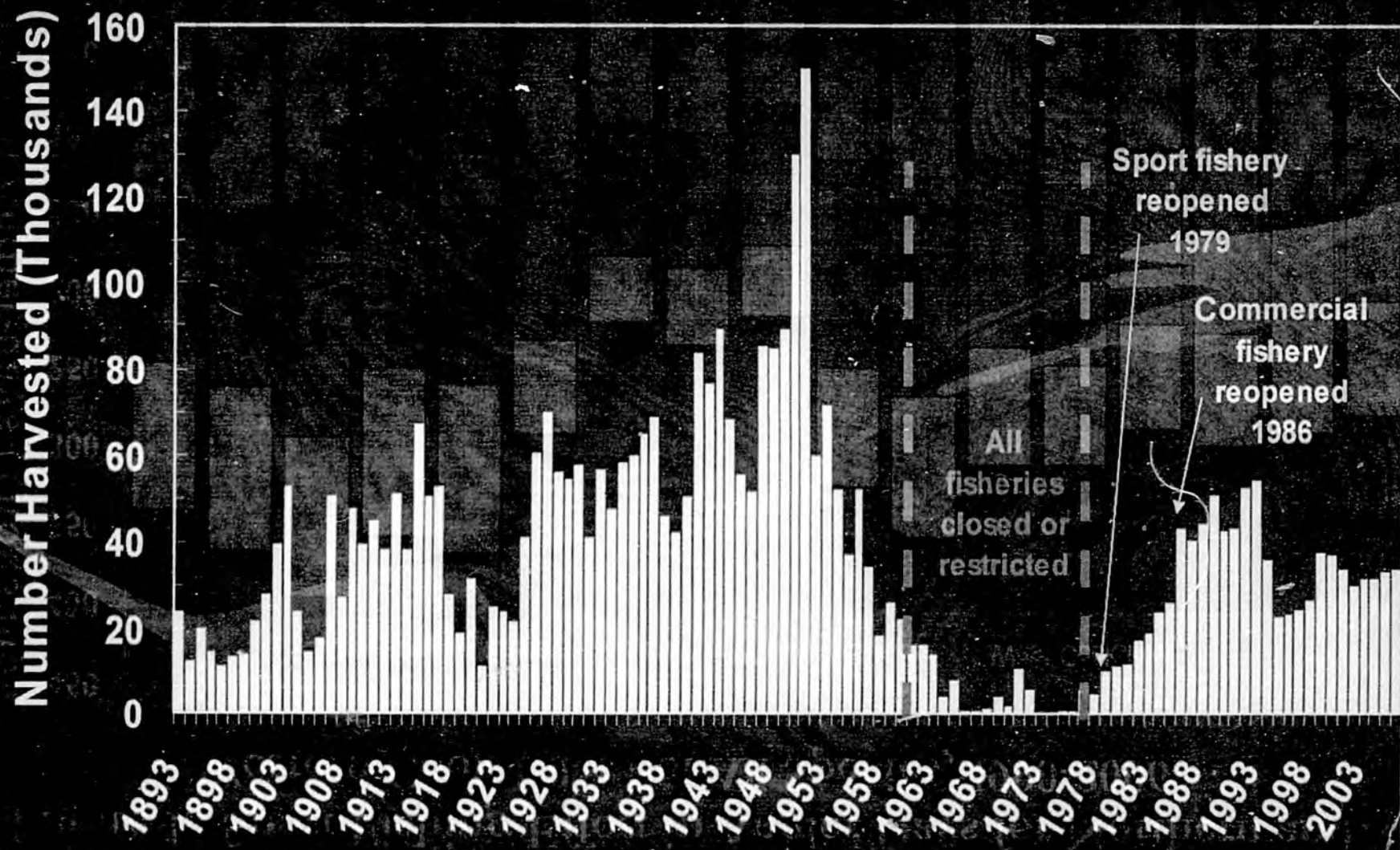
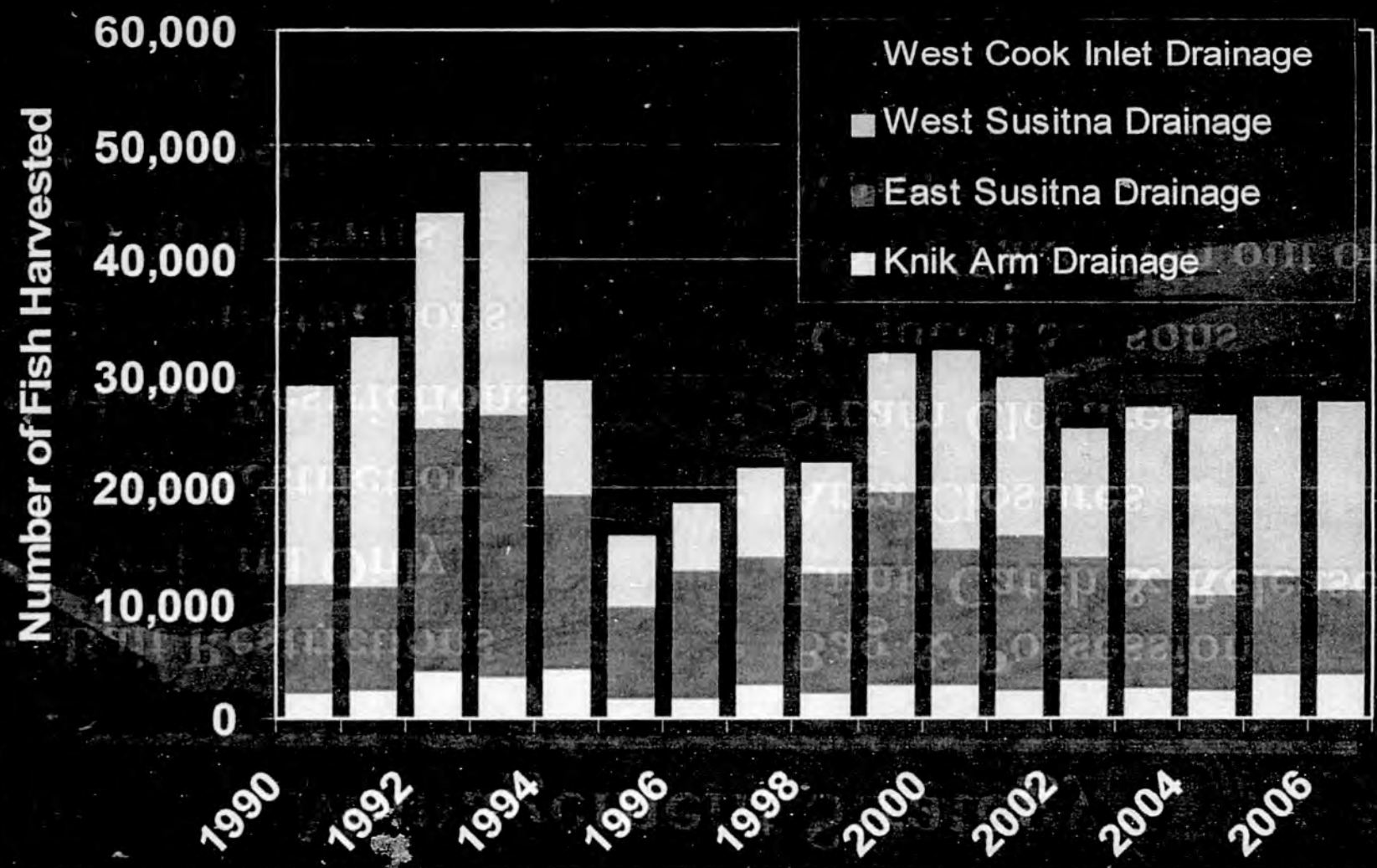


Figure 3. King Salmon Sport Harvest for Northern and Western Cook Inlet, 1990 - 2006



King Salmon Sport Fish Management Strategy

- Bait Restrictions
- Weekend Only
- Area Restriction
- Hook Restrictions
- Hour restrictions
- Annual Limits
- Quit Fishing After Harvest
- Bag & Possession
- Limit Catch & Release
- Area Closures
- Steam Closures
- Reduced Seasons
- Don't Take Fish out of Water

Historical Average Harvest of Northern Cook Inlet King Salmon By User Group, 1990-2006

Commercial

13%



Sport

87%

King Salmon Sport Fish Management Tools

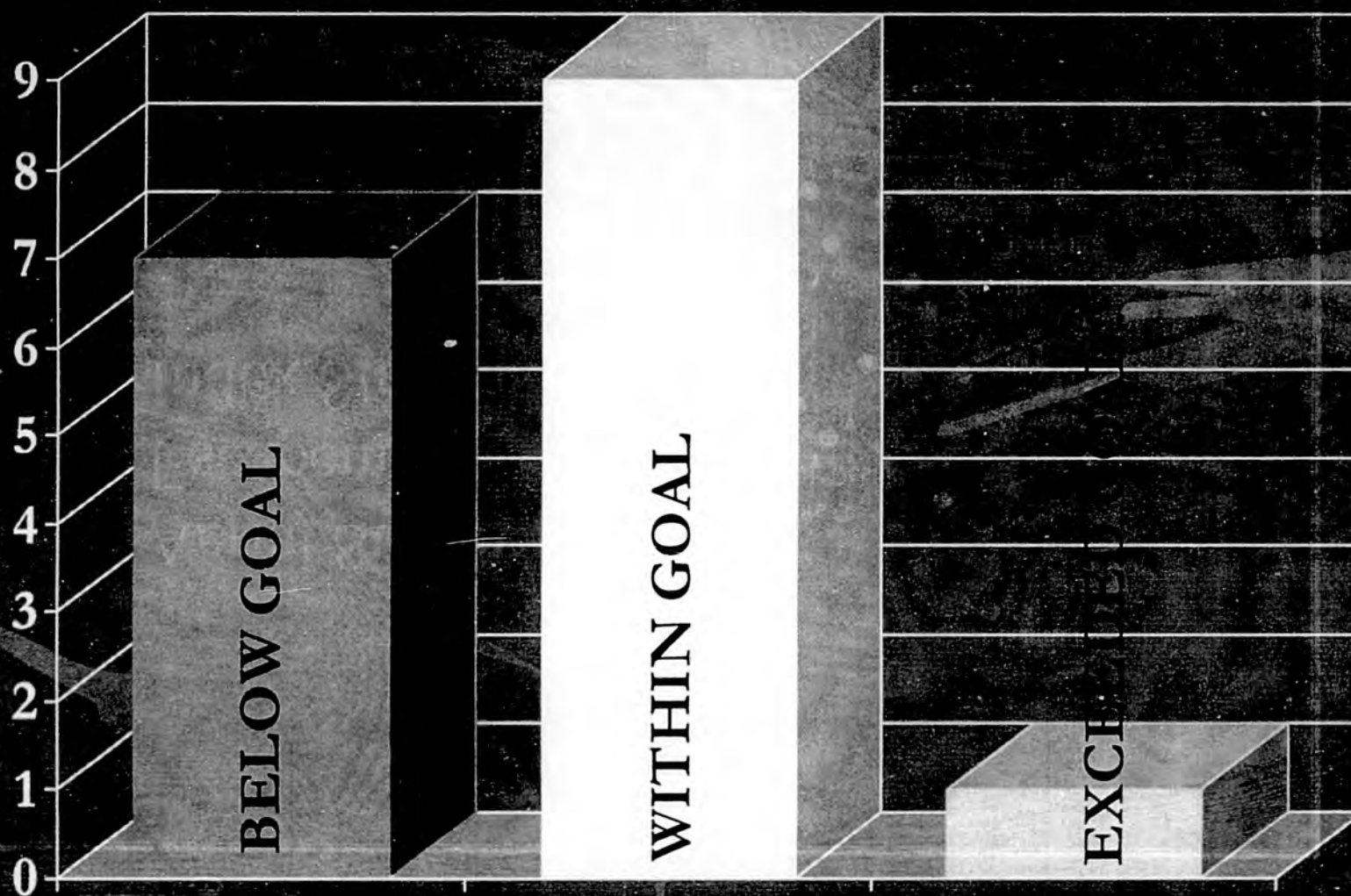
- Commercial Catch Statistics
- Little Susitna Exit Survey
- Deshka Weir
- Statewide Harvest Survey
- Post Season Escapement Surveys

King Salmon Escapement Index Sites

Aerial Survey
Escapement
Index Streams



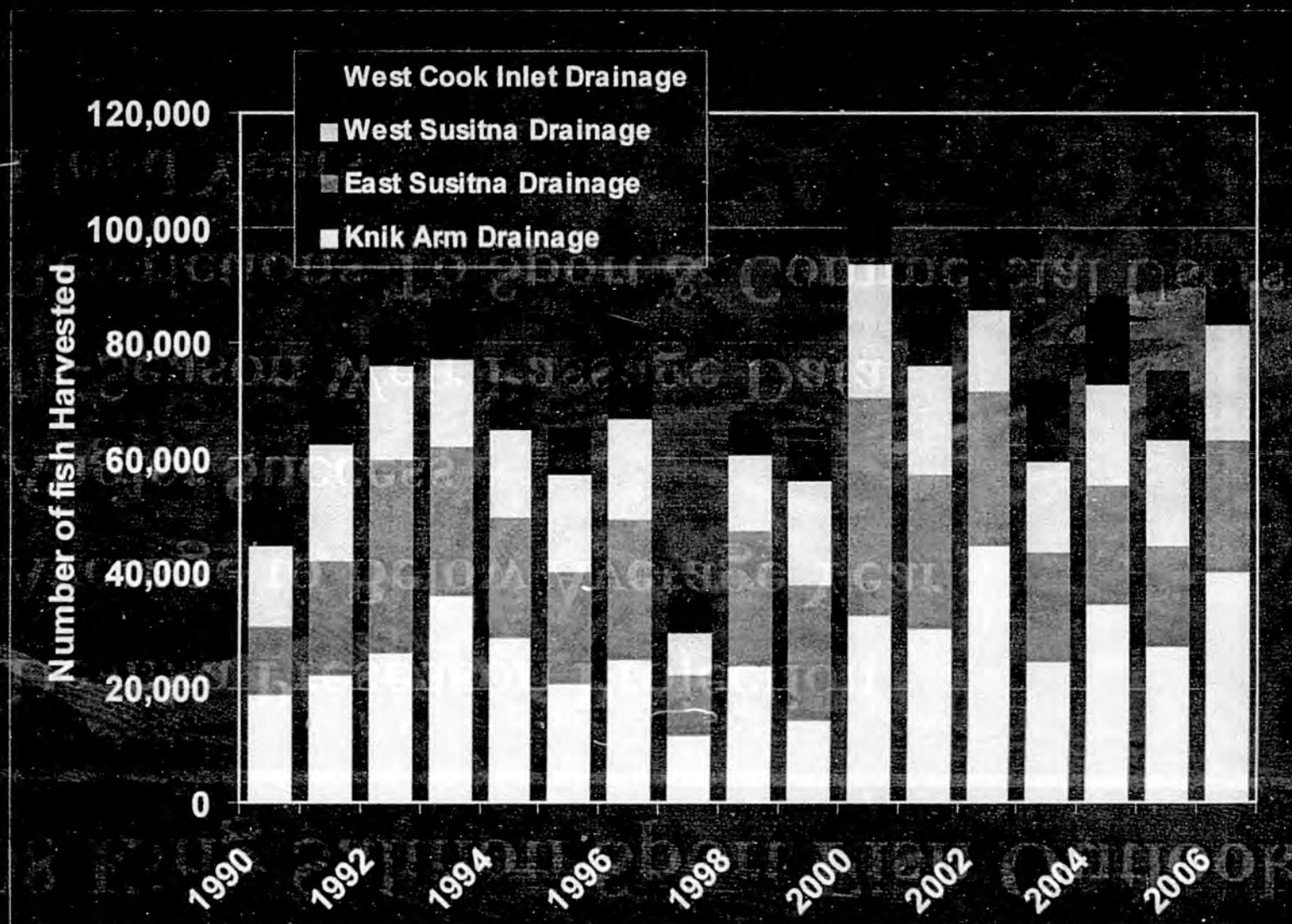
Figure 4. Escapement Goal Achievement Status For King Salmon Escapement Surveys of the 17 Major King Salmon Producing Systems in the Northern Cook Inlet for 2007



08 King Salmon Sport Fish Outlook

- Deshka Preseason Projection
- Average to Below Average Year
- Angler Success
- In-Season Weir Passage Data
- Restrictions To Sport & Commercial Users
- Flood Years

Figure 5. Coho Salmon Sport Harvest for Northern and Western Cook Inlet, 1990 - 2006



Coho Salmon Sport Fish Management Strategy

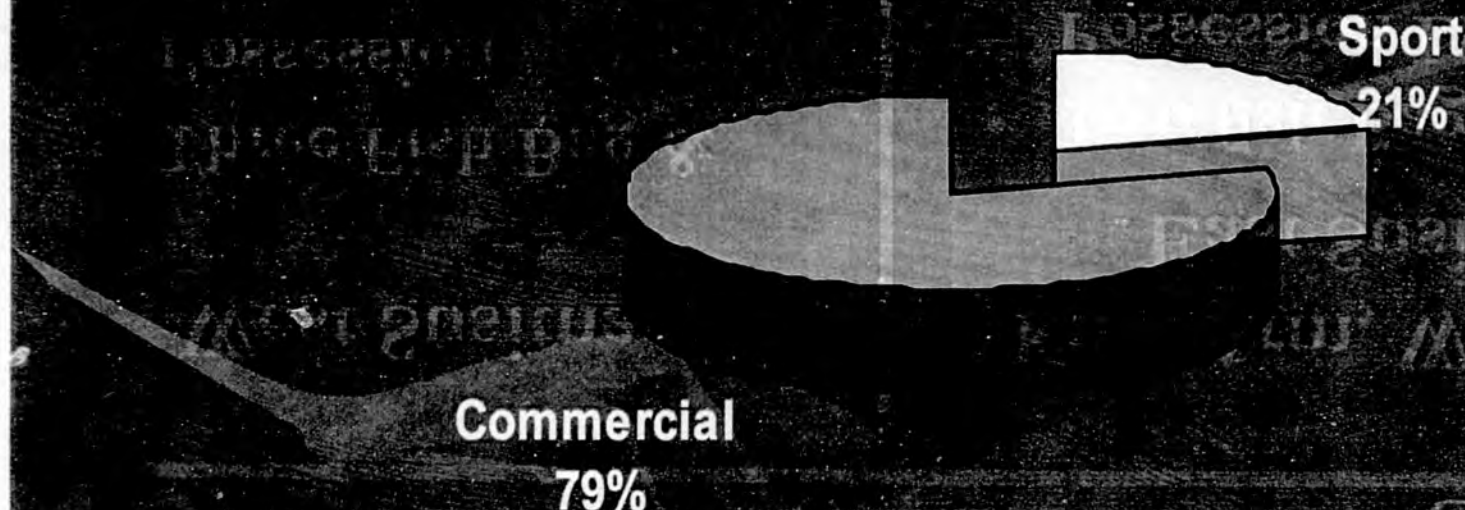
West Susitna

- Three Fish Bag & Possession
- No Area Restrictions

Knik Arm, WCI and East Susitna

- Two fish Bag & No Possession Limit
- Weekend Only
- Some Bait Restrictions
- Delayed Openings
- Area Closures
- Quit Fishing After Limit

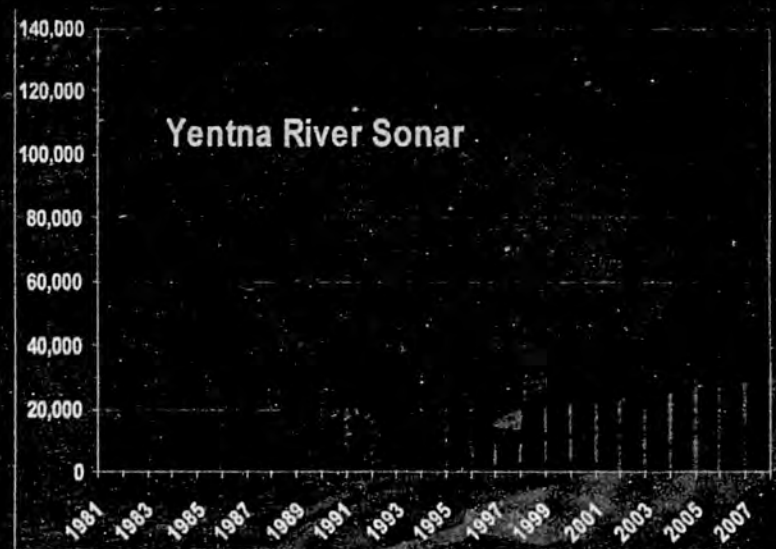
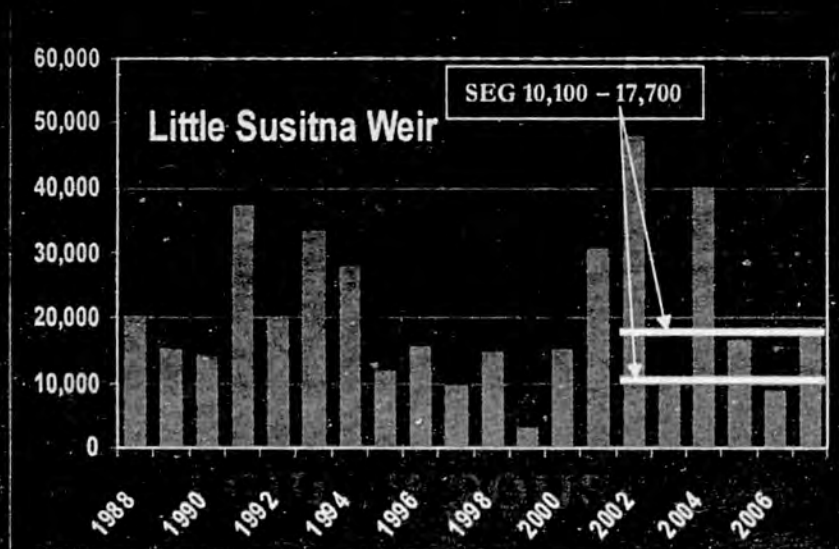
Historical Average Harvest of Northern Cook Inlet Coho Salmon By User Group, 1990-2006



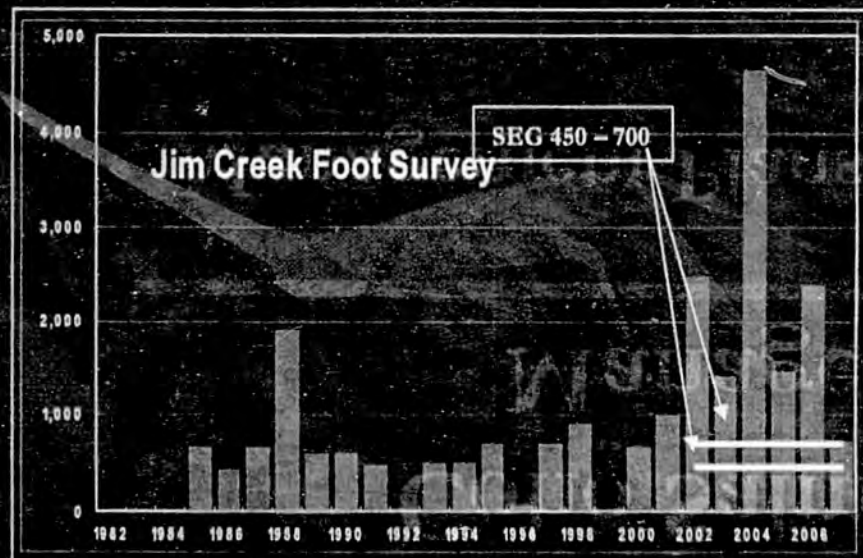
Coho Salmon Sport Fish Management Tools

- Management Plans
- Commercial Catch
- Little Susitna and Deshka River Weirs and Yentna Sonar
- Statewide Harvest Survey
- Post Season Foot Surveys

Figure 6. Coho Salmon Escapement Counts Into N&WCI Streams



Knik Arm



Susitna River



Coho Salmon Foot Survey Index Areas

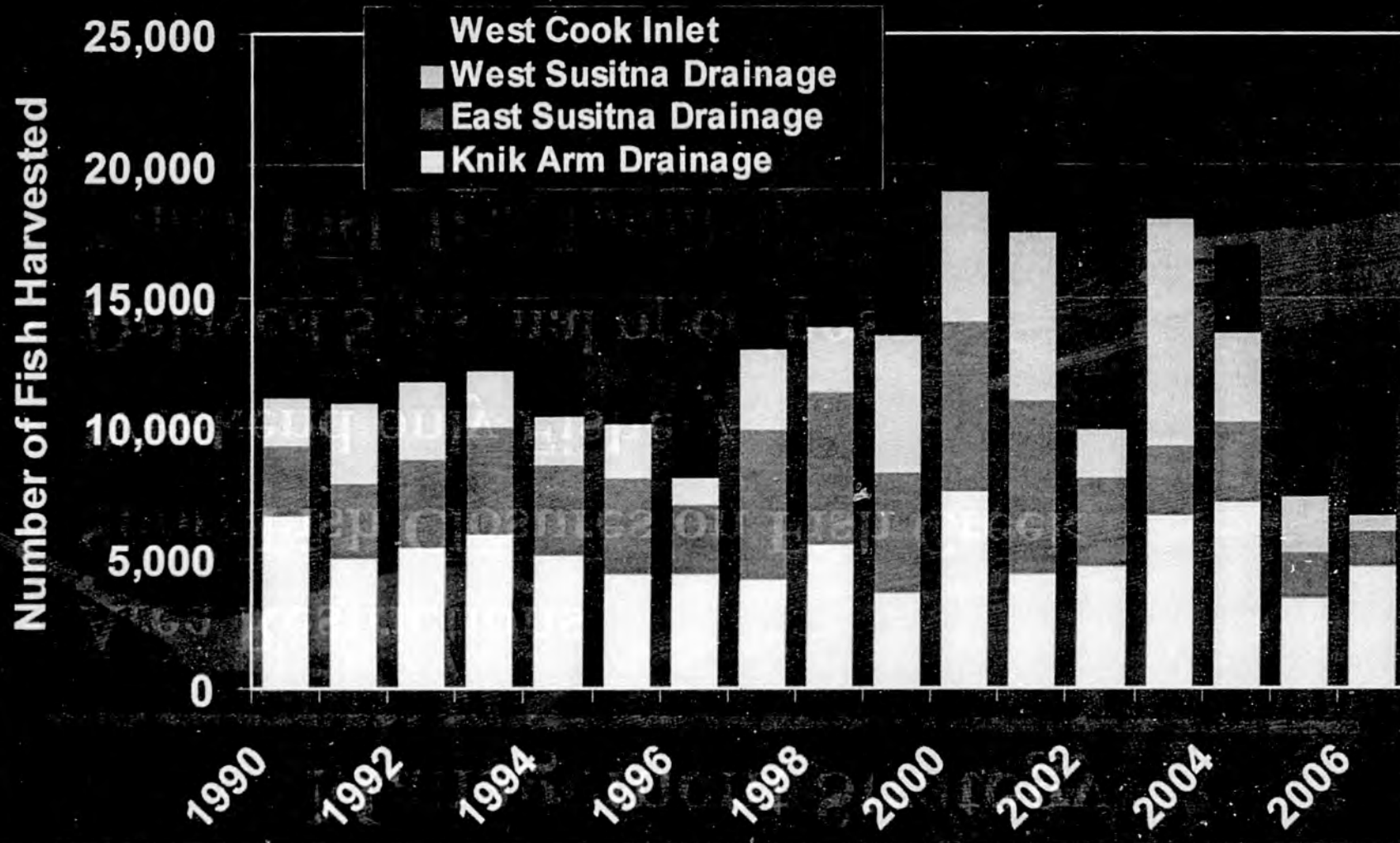
Stream Walk Escapement Index Systems For Coho Salmon



08 Coho Salmon Sport Fish Outlook

- 2008 return is progeny of the 2004 and 2005 brood year which were both strong returns
- 2006 Flood may impact this year's return
- 08 Possible Management Actions

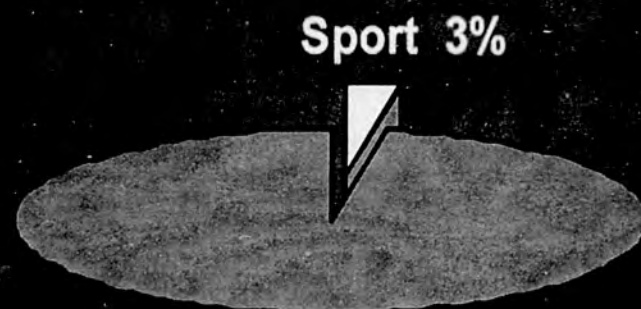
Figure 7. Sockeye Salmon Sport Harvest for Northern and Western Cook Inlet, 1990 - 2006



Sockeye Salmon Sport Fish Management Strategy

- Area Restrictions
- Sport Fish Closures on Fish Creek
- Weekend only Fishery
- Delayed Seasonal openings
- Three Fish Bag Limit

Historical Average Harvest of Northern Cook Inlet Sockeye Salmon By User Group , 1990 - 2006



Commercial,
97%

Sockeye Salmon Sport Fish Management Tools

- Numerous Management Plans
- Commercial Catch & Offshore Test Fish Data
- Angler Reports
-
-
- Fish Creek Weir
- CIAA Susitna Drainage Weirs
- Mark Recapture Project
-
- Stream Walks
- Statewide Harvest Survey

Figure 8. Escapement of Sockeye Salmon Into Fish Creek, 1968-2007

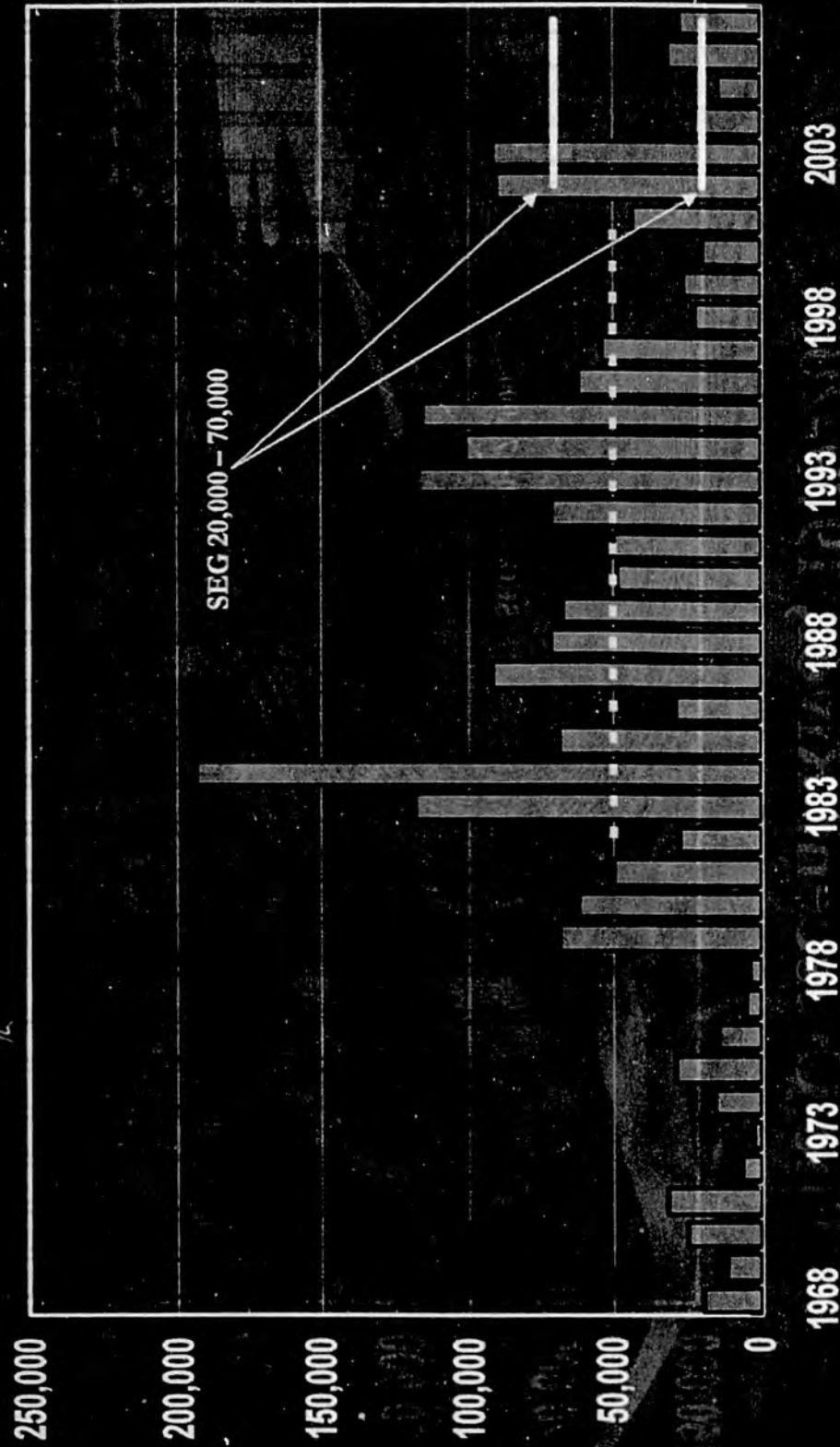


Figure 9. Escapement of Sockeye Salmon Into The Crescent River, 1979-2007

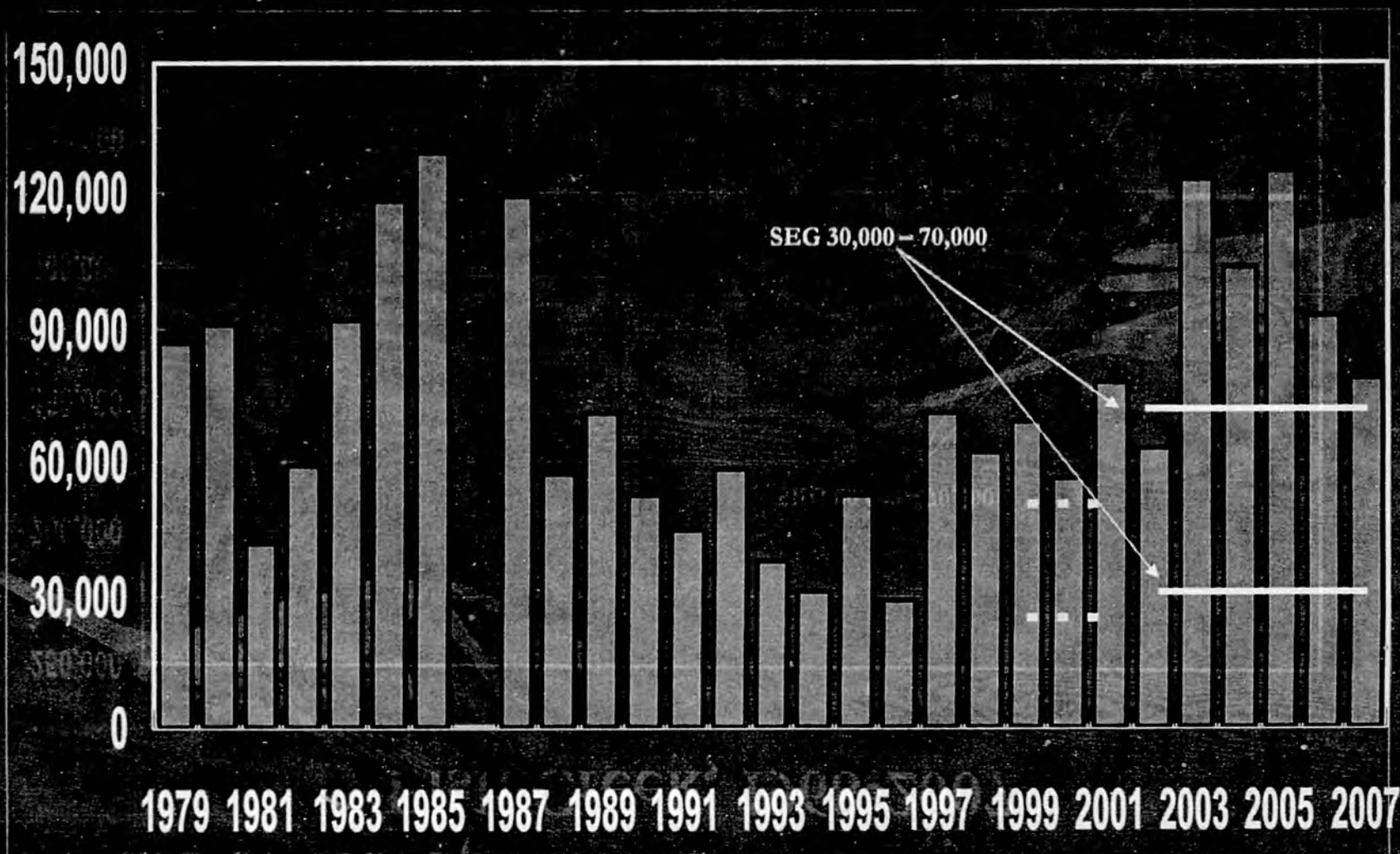
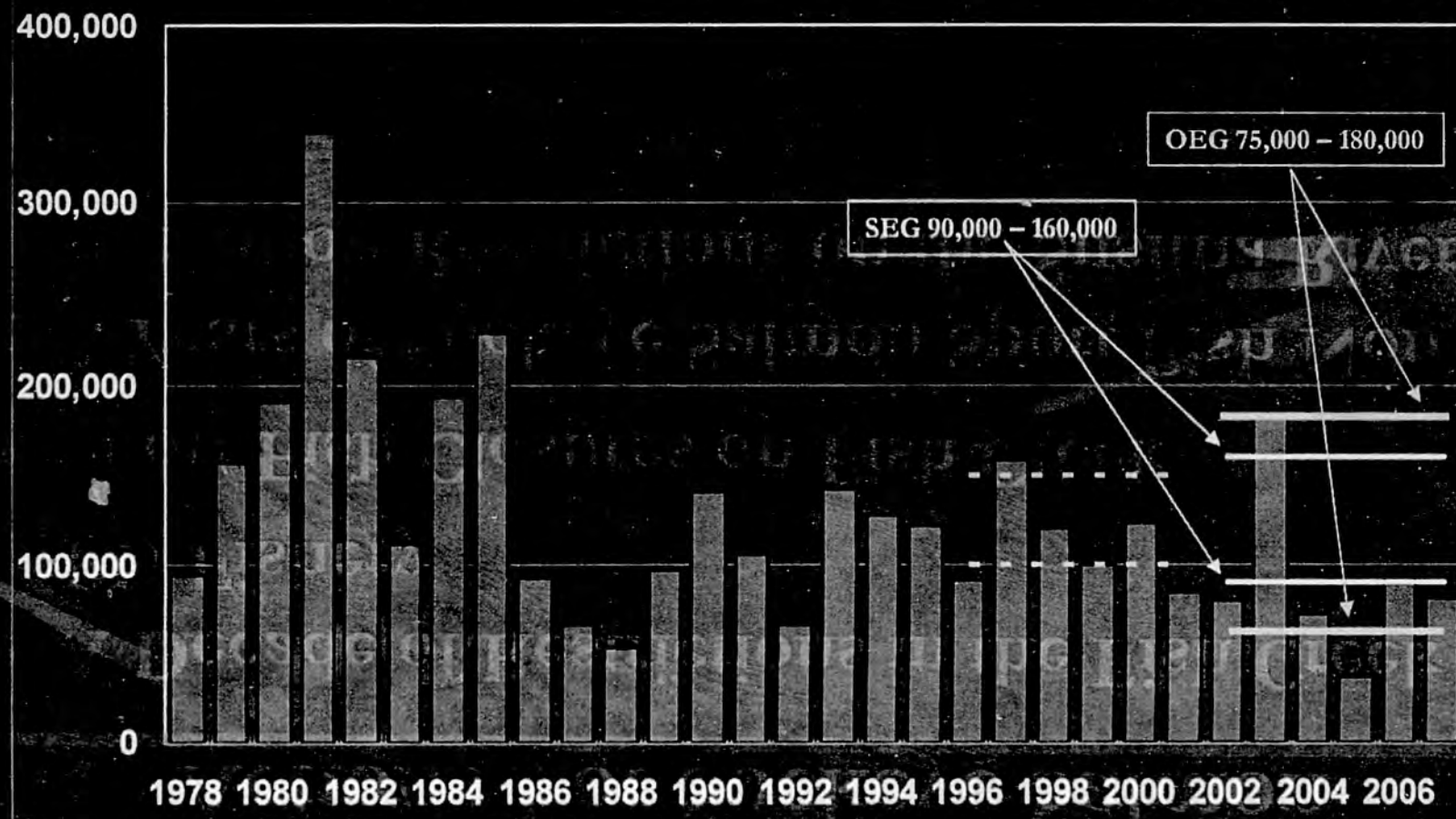


Figure 10. Escapement of Sockeye Salmon Into The Yentna River, 1978-2007



Recent Sport and Personal Use Actions For Sockeye Salmon

- A Decade of Restrictions in the Fish Creek
PU Fishery
- Sport Fish Closures on Fish Creek
- 3 Years of Sockeye Salmon Sport Fish Non
Retention Restrictions on the Susitna River

08 Sport Fish Sockeye Salmon Outlook

- Forecast
- Recent Performance
- Commercial Restrictions
- Sport Restrictions (Bendix Sonar)

Figure 11. Pink Salmon Sport Harvest for Northern and Western Cook Inlet, 1977- 2006

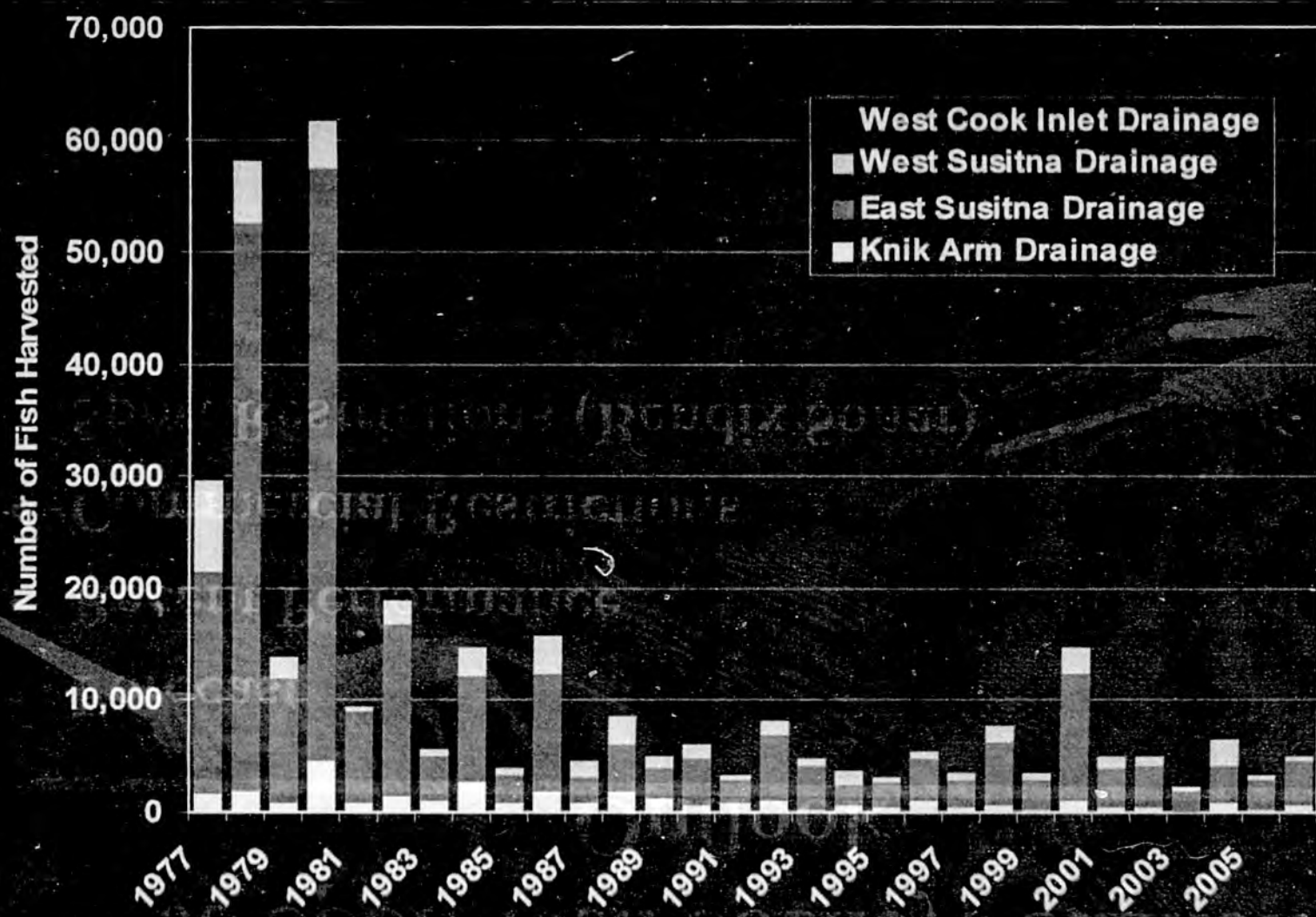
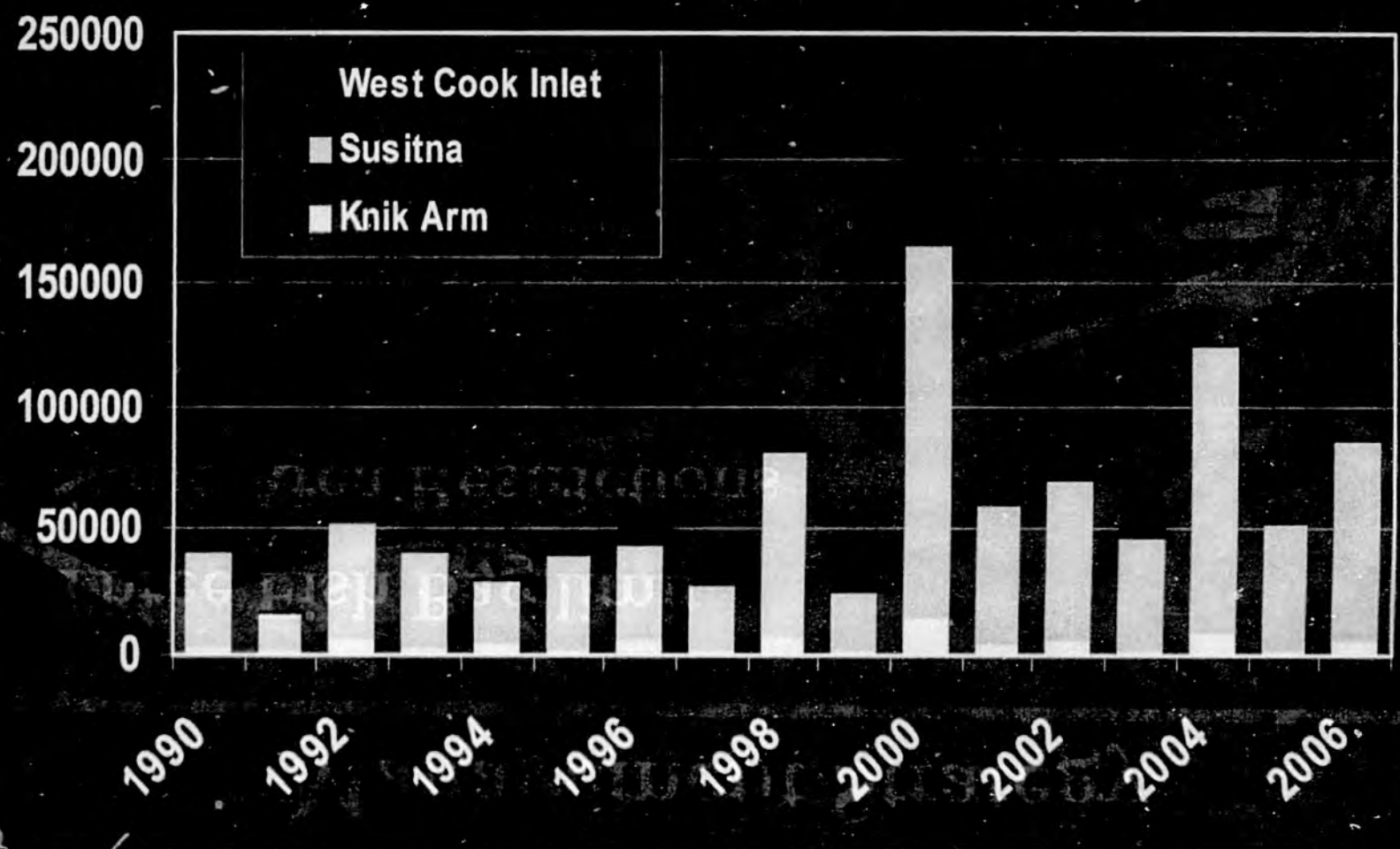
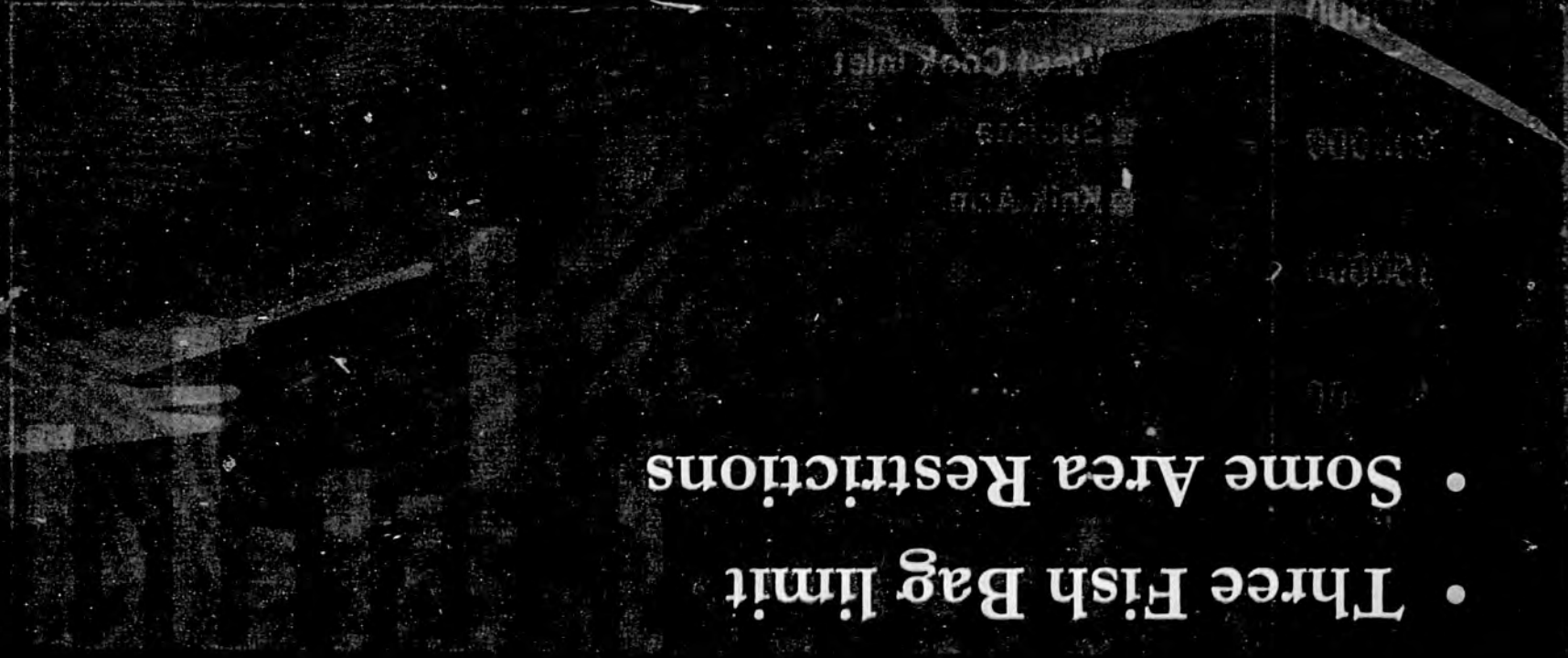


Figure 12. Pink Salmon Sport Catch for Northern and Western Cook Inlet, 1990 - 2006

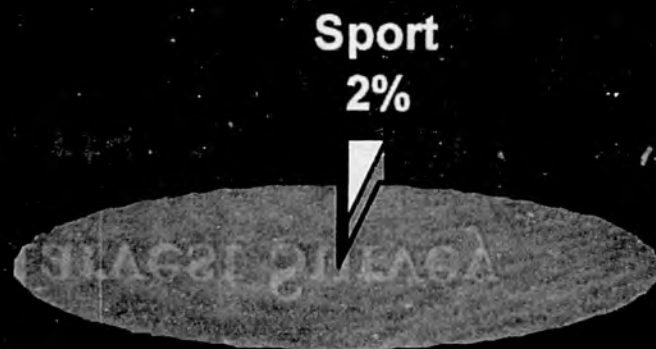


Pink Salmon Sport Fish Management Strategy

- Three Fish Bag limit
- Some Area Restrictions



Historical Average Harvest of Northern Cook Inlet Pink Salmon By User Group, 1990 - 2006



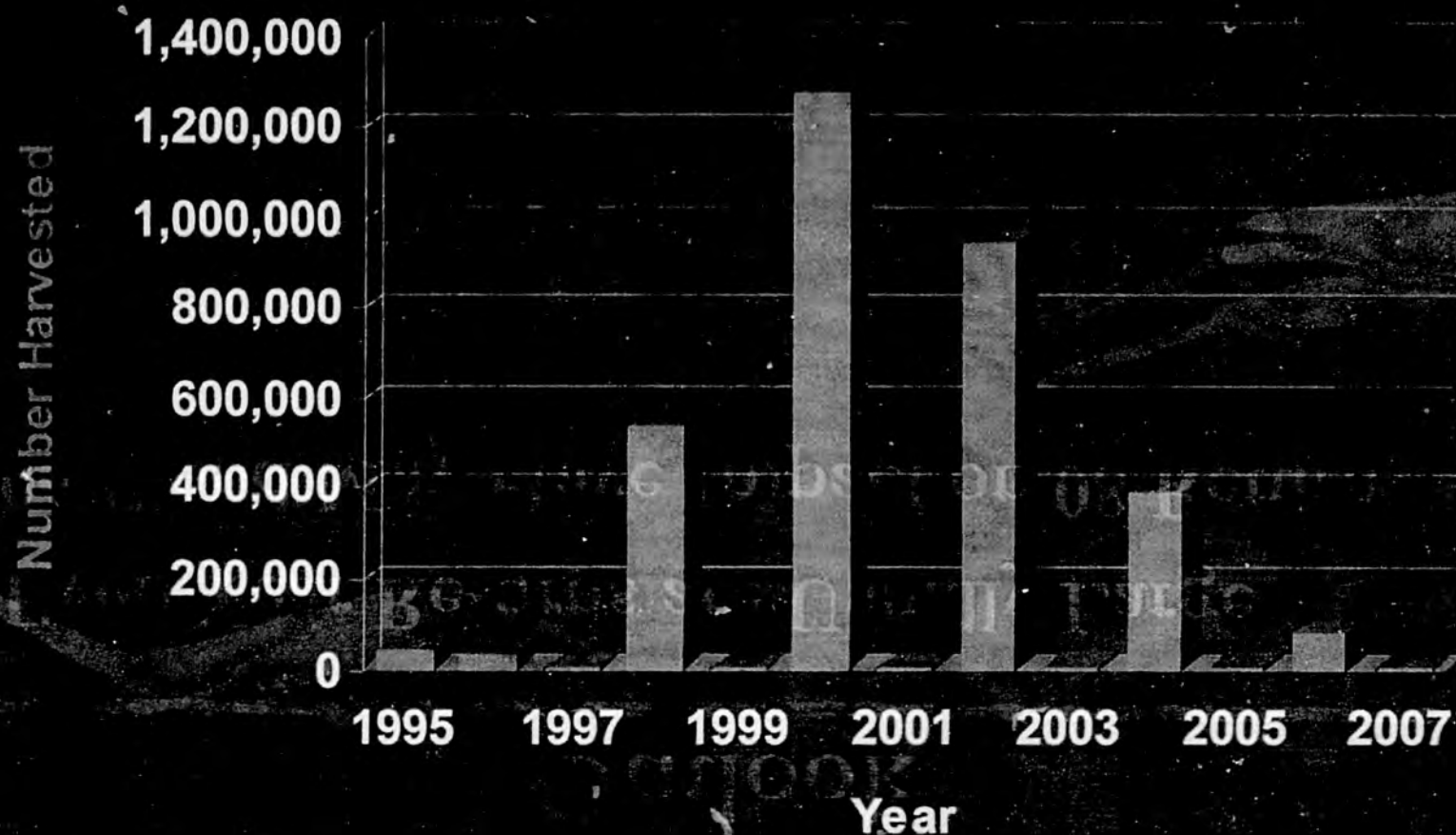
Commercial

98%

Sport Fish Pink Salmon Management Tools

- Commercial Catch Information
- Statewide Harvest Survey
- Angler Reports
- Dershka Weir

**Figure 13. Pink Salmon Escapement Into the
Deshka River, 1995 - 2007**



08 Pink Salmon Sport Fish Outlook

- Even Year Returns are Usually Large
- 06 Flood May Have Impact on 08 Return

Figure 14. Chum Salmon Sport Harvest for Northern and Western Cook Inlet, 1977- 2006

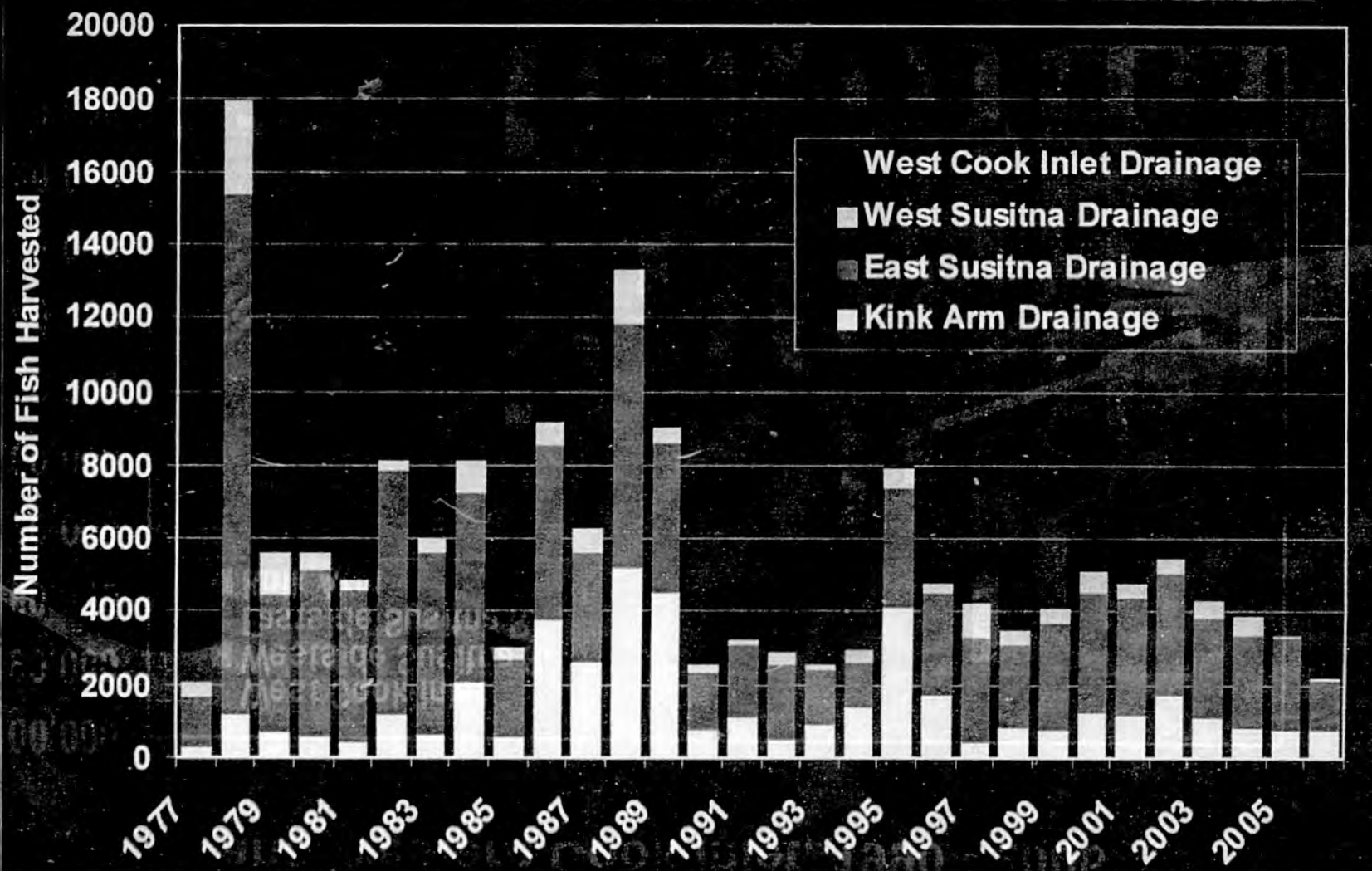
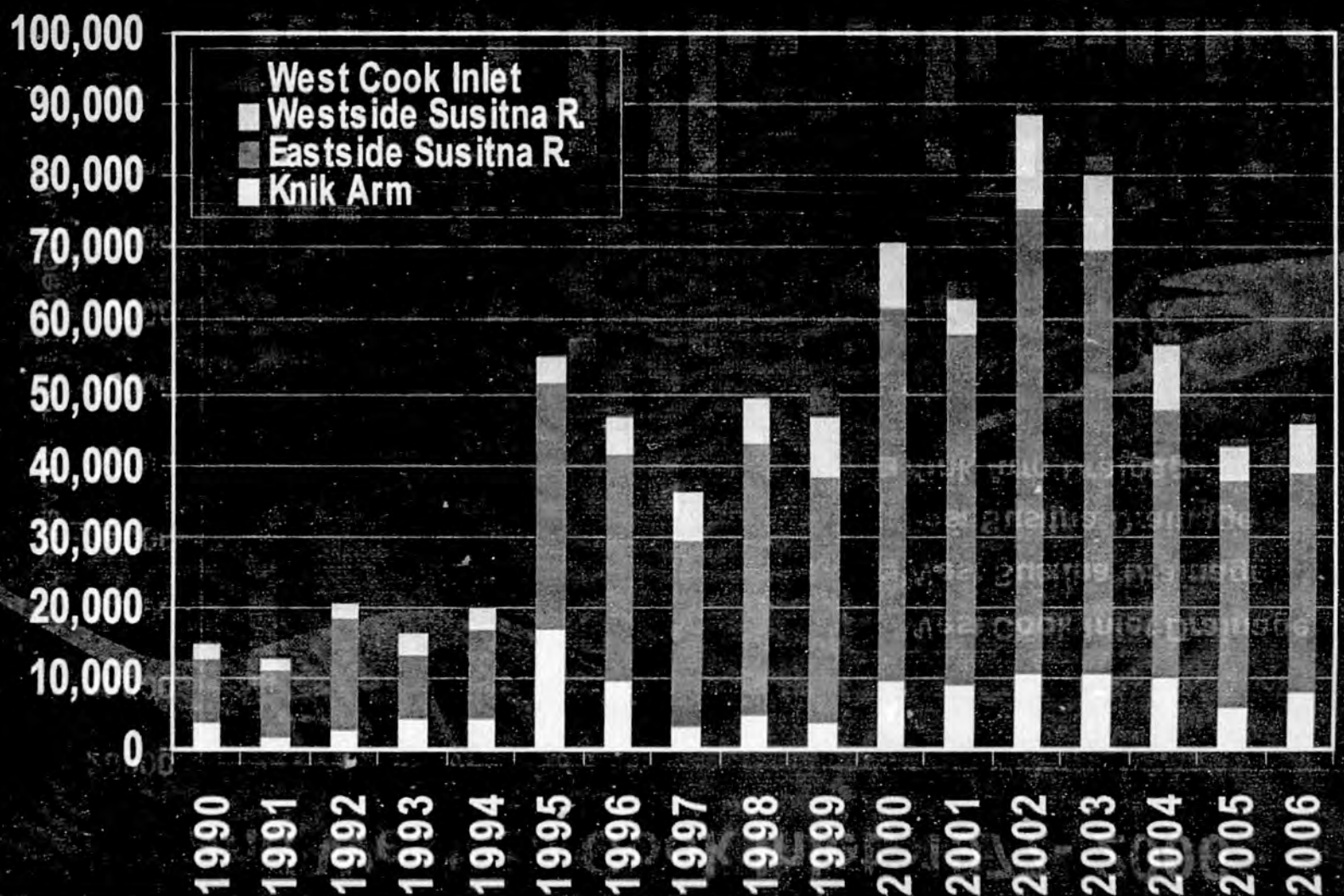


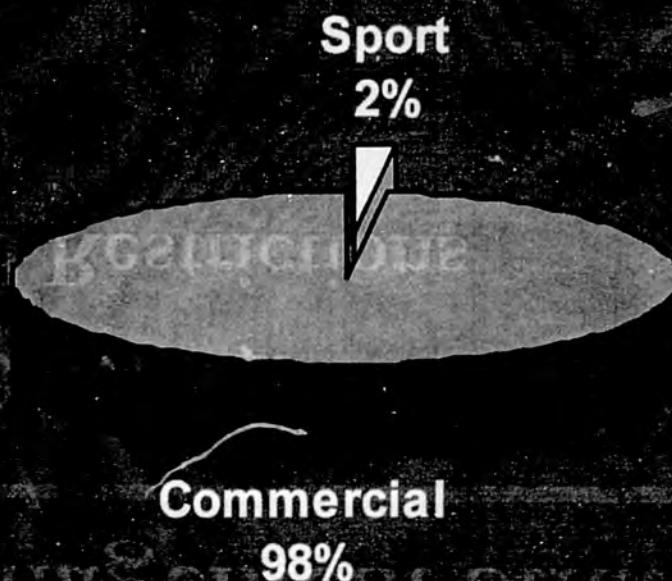
Figure 15. Chum Salmon Sport Catch for Northern and Western Cook Inlet, 1990 - 2006



Chum Salmon Sport Fish Management Strategy

- Three fish Bag limit
- No Directed Restrictions

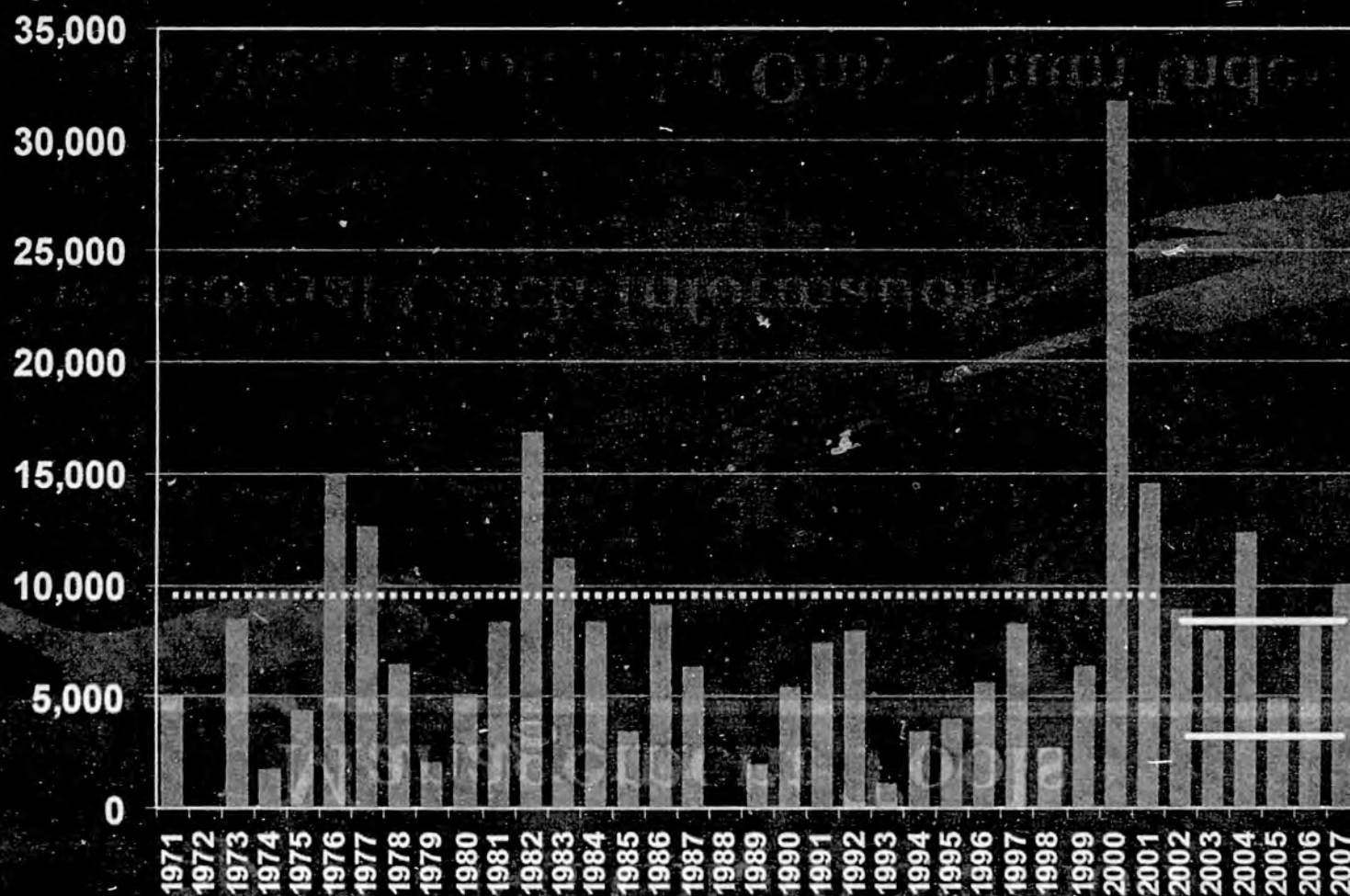
Historical Average Harvest of Northern Cook Inlet Chum Salmon By User Group, 1977-2005



Sport Fish Chum Salmon Management Tools

- Management Plans
- Commercial Catch Information
- Angler Reports
- Lower West Cook Inlet Only Chum Index Area

Figure 14. Chum Salmon Escapement (Single Aerial Survey) Into Clearwater Creek in Lower Cook Inlet (Chinitna Bay) 1971 - 2007



08 Chum Salmon Sport Fish Outlook

- Production Level down from the late 70's to Mid 80's
- No Restriction

Conclusion

- Sport Fishing Effort Has Decreased in the Northern Cook Inlet
- Sport Harvest of Chinook, Sockeye, Chum and Pink salmon have decreased
- Coho Salmon Returns Appear to be Strong
- Chinook Returns Appear to be Below Average
- 06 Flood May Impact Pink and Coho Returns in 08 and King Salmon Production in Future

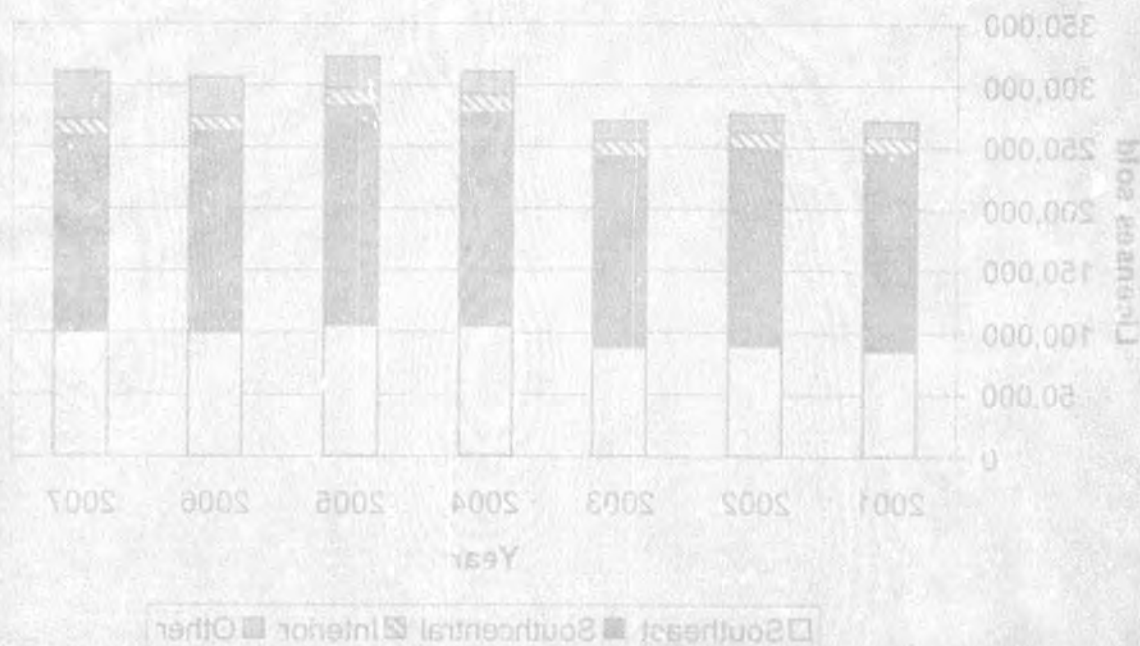
The End

SCOMM

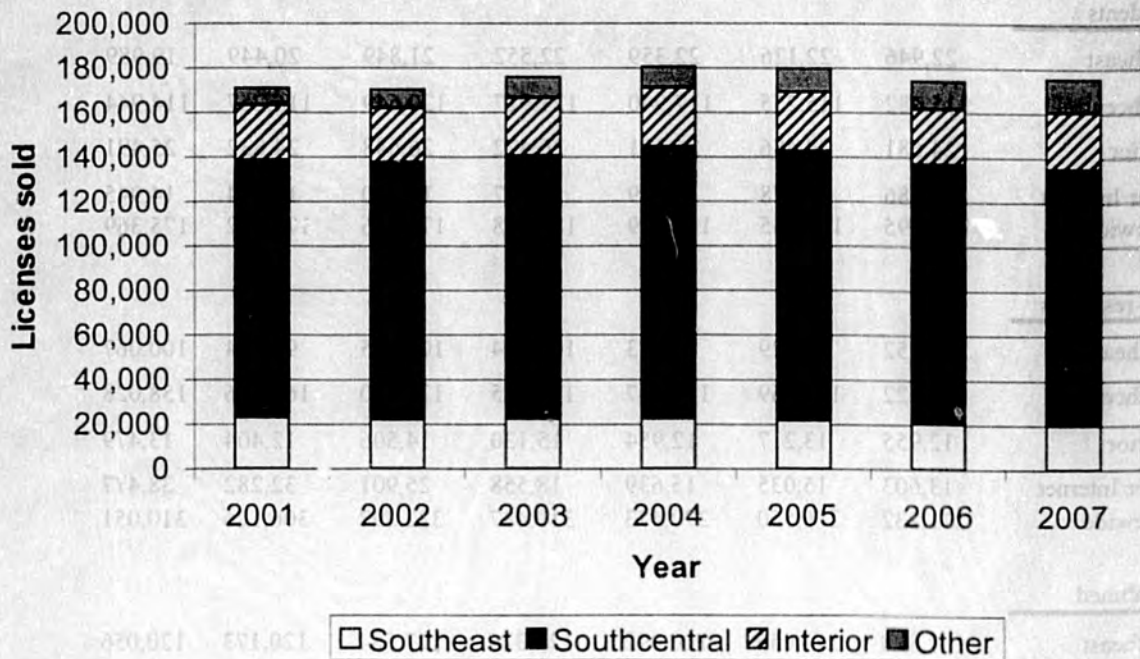
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License sales by region - based on DSF license database by license class and vendor ID

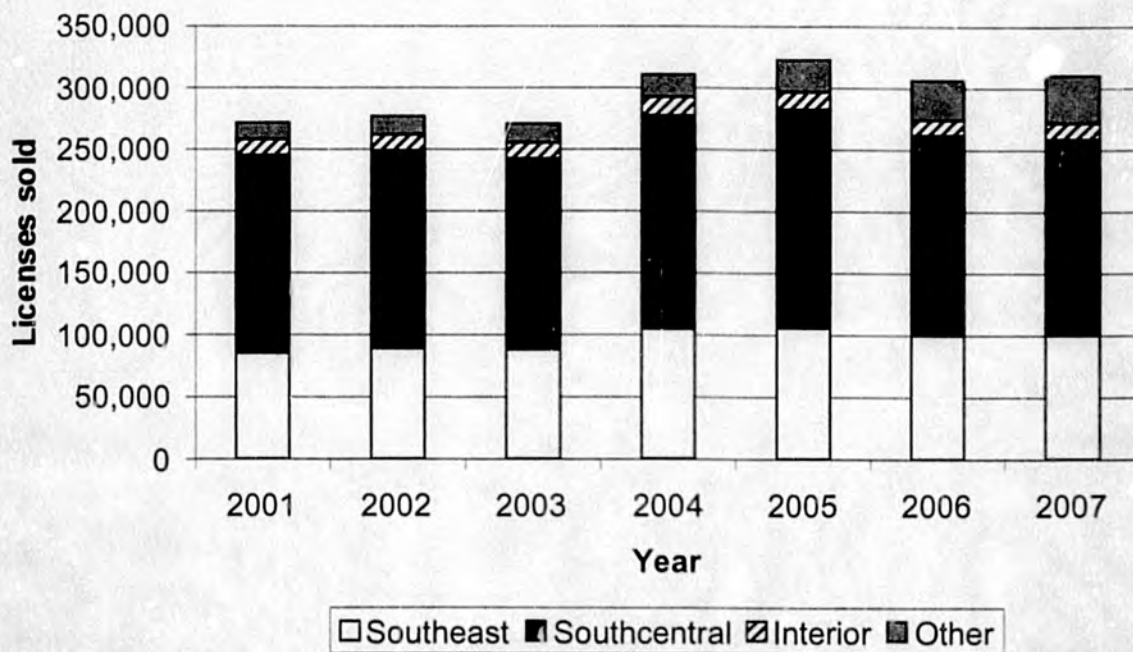
	Year						
	2001	2002	2003	2004	2005	2006	2007
Residents							
Southeast	22,946	22,126	22,359	22,552	21,849	20,449	19,989
Southcentral	115,482	115,255	117,940	121,927	120,649	116,257	114,944
Interior	24,681	24,486	26,181	26,472	26,648	24,832	25,491
Other/Internet	7,686	8,278	9,339	9,507	10,600	12,484	14,945
Statewide	170,795	170,145	175,819	180,458	179,746	174,022	175,369
Non-residents							
Southeast	84,952	88,929	87,733	104,774	105,735	99,724	100,067
Southcentral	159,722	159,369	154,147	172,025	176,250	161,716	158,028
Interior	12,955	13,217	12,954	15,130	14,506	12,404	13,479
Other/Internet	13,603	15,035	15,639	18,558	25,901	32,282	38,477
Statewide	271,232	276,550	270,473	310,487	322,392	306,126	310,051
Combined							
Southeast	107,898	111,055	110,092	127,326	127,584	120,173	120,056
Southcentral	275,204	274,624	272,087	293,952	296,899	277,973	272,972
Interior	37,636	37,703	39,135	41,602	41,154	37,236	38,970
Other/Internet	21,289	23,313	24,978	28,065	36,501	44,766	53,422
Statewide	442,027	446,695	446,292	490,945	502,138	480,148	485,420

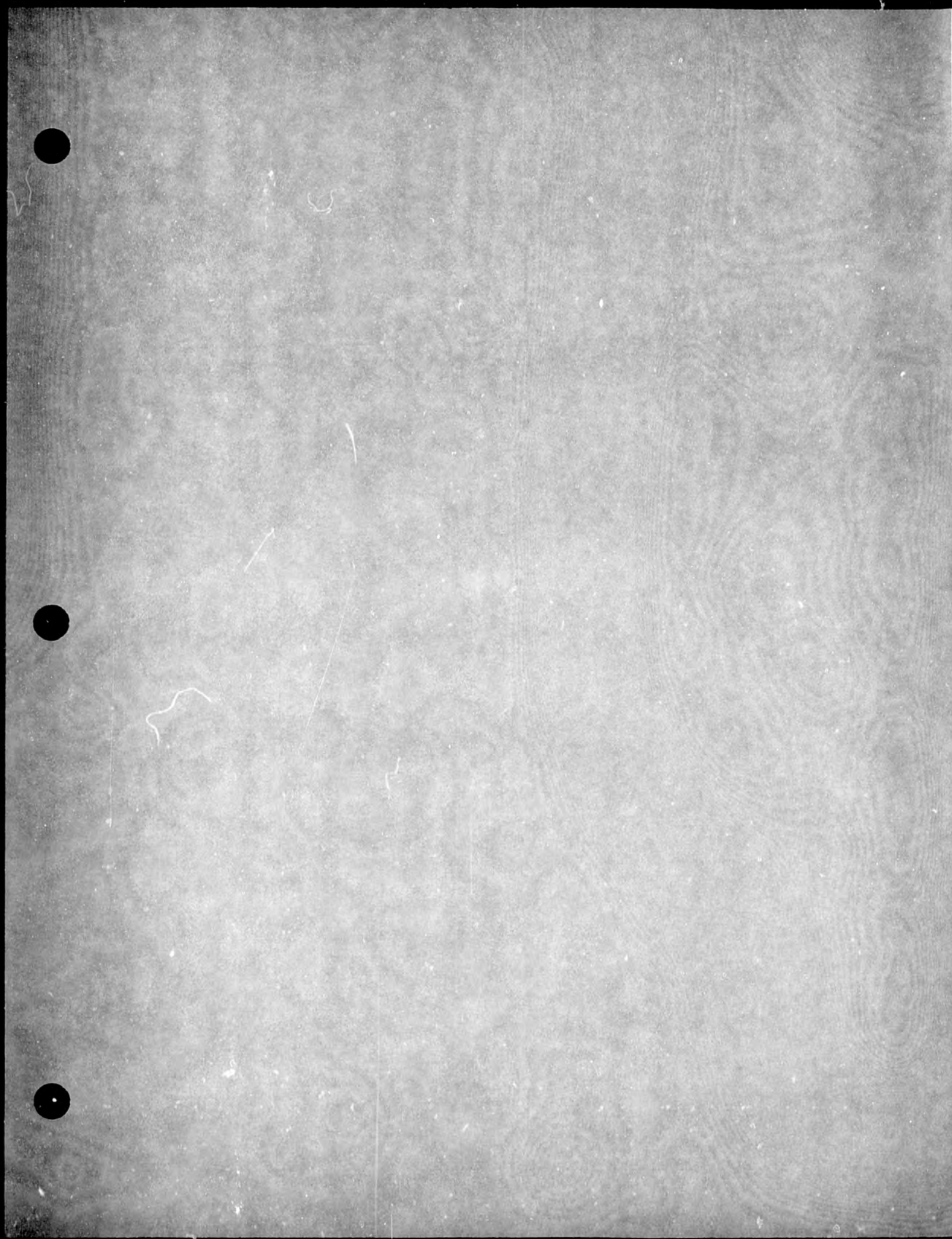


License sales to residents by region



License sales to non-residents by region





Fishery Data Series No. 07-40

Participation, Catch, and Harvest in Alaska Sport Fisheries During 2004

by

Gretchen B. Jennings,

Kathrin Sundet,

and

Allen E. Bingham

June 2007

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

FISHERY DATA SERIES NO. 07-40

**PARTICIPATION, CATCH, AND HARVEST IN ALASKA SPORT
FISHERIES DURING 2004**

by
Gretchen B. Jennings,
Kathrin Sundet, and
Allen E. Bingham,
Division of Sport Fish, Anchorage

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1599

June 2007

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*Gretchen B. Jennings, Kathrin Sundet, and Allen E. Bingham
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333 Raspberry Road, Anchorage, AK 99518-1599, USA*

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Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240

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