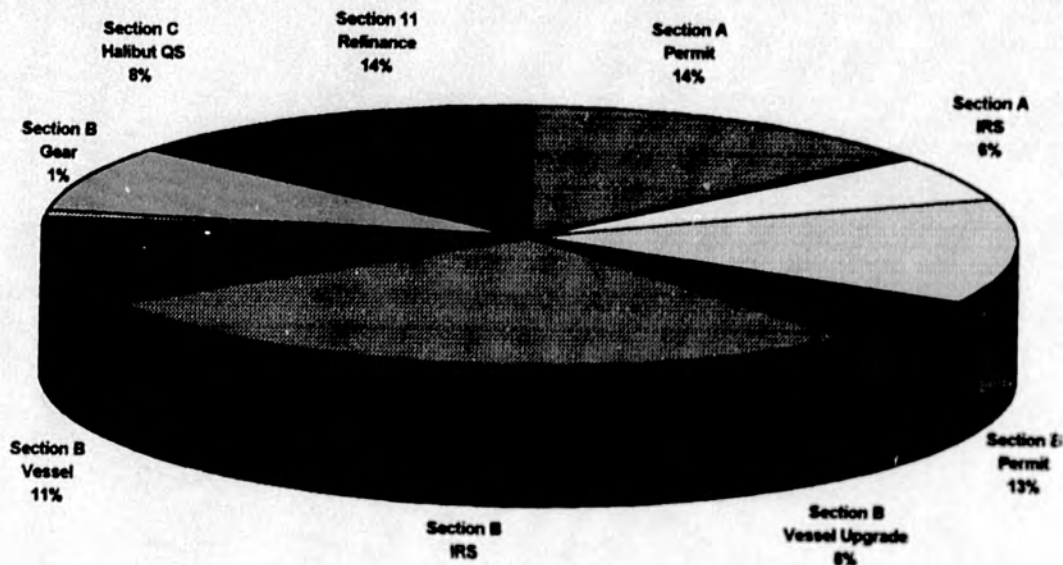


ALASKA LEGISLATURE SPECIAL COMMITTEE/SUBJECT FILES 8672

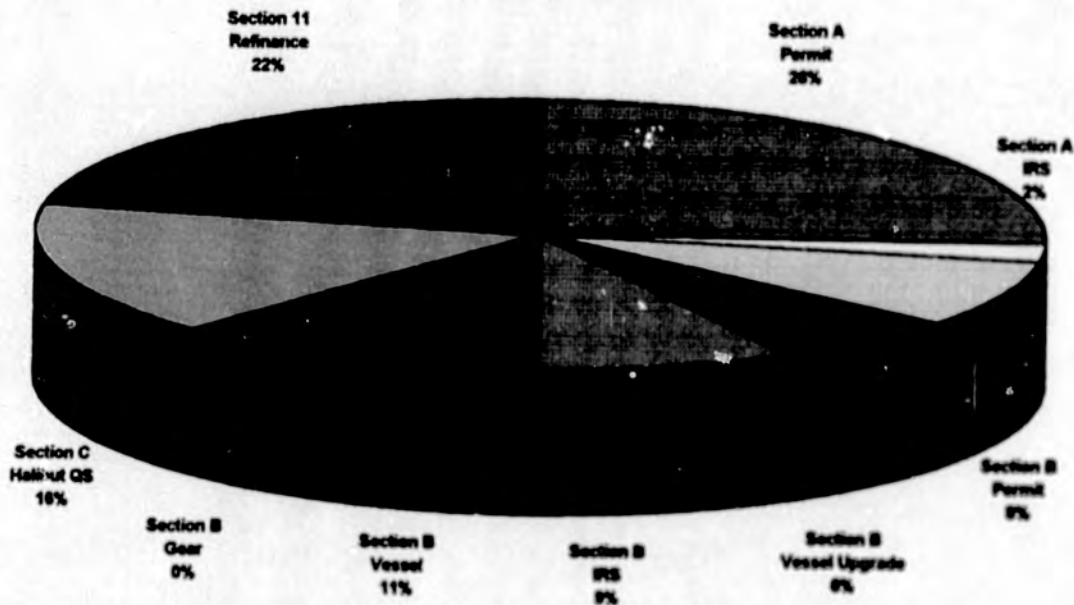
2290 SCOMM 95: HOUSE SPEC. COMM. ON FISHERIES 1995-1996

Commercial Fishing Revolving Loan Fund FY95 YTD - 1-31-95

of Applications



\$ of Applications



Division of Investments

Alaska Department of Commerce and Economic Development

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

PROPOSED ORDER OF PRIORITY
FOR THE COMMERCIAL FISHING LOAN PROGRAM

- 1) Purchase Permit
- 2) IRS Loan to Protect Permit
- 3) Vessel Upgrade or Purchase (includes refrigeration)
- 4) Gear
- 5) IFQ's
- 6) Refinance Other Loans
- 7) Excess Fund Transfer

By Regulation

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
COMMERCIAL FISHING REVOLVING LOAN FUND
HISTORICAL SUMMARY
(Dollars in Thousands)

AS 16.10.300; enacted in 1972

3 AAC 80.010 - .090, .900

The Commercial Fishing Revolving Loan Fund consists of three sections, A, B, and C, each with its own particular requirements. The loan program allows for prequalifications for loans to purchase limited entry permits and quota shares and for assumptions of existing loans.

Section A loans may be made for the purchase of limited entry permits, the upgrading of existing vessels to improve product quality, the retirement of federal tax obligations, and the refinancing of loans used to purchase commercial fishing vessels or gear from other lenders. *Eligibility:* Loans may be made to individual commercial fishermen who have been Alaska residents for the past two years and have been active in the applicable fishery during the past three out of five years.

Section B loans may be made for the repair, restoration or upgrading of existing vessels and gear, the purchase of limited entry permits, vessels and gear, the retirement of federal tax obligations, and the refinancing of loans used to purchase commercial fishing vessels or gear from other lenders. *Eligibility:* Loans may be made to individuals who have been Alaska residents for the past two years and, due to a lack of training or lack of employment opportunities in the area of residence, do not have occupational opportunities available other than commercial fishing or are economically dependent on commercial fishing for a livelihood.

Section C loans may be made for the purchase of quota shares. *Eligibility:* Loans may be made to individuals who have been Alaska residents for the past two years, possessed a permit or crew license and actively participated in a fishery for two of the past five years, qualifies as a transferee for quota shares, and is not eligible for financing from other recognized commercial lending institutions.

Terms: Maximum loan amount: Section A - \$300.0; Section B - \$100.0; Section C - \$300.0
Maximum loan term - 15 years Interest rate - fixed rate at Prime + 2%

Statistics as of December 31, 1994:

Total appropriations to RLF -	\$60,201.0	Last appropriation to RLF - \$3,710.0 in 1985
Total appropriations from RLF -	(56,238.9)	
Net of appropriations	\$3,962.1	

Total number of loans committed: 4,316

Total dollars committed: \$276,182.0

Current statistics: Number of loans outstanding: 1,206
Principal amount outstanding: \$64,251.1

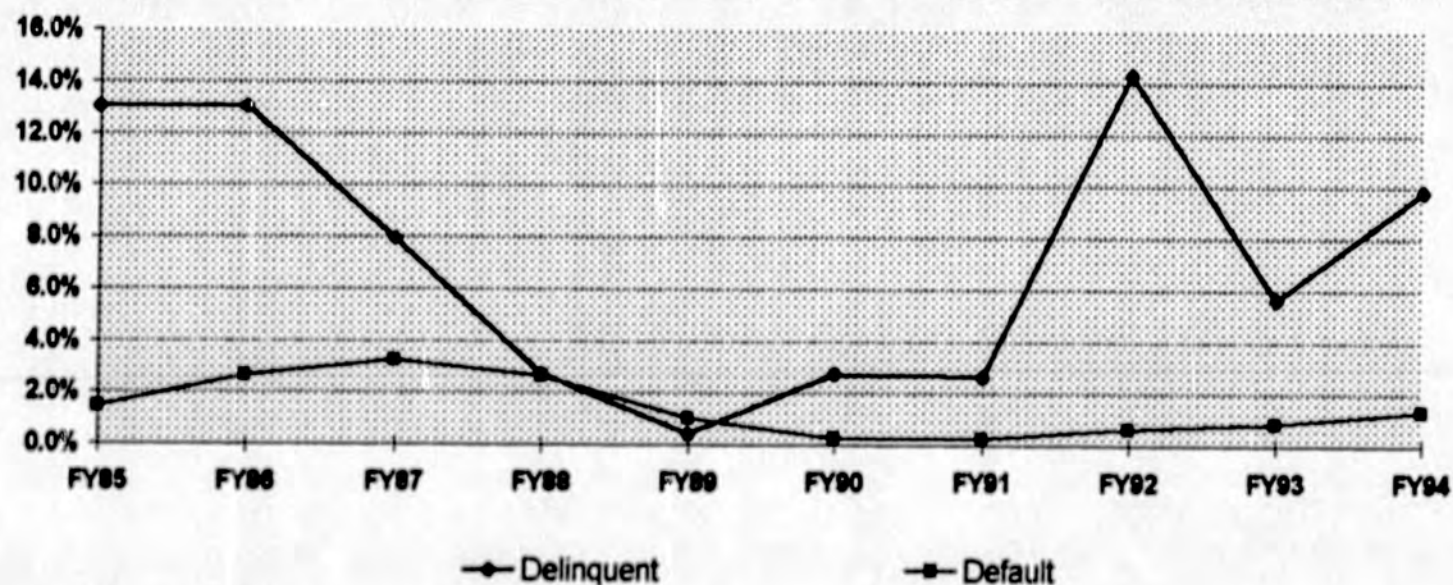
<u>Delinquency and Default Rates</u>	<u>Based on Principal Balance</u>	<u>Based on No. of Loans</u>
% Delinquent	21.2%	14.4%
% in default	.8%	.7%

Prepared by: Division of Investments
Revised February 22, 1995

Commercial Fishing Revolving Loan Fund

Delinquent - Default History

	% of \$ Outstanding Delinquent	% of \$ Outstanding Default	Total Delinquent & Default % of \$ Outstanding
FY85	13.0%	1.4%	14.4%
FY86	13.0%	2.6%	15.6%
FY87	7.9%	3.2%	11.1%
FY88	2.7%	2.6%	5.3%
FY89	0.4%	1.0%	1.4%
FY90	2.7%	0.2%	2.9%
FY91	2.6%	0.2%	2.8%
FY92	14.3%	0.6%	14.9%
FY93	5.6%	0.8%	6.4%
FY94	9.8%	1.3%	11.1%



Source: Delinquency & Foreclosure Summary Report - 6-30-XX

Delinquent is defined as 60 days or more past due, not in litigation.

Default is defined as in litigation.

Division of Investments
Alaska Department of Commerce and Economic Development

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
COMMERCIAL FISHING REVOLVING LOAN FUND

LOAN TYPE	MAX. LOAN AMOUNT	INTEREST RATE	MAX. LOAN TERM	LOAN PURPOSE	ELIGIBILITY
Section A	\$300,000	Prime +2	15 yrs.	Purchase limited entry permits Upgrade existing vessels to improve product quality Pay past-due federal taxes to prevent loss of permit Refinance commercial fishing loans from other lenders	Alaska resident for the past 2 years Active in fishery for 3 of the past 5 years
Section B	\$100,000	Prime +2	15 yrs.	Repair, restore or upgrade existing vessels or gear Purchase limited entry permits, vessels or gear Pay past-due federal taxes to prevent loss of permit Refinance commercial fishing loans from other lenders.	Alaska residents for the past 2 years No other occupational opportunities available in area Economically dependent on commercial fishing for a living
Section C	\$300,000	Prime +2	15 yrs.	Purchase individual fishing quota shares	Alaska resident for the past 2 years Possesses a permit or crew license Active participant in fishery for 2 of the past 5 years Qualifies as a transferee for quota shares Not eligible for financing from other commercial lenders.

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

COMMERCIAL FISHING LOAN PROGRAM

LENDING LIMITS

Section A: \$300,000 less total outstanding balances from all Division of Investments (DOI) commercial fishing loans **excluding** loans made under Section C for quota shares.

Section B: \$100,000 less the total outstanding loan balances from any previous DOI commercial fishing loans made under Section B.

Section C: \$300,000 less the total outstanding loan balances from any previous DOI commercial fishing loans made under Section C. This \$300,000 is in addition to loans made under Sections A, B, or 11 (Refinance).

Section 11 (Refinance): \$300,000 less the total outstanding loan balances from any previous DOI commercial fishing loans made under Sections A, B, or 11 (Refinance).

Tax Obligation: One-time only loan up to \$30,000 to be made under Section A or B. The tax obligation loan amount is to be included when determining the lending limits under Section A or B.

Prepared: February 27, 1995

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

ELIGIBILITY

Section A (Permits, vessel upgrades, and tax obligation loans):

- ♦ Two-year residency; **and**
- ♦ Must have held a limited entry permit, commercial fishing or crew member license for three of past five years including year immediately preceding date of application, **and**
- ♦ Establish that for each year claimed applicant actively participated in the fishery with the intent to make a profit during those periods. Active participation is defined by regulation as:
 - 30% or more of gross income was from commercial fishing, **or**
 - that applicant fished 25 days of each year claimed, **or**
 - that applicant fished 50% or more of the days that fishery was open.

Section B (Permits, vessels, gear, and tax obligation loans):

- ♦ Two-year residency; **and**
- ♦ Applicant must demonstrate that:
 - due to lack of training or lack of employment opportunities in the area of residence, do not have occupational opportunities other than commercial fishing, **or**
 - is economically dependent on commercial fishing for a livelihood which regulation defines as 30% or more of gross income over past two years was from commercial fishing, **and**
- ♦ Applicant does not have other sources of financing available, **and**
- ♦ Has never had a loan under Section A.

Section C (Quota Shares):

- ♦ Two-year residency; **and**
- ♦ Must have held a limited entry permit, commercial fishing or crew member license for two of the past five years, **and**
- ♦ Qualify as a transferee for quota shares, **and**
- ♦ Establish that for each year claimed applicant actively participated in the fishery with the intent to make a profit during those periods. Active participation is defined by regulation as:
 - 30% or more of gross income was from commercial fishing, **or**
 - that applicant fished 25 days of each year claimed, **or**
 - that applicant fished 50% or more of the days that fishery was open, **and**
- ♦ Are **not** eligible for financing from other recognized commercial lending institutions to purchase quota shares.

ELIGIBILITY (continued)

Assumptions and Refinance of Existing Loans (to lower interest rate):

- ♦ Two-year residency only.

Section 11 (Refinance of vessel loans made by other lending institutions):

- ♦ Two-year residency; **and**
- ♦ Must have held a limited entry permit, commercial fishing or crew member license for three of past five years including year immediately preceding date of application, **and**
- ♦ Establish that for each year claimed applicant actively participated in the fishery with the intent to make a profit during those periods. Active participation is defined by regulation as:
 - 30% or more of gross income was from commercial fishing, **or**
 - that applicant fished 25 days of each year claimed, **or**
 - that applicant fished 50% or more of the days that fishery was open.

OR

- ♦ Two-year residency; **and**
- ♦ Applicant must demonstrate that:
 - due to lack of training or lack of employment opportunities in the area of residence, do not have occupational opportunities other than commercial fishing, **or**
 - is economically dependent on commercial fishing for a livelihood which regulation defines as 30% or more of gross income over past two years was from commercial fishing.

OR

- ♦ Two-year residency; **and**
- ♦ Must have held a limited entry permit, commercial fishing or crew member license for two of the past five years, **and**
- ♦ Qualify as a transferee for quota shares, **and**
- ♦ Establish that for each year claimed applicant actively participated in the fishery with the intent to make a profit during those periods. Active participation is defined by regulation as:
 - 30% or more of gross income was from commercial fishing, **or**
 - that applicant fished 25 days of each year claimed, **or**
 - that applicant fished 50% or more of the days that fishery was open.

10/7/94

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

23-Feb-95

<u>Approved</u>	<u>48</u>
<u>Disapproved</u>	<u>10</u>
<u>Withdrawn</u>	<u>0</u>
<u>have been processed</u>	<u>58</u>

Total applications rec'd: 98

Total amount requested: \$2,232,812.11

Total amount approved: \$940,731.00

BORROWER	CITY	AMOUNT REQUESTED
Martushev, Peter	ANCHOR PT	\$24,000.00
Albright, Duane C.	ANCHORAGE	\$26,300.00
Benson, Roger L.	ANCHORAGE	\$30,000.00
Boyles, Donald	ANCHORAGE	\$26,572.00
Buckmeier, Timothy J.	ANCHORAGE	\$17,750.00
Dillon, Joyce	ANCHORAGE	\$24,000.00
Kanulie, James P.	ANCHORAGE	\$14,839.49
Nelson, Andrew	ANCHORAGE	\$22,500.00
Nelson, Nida	ANCHORAGE	\$22,500.00
Rodgers, Kenny R.	ANCHORAGE	\$30,000.00
Rudolph, Harold F.	ANCHORAGE	\$5,729.66
Simpson, David	ANCHORAGE	\$30,000.00
Vaughn, J. Paul	ANCHORAGE	\$30,000.00
Edmondson, Daniel B.	AUKE BAY	\$9,294.00
Jacobs, Chris J.	BETHEL	\$9,295.00
Alber, Louie E.	CORDOVA	\$30,000.00
Alber, Nina L.	CORDOVA	\$30,000.00
Bray, Russell	CORDOVA	\$30,000.00
Graham, Donald D.	CORDOVA	\$30,000.00
Johnson, John D.	CORDOVA	\$11,500.00
Johnson, Steve M.	CORDOVA	\$13,500.00
Keitel, Jack, S. Sr.	CORDOVA	\$22,000.00
Kramer, Dean	CORDOVA	\$28,000.00
Maxwell, Robert	CORDOVA	\$15,268.00
Nippell, Charles P.	CORDOVA	\$16,000.00
Septien, Richard K.	CORDOVA	\$29,800.00
Shaw, Brian J.	CORDOVA	\$30,000.00
Shipman, Harry	CORDOVA	\$30,000.00
Thorne, Gery	CORDOVA	\$30,000.00
Anderson, Emil	DILLINGHAM	\$30,000.00
Darrough, Robert	DILLINGHAM	\$30,000.00
Fletcher, Evan Sr.	DILLINGHAM	\$30,000.00
Nelson, Martin J.	DILLINGHAM	\$27,700.00
Chmiel, Carol A.	EGEGIK	\$30,000.00
Chmiel, Morgan T	EGEGIK	\$30,000.00
Busby, Thomas E.	ELFIN COVE	\$17,000.00
Aketachunak, Clyde	EMMONAK	\$30,000.00
Yatchmeneff, Peter	FALSE PASS	\$15,995.00
Rice, Kim	GIRDWOOD	\$16,381.00
Basargin, Dimitre	HOMER	\$25,959.00
Kallenberg, Walter	HOMER	\$30,000.00
Sanderson, Robert	HYDABURG	\$20,000.00
Abbott, George W.	JUNEAU	\$5,000.00
Martin, James Al	JUNEAU	\$11,000.00
Jones, Terre	KENAI	\$30,000.00

DIVISION OF INVESTMENTS
ALASKA DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

BORROWER	CITY	AMOUNT REQUESTED
Linderman, James	KENAI	\$30,000.00
Linderman, Nancy	KENAI	\$30,000.00
Myers, Earl G.	KENAI	\$20,000.00
Anderson, Donna	KETCHIKAN	\$18,700.00
Anderson, Jeffrey	KETCHIKAN	\$44,000.00
Newman, Alvin, Jr.	KING COVE	\$24,328.00
Groat, Kenneth	KING SALMON	\$30,000.00
Freeman, Robert J.	KODIAK	\$30,000.00
Katelnikoff, Nick	KODIAK	\$30,000.00
Resoff, Michael	KODIAK	\$25,000.00
Shauss, Moses	KONGIGANAK	\$18,000.00
Prince, Thomas E.	KOTLIK	\$16,000.00
Hansen, Olaf	LEVELOCK	\$7,500.00
Apalayak, Pavilla	MANOKOTAK	\$25,000.00
Krause, Earling E.	MANOKOTAK	\$15,000.00
Fitka, Charlie F.	MT. VILLAGE	\$3,206.71
Herrmann, Herbert	NAKNEK	\$30,000.00
Lawrence, Angela	NAKNEK	\$8,000.00
Wassillie, Oscar	NAPAKIAK	\$30,000.00
Johnson, Richard	NELSON LAGN.	\$30,000.00
Andrew, Tim Murphy	NEW STU	\$15,667.61
Pavella, Timmy J.	NEW STU	\$30,000.00
Wik, Harold L.	NIKISKI	\$30,000.00
Wik, Shane	NIKISKI	\$28,803.00
Fefelov, Nikita	NIKOLAEVSK	\$9,000.00
Yakunin, Victor	NIKOLAEVSK	\$30,000.00
Leman, Harry	NINILCHIK	\$30,000.00
Ophiem, Chris, Jr.	OUZINKIE	\$30,000.00
Hall, Daniel R.	PALMER	\$28,000.00
MacDonald, Terry E.	PETERSBURG	\$30,000.00
Nilson, Ole R.	PETERSBURG	\$30,000.00
Griechen, Dennis R.	PILOT POINT	\$30,000.00
Christensen, Raymond	PORT HEIDEN	\$30,000.00
Constantine, Aleck	PORT HEIDEN	\$15,600.00
Lukin, Jefferey	PORT LION	\$18,486.00
Pitka, Nick S.	RUSSIAN MISS	\$8,044.00
Brown, James R.	SAND POINT	\$24,000.00
Calugan, Betty	SAND POINT	\$24,625.00
Calugan, Lawrence	SAND POINT	\$24,625.00
Feller, Thomas C.	SAND POINT	\$30,000.00
Gardner, Jennifer	SAND POINT	\$17,500.00
Gardner, John P.	SAND POINT	\$18,000.00
Gilbert, Marvin	SAND POINT	\$20,000.00
Gilbert, Thekla	SAND POINT	\$20,000.00
Shuravloff, Peter	SAND POINT	\$17,000.00
Mobeck, Benjamin	SAND PT	\$13,000.00
Bower, Charlie	SITKA	\$12,000.00
Riley, John K.	ST. MARY'S	\$25,000.00
Thompson, Ephrim	ST. MARY'S	\$7,271.00
Osborne, Eric V.	UNAKLEET	\$30,000.00
Martinson, Robert A.	WASILLA	\$21,000.00
Maxwell, Mike	WASILLA	\$11,300.00
Mallott, Byron J.	YAKUTAT	\$11,272.64

Fund, the total outstanding loan balances of this loan plus any previous Section B loans cannot exceed \$100,000.

INTEREST RATE

The interest rate will be fixed at the time of loan approval and will be approximately two percent (2%) above the prime rate not to exceed ten and one-half percent (10.5%).

LOAN TERMS

The maximum loan term is 15 years. Terms of all loans will be fixed by the loan committee in consideration of the needs of the borrower, the collateral offered and the ability to repay the loan.

COLLATERAL

Loans must be secured by adequate collateral to protect the investment of the State in the event of default. The loan shall be secured by a first priority lien and may not exceed 90 percent of the appraised value or cost of the collateral (whichever is lower). The specific amount to be loaned shall be determined by the loan committee and additional collateral may be required.

RESIDENCY

For purposes of eligibility under this program, "resident" is an individual who, except for brief intervals, military service, attendance at an educational institution or absence for good cause, has resided in the State continuously for two years.

All parties applying for a loan must establish residency.

FEES

If you are applying for a loan, a nonrefundable \$50 fee must accompany the application.

If your application is approved, an origination fee of half of one percent (0.5%) of the total loan amount will be due at closing.

Photo Courtesy of David J. Nesgoda

Commercial Fishing

Tax Obligation Loan Program



Division of Investments

Alaska
Department of Commerce
and Economic Development

Division of Investments
P.O. Box 34159, Juneau, Alaska 99803
Telephone Number: (907) 465-2510
1 (800) 478-LOAN

Division of Investments
3601 "C" Street, Suite 778
Anchorage, Alaska 99503
Telephone: (907) 562-3779

**DIVISION OF INVESTMENTS
ALASKA DEPARTMENT
OF COMMERCE AND
ECONOMIC DEVELOPMENT**

**TAX OBLIGATION LOAN
POLICIES AND PROCEDURES**

**COMMERCIAL FISHING
REVOLVING LOAN FUND
(AS 16.10.310 - AS 16.10.370)**

LOAN PURPOSE

Loans may be made under Section A or Section B of the Commercial Fishing Revolving Loan Fund to satisfy past due federal tax obligations that may result in the loss of a limited entry permit. An individual must have filed past and current federal tax returns with the federal government and have executed an agreement with the federal government for repayment of past due federal tax obligations. An individual may receive only one loan for this purpose during the individual's lifetime. The Department's authority to make tax obligation loans expires on May 26, 1997.

**ELIGIBILITY FOR
SECTION A LOANS**

Loans may be made to individuals who have been State residents for the two years immediately preceding the date of application and have held a limited entry permit, commercial fishing or crew member license for the year

preceding the date of application and any other two of the past five years. You must have actively participated in the fishery with the intent to make a profit during those periods.

An applicant must establish that for each year claimed, 30 percent of the applicant's total gross income was from commercial fishing, 25 days of the year were spent commercial fishing, or the applicant fished in a particular commercial fishery for 50 percent or more of the days that fishery was open. **Note: If you receive a loan under this section, you will not be eligible to borrow under Section B.**

**LENDING LIMITS FOR
SECTION A LOANS**

The maximum tax obligation loan is \$30,000. If the applicant has any other loans under the Commercial Fishing Revolving Loan Fund, the total outstanding loan balance of this loan plus any previous State commercial fishing loans, excluding Section C loans for quota shares, cannot exceed \$300,000.

**ELIGIBILITY FOR
SECTION B LOANS**

Loans may be made to individuals who have been State residents for a continuous period of two years immediately preceding the date of application, and due to a lack of training or lack of employment opportunities in the area of residence, do not have occupational opportunities available other than commercial fishing or are economically dependent on commercial fishing for a livelihood.

As stated in Alaska Statute 16.10.310(a)(1)(B)(ii) "economically dependent on commercial fishing for a livelihood" means that at least 30 percent of the applicant's total gross income during the previous two years was derived from commercial fishing.

Loans under Section B are intended to be made to individuals who do not have alternative sources of financing available to them.

**LENDING LIMITS FOR
SECTION B LOANS**

The maximum tax obligation loan amount is \$30,000. If the applicant has any other loans under the Commercial Fishing Revolving Loan

State is not liable for any costs incurred by the borrower during the application process.

FEES: If you are applying for a loan, a preauthorization to purchase a vessel or an assumption of an existing loan, a nonrefundable fee of \$50 must be included with the application. If you are applying for a prequalification, a nonrefundable fee of \$200 must be included with the application. If the loan is approved, a half of one percent (0.5%) origination fee will be due at closing.

COLLATERAL: Loans must be secured by adequate collateral to protect the investment of the State in the event of default. The specific amount to be loaned and the amount of collateral required will be determined by the loan committee.

INTEREST RATE: The interest rate will be fixed at the time of loan approval and will be approximately two percent (2%) above the prime rate not to exceed ten and one-half percent (10.5%).

LOAN TERM: The maximum loan term is 15 years. Terms of all loans will be fixed by the loan committee in consideration of the purpose of the loan, the needs of the borrower, the collateral offered and the ability to repay the loan.

ASSUMPTION OF AN EXISTING COMMERCIAL FISHING LOAN

To qualify for a loan assumption, the applicant must meet the 2-year residency requirement. The loan committee may permit an assumption if the applicant is a good financial risk and the security of the State's investment is preserved.

PREQUALIFICATION FOR A LOAN TO PURCHASE A LIMITED ENTRY PERMIT

The application must indicate which permit is being applied for and the dollar amount requested. A prequalification approval will be valid for 60 days after the date of approval. If a prequalification commitment expires, an applicant may apply for another 60 days by paying an additional \$200 and submitting an updated financial statement.

REFINANCING OF VESSEL/GEAR LOANS

Loans may be made to refinance vessel or gear loans made by other lenders more than one year prior to the date of application. Applicants must meet the two-year residency requirement and eligibility under Section A, B or C. Refinancing loan requests will only be considered if the Division determines there are adequate funds to meet loan demand.

PRAUTHORIZATION TO PURCHASE A VESSEL

Preauthorizations will be accepted under Section B only. The application must indicate the fishery and area in which the vessel will be used, and the approximate dollar amount requested. The application fee is \$50 and if approved the preauthorization will be valid for 90 days after approval. This preauthorization establishes the borrower's eligibility only and is not a commitment for a specific dollar amount.

Commercial Fishing Loan Program



Division of Investments

**Alaska
Department of Commerce
and Economic Development**

Division of Investments
P.O. Box 34159, Juneau, Alaska 99803
Telephone Number: (907) 465-2510
1(800) 478-LOAN

Division of Investments
3601 "C" Street, Suite 773
Anchorage, Alaska 99503
Telephone: (907) 562-3779

**LOAN POLICIES AND PROCEDURES
COMMERCIAL FISHING
REVOLVING LOAN FUND
(AS 16.10.310 - AS 16.10.370)**

The Commercial Fishing Revolving Loan Fund consists of three sections (A, B, and C) and provisions for refinancing or assuming an existing loan. Each section has its own particular requirements.

**SECTION A LOANS
(Permits, Vessel Upgrades)**

LOAN PURPOSE: Loans may only be made to finance the purchase of limited entry permits, and to upgrade existing vessels and gear for the purpose of improving the quality of Alaska seafood products. Loan funds may not be used to reimburse an applicant for permits or vessel/gear upgrades which were obtained more than six months before receipt of the application. **Note: If you receive a loan under this section, you will not be eligible to borrow under Section B.**

ELIGIBILITY: Loans may be made to individuals who have been State residents for the two years immediately preceding the date of application and have held a limited entry permit, commercial fishing or crew member license for the year preceding the date of application and any other two of the past five years. You must have actively participated in the fishery with the intent to make a profit during those periods.

An applicant must establish that for each year claimed, 30 percent of the applicant's total gross income was from commercial fishing, 25 days of the year were spent commercial fishing, or the applicant fished in a particular commercial fishery for 50 percent or more of the days that fishery was open.

LENDING LIMITS: The maximum loan amount is \$300,000, less the total of any outstanding loan balances from any previous State commercial fishing loans made under the Commercial Fishing Revolving Loan Fund, excluding Section C loans for quota shares.

**SECTION B LOANS
(Permits, Vessels and Gear)**

LOAN PURPOSE: Loans may be made for the purchase of limited entry permits, vessels or gear, or for the repair, restoration or upgrading of existing vessels and gear. Loan funds may not be used to reimburse an applicant for permits, vessels, gear or vessel/gear upgrading obtained more than six months before receipt of the application.

ELIGIBILITY: Loans may be made to individuals who have been State residents for a continuous period of two years immediately preceding the date of application, and due to a lack of training or lack of employment opportunities in the area of residence, do not have occupational opportunities available other than commercial fishing or are economically dependent on commercial fishing for a livelihood. "Economically dependent" is defined as 30 percent or more of the applicant's income during the past two years was derived from commercial fishing. **Note: Loans under Section B are intended to be made to individuals who do not have alternative sources of financing available to them.**

LENDING LIMITS: The maximum loan amount is \$100,000, less the total of any outstanding loan balances from any previous State commercial fishing loans made under Section B of the Commercial Fishing Revolving Loan Fund. Two or more commercial fishers applying jointly may combine their eligibility on a single loan, up to \$100,000 per individual less the total of any outstanding loan balances from previous Section B loans.

SECTION C LOANS (Quota Shares)

LOAN PURPOSE: Loans may be made for the purchase of quota shares in the sablefish and halibut fisheries and other fisheries in and off Alaska.

ELIGIBILITY: Loans may be made to individuals who have been a State resident for a continuous period of two years immediately preceding the date of application, have held a limited entry permit, commercial fishing or crew member license for any two of the past five years (you must have actively participated in the fishery with the intent to make a profit during those periods), qualify as a transferee for quota shares under applicable law, and are not eligible for financing from other recognized commercial lending institutions to purchase quota shares.

LENDING LIMITS: The maximum loan amount is \$300,000, less the total of any outstanding loan balances from any previous Section C loan.

LOAN CONDITIONS

RESIDENT: A resident is defined as an individual who, except for brief intervals, military service, attendance at an educational institution, or absence for good cause, has been present in Alaska with the intent to remain indefinitely and make a primary and permanent home in the state.

CONSTRUCTION FINANCING: Not available under this program. No loan funds may be disbursed until construction or renovation is 100 percent complete. Applicants should obtain written loan approval prior to obtaining interim financing.

LOAN COSTS: The borrower shall pay all direct costs incurred by the State in processing the application for a loan, including the cost of credit reports, title insurance, appraisals, surveys, inspections, or other direct costs. The

SCOMM

95:9

Fishery Data Series No. 94-28

Harvest, Catch, and Participation in Alaska Sport Fisheries During 1993

by

Michael J. Mills

September 1998

Alaska Department of Fish and Game

Division of Sport Fish



FISHERY DATA SERIES NO. 94-28

HARVEST, CATCH, AND PARTICIPATION IN ALASKA
SPORT FISHERIES DURING 1993¹

By

Michael J. Mills

Alaska Department of Fish and Game
Division of Sport Fish
Anchorage, Alaska

September 1994

¹ This investigation was partially financed by the Federal Aid in Sport Fish Restoration Act (16 U.S.C. 777-777E) under Project F-10-9, Job No. 87-1.

The Fishery Data Series was established in 1987 for the publication of technically oriented results for a single project or group of closely related projects. Fishery Data Series reports are intended for fishery and other technical professionals. Distribution is to state and local publication distribution centers, libraries and individuals and, on request, to other libraries, agencies, and individuals. This publication has undergone editorial and peer review.

The Alaska Department of Fish and Game administers all programs and activities free from discrimination on the basis of sex, color, race, religion, national origin, age, marital status, pregnancy, parenthood, or disability. For information on alternative formats available for this and other department publications, contact the department ADA Coordinator at (voice) 907-465-4120, or (TDD) 907-465-3646. Any person who believes s/he has been discriminated against should write to: ADF&G, PO Box 25526, Juneau, AK 99802-5526; or O.E.O., U.S. Department of the Interior, Washington, DC 20240.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF APPENDICES.....	ii
ABSTRACT.....	1
INTRODUCTION.....	2
METHODS.....	3
RESULTS.....	5
Participation	5
Harvest	6
Catch	6
DISCUSSION.....	7
ACKNOWLEDGEMENTS.....	8
LITERATURE CITED.....	8
APPENDIX A. TABLES AND FIGURES.....	11
APPENDIX B. QUESTIONNAIRES AND REMINDERS.....	143

LIST OF APPENDICES

<u>Appendix</u>	<u>Page</u>
A1. Map of Alaska sport fishing regions and areas.....	12
A2. List of Alaska sport fishing regions and areas.....	13
A3. List of common names, scientific names, and abbreviations.....	14
A4. Response to the standard Alaska sport fish survey mailing, 1993.....	16
A5. Response to the supplementary Alaska sport fish survey mailing, 1993.....	17
A6. Number and percent of Alaska sport fishing licenses by residency, 1961-1993.....	18
A7. Statewide and regional participation in Alaska sport fishing by residency, 1991-1993.....	19
A8. Anglers who sport fished in Alaska by area of residence, 1983-1993.....	20
A9. Number of anglers who sport fished in Alaska by area of residence, 1983-1993.....	21
A10. Number of Alaska anglers by region and area fished, 1984-1993.....	22
A11. Number of Alaska sport fishing trips by region and area, 1984-1993.....	23
A12. Angler-days fished in Alaska, statewide and by region, 1983-1993.....	24
A13. Number of angler-days fished in Alaska and percentage by region and area, 1983-1993.....	25
A14. Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.....	27
A15. Alaska saltwater sport fish harvest by species, 1983-1993, and catch by species, 1993.....	28
A16. Alaska freshwater sport fish harvest by species, 1983-1993, and catch by species, 1993.....	29
A17. Southeast Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.....	30

LIST OF APPENDICES (Continued)

<u>Appendix</u>	<u>Page</u>
A18. Southcentral Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.....	31
A19. Arctic-Yukon-Kuskokwim Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.....	32
A20. Alaska sport sea-run salmon harvests, statewide and by region, 1983-1993.....	33
A21. Alaska sport sea-run salmon harvests, 1983-1993, and catch, 1993, by region and area.....	34
A22. Alaska sport sea-run chinook salmon harvests, statewide and by region, 1983-1993.....	35
A23. Alaska sport sea-run chinook salmon harvests, 1983-1993, and catch, 1993, by region and area.....	36
A24. Alaska sport sea-run coho salmon harvests, statewide and by region, 1983-1993.....	37
A25. Alaska sport sea-run coho salmon harvests, 1983-1993, and catch, 1993, by region and area.....	38
A26. Alaska sport sea-run sockeye salmon harvests, statewide and by region, 1983-1993.....	39
A27. Alaska sport sea-run sockeye salmon harvests, 1983-1993, and catch, 1993, by region and area.....	40
A28. Alaska sport pink salmon harvests, statewide and by region, 1983-1993.....	41
A29. Alaska sport pink salmon harvests, 1983-1993, and catch, 1993, by region and area.....	42
A30. Alaska sport chum salmon harvests, statewide and by region, 1983-1993.....	43
A31. Alaska sport chum salmon harvests, 1983-1993, and catch, 1993, by region and area.....	44
A32. Alaska sport landlocked coho salmon and chinook salmon harvests, 1983-1993, and catch, 1993, by region and area...	45
A33. Alaska sport kokanee salmon harvests, 1983-1993, and catch, 1993, by region and area.....	46
A34. Alaska sport steelhead harvests, 1983-1993, and catch, 1993, by region and area.....	47

LIST OF APPENDICES (Continued)

<u>Appendix</u>	<u>Page</u>
A35. Alaska sport rainbow trout harvests, 1983-1993, and catch, 1993, by region and area.....	48
A36. Alaska sport cutthroat trout harvests, 1983-1993, and catch, 1993, by region and area.....	49
A37. Alaska sport brook trout harvests, 1983-1993, and catch, 1993, by region and area.....	50
A38. Alaska sport lake trout harvests, 1983-1993, and catch, 1993, by region and area.....	51
A39. Alaska sport Dolly Varden and Arctic char harvests, 1983-1993, and catch, 1993, by region and area.....	52
A40. Alaska sport Arctic grayling harvests, 1983-1993, and catch, 1993, by region and area.....	53
A41. Alaska sport northern pike harvests, 1983-1993, and catch, 1993, by region and area.....	54
A42. Alaska sport whitefish harvests, 1983-1993, and catch, 1993, by region and area.....	55
A43. Alaska sport burbot harvests, 1983-1993, and catch, 1993, by region and area.....	56
A44. Alaska sport sheefish harvests, 1983-1993, and catch, 1993, by region and area.....	57
A45. Alaska sport smelt harvests, 1983-1993, and catch, 1993, by region and area.....	58
A46. Alaska sport Pacific halibut harvests, 1983-1993, and catch, 1993, by region and area.....	59
A47. Alaska sport rockfish harvests, 1983-1993, and catch, 1993, by region and area.....	60
A48. Alaska sport lingcod harvests, 1991-1993, and catch, 1993, by region and area.....	61
A49. Alaska sport razor clam harvests, 1983-1993, and catch, 1993, by region and area.....	62
A50. Alaska sport harvests, 1983-1993, and catch, 1993, of other fish by region and area.....	63
A51. Ketchikan Area sport fish harvest and effort by fisheries and species, 1993.....	64

LIST OF APPENDICES (Continued)

<u>Appendix</u>	<u>Page</u>
A52. Ketchikan Area sport fish catch and effort by fisheries and species, 1993.....	65
A53. Prince of Wales Island Area sport fish harvest and effort by fisheries and species, 1993.....	66
A54. Prince of Wales Island Area sport fish catch and effort by fisheries and species, 1993.....	67
A55. Kake, Petersburg, Wrangell, Stikine Area sport fish harvest and effort by fisheries and species, 1993.....	68
A56. Kake, Petersburg, Wrangell, Stikine Area sport fish catch and effort by fisheries and species, 1993.....	69
A57. Sitka Area sport fish harvest and effort by fisheries and species, 1993.....	70
A58. Sitka Area sport fish catch and effort by fisheries and species, 1993.....	71
A59. Juneau Area sport fish harvest and effort by fisheries and species, 1993.....	72
A60. Juneau Area sport fish catch and effort by fisheries and species, 1993.....	73
A61. Haines-Skagway Area sport fish harvest and effort by fisheries and species, 1993.....	74
A62. Haines-Skagway Area sport fish catch and effort by fisheries and species, 1993.....	75
A63. Glacier Bay Area sport fish harvest and effort by fisheries and species, 1993.....	76
A64. Glacier Bay Area sport fish catch and effort by fisheries and species, 1993.....	77
A65. Yakutat Area sport fish harvest and effort by fisheries and species, 1993.....	78
A66. Yakutat Area sport fish catch and effort by fisheries and species, 1993.....	79
A67. Glennallen Area sport fish harvest and effort by fisheries and species, 1993.....	80
A68. Glennallen Area sport fish catch and effort by fisheries and species, 1993.....	81

LIST OF APPENDICES (Continued)

<u>Appendix</u>	<u>Page</u>
A69. Prince William Sound Area sport fish harvest and effort by fisheries and species, 1993.....	82
A70. Prince William Sound Area sport fish catch and effort by fisheries and species, 1993.....	83
A71. Knik Arm Drainage Area sport fish harvest and effort by fisheries and species, 1993.....	84
A72. Knik Arm Drainage Area sport fish catch and effort by fisheries and species, 1993.....	85
A73. Knik Arm Drainage Area personal use harvest and effort by fisheries and species, 1993.....	86
A74. Knik Arm Drainage Area personal use catch and effort by fisheries and species, 1993.....	87
A75. Anchorage Area sport fish harvest and effort by fisheries and species, 1993.....	88
A76. Anchorage Area sport fish catch and effort by fisheries and species, 1993.....	89
A77. East Susitna River Drainage sport fish harvest and effort by fisheries and species, 1993.....	90
A78. East Susitna River Drainage sport fish catch and effort by fisheries and species, 1993.....	91
A79. West Cook Inlet-West Susitna River Drainages sport fish harvest and effort by fisheries and species, 1993.....	92
A80. West Cook Inlet-West Susitna River Drainages sport fish catch and effort by fisheries and species, 1993.....	93
A81. Kenai River sport fish freshwater nonguided harvest and effort by fisheries and species, 1993.....	94
A82. Kenai River sport fish freshwater nonguided catch and effort by fisheries and species, 1993.....	95
A83. Kenai River sport fish freshwater guided harvest and effort by fisheries and species, 1993.....	96
A84. Kenai River sport fish freshwater guided catch and effort by fisheries and species, 1993.....	97

LIST OF APPENDICES (Continued)

<u>Appendix</u>	<u>Page</u>
A85. Kenai Peninsula Area sport fish freshwater harvest and effort by fisheries and species, 1993.....	98
A86. Kenai Peninsula Area sport fish freshwater catch and effort by fisheries and species, 1993.....	99
A87. Kenai Peninsula Area sport fish saltwater harvest and effort by fisheries for finfish species, 1993.....	100
A88. Kenai Peninsula Area sport fish saltwater catch and effort by fisheries for finfish species, 1993.....	101
A89. Kenai Peninsula Area sport fish harvest and effort by fisheries for shellfish, 1993.....	102
A90. Kodiak Area sport fish harvest and effort by fisheries and species, 1993.....	104
A91. Kodiak Area sport fish catch and effort by fisheries and species, 1993.....	105
A92. Naknek River Drainage-Alaska Peninsula Area sport fish harvest and effort by fisheries and species, 1993.....	106
A93. Naknek River Drainage-Alaska Peninsula Area sport fish catch and effort by fisheries and species, 1993.....	107
A94. Kvichak River Drainage Area sport fish harvest and effort by fisheries and species, 1993.....	108
A95. Kvichak River Drainage Area sport fish catch and effort by fisheries and species, 1993.....	109
A96. Nushagak Area sport fish harvest and effort by fisheries and species, 1993.....	110
A97. Nushagak Area sport fish catch and effort by fisheries and species, 1993.....	111
A98. Tanana River Drainage Area sport fish harvest and effort by fisheries and species, 1993.....	112
A99. Tanana River Drainage Area sport fish catch and effort by fisheries and species, 1993.....	113
A100. Kuskokwim River Drainage Area sport fish harvest and effort by fisheries and species, 1993.....	114

LIST OF APPENDICES (Continued)

<u>Appendix</u>	<u>Page</u>
A101. Kuskokwim River Drainage Area sport fish catch and effort by fisheries and species, 1993.....	115
A102. Seward Peninsula-Norton Sound Area sport fish harvest and effort by fisheries and species, 1993.....	116
A103. Seward Peninsula-Norton Sound Area sport fish catch and effort by fisheries and species, 1993.....	117
A104. Northwest Alaska Area sport fish harvest and effort by fisheries and species, 1993.....	118
A105. Northwest Alaska Area sport fish catch and effort by fisheries and species, 1993.....	119
A106. Yukon River Drainage Area sport fish harvest and effort by fisheries and species, 1993.....	120
A107. Yukon River Drainage Area sport fish catch and effort by fisheries and species, 1993.....	121
A108. North Slope Brooks Range Area sport fish harvest and effort by fisheries and species, 1993.....	122
A109. North Slope Brooks Range Area sport fish catch and effort by fisheries and species, 1993.....	123
A110. Comparison of 1993 Alaska statewide survey and onsite survey estimates and confidence intervals (CI).....	124
A111. Number of households responding to the 1993 standard and supplementary sport fish surveys by fishery.....	127
B1. Sport fish standard survey questionnaire, 1993.....	145
B2. First reminder standard survey, 1993.....	189
B3. Second reminder standard survey, 1993.....	191
B4. Sport fish supplementary survey questionnaire, 1993.....	193
B5. First reminder supplementary survey, 1993.....	199
B6. Second reminder supplementary survey, 1993.....	201
B7. Sport fish supplementary survey map/site booklet, 1993.....	203

ABSTRACT

Since 1977, the Alaska Department of Fish and Game has conducted an annual mail survey to estimate sport fishing participation and harvests (fish kept) statewide and by Alaska fisheries, areas, regions, and species. Since 1990, catches (fish harvested plus fish released) have also been estimated. Detailed findings are presented for 1993. In 1993, 426,514 anglers took 1,809,419 household trips and fished 2,559,408 days to catch 6,307,062 fish and harvest 2,989,720 fish.

KEY WORDS: Alaska, recreation, sport, fish, fisheries, fishing, catch, harvest, angler, angler-days, survey, salmon, trout, char, Arctic grayling, northern pike, whitefish, burbot, smelt, Pacific halibut, rockfish, lingcod, razor clams.

INTRODUCTION

Meeting public demand for recreational fishing opportunities in Alaska while at the same time maintaining and protecting the fisheries resources has become increasingly complex. In the early years of statehood—before rapid population expansion and industrial development—good, uncrowded sport fishing was accessible; large sport fisheries were few and easily monitored; and sport fishing was considered to be a minor factor in management of commercially exploited species.

Today, along with increasing tourism and continued forest, mineral, petroleum, and associated governmental development has come an avid, recreationally-oriented population. Accessible sport fisheries have become crowded, new fisheries have developed, and pressure from a large mobile angling population is spilling ever farther afield. International treaties, native land allotments, (d)(2) national interest land legislation, federal takeover of subsistence management on federal lands within the state, state and federal land conveyances, habitat degradation, and problems of access have complicated maintenance and expansion of sport fishing opportunities. The State and private corporations have made substantial commitments to aquaculture and hatchery propagation. Also, recreational fishing is now a significant factor in total fisheries management, and vociferous sport-commercial-subsistence user conflicts have developed.

Against this backdrop, a statewide database providing information on where sport fishing occurs, the extent of participation, the preferences of participants, and the species and numbers of major game fishes being caught and harvested is essential for regulation and management of Alaska's sport fisheries and for total regulation, management, and allocation of multiple-use fisheries. In addition, this information is needed for establishing priorities; for formulating policies; for budgeting; for planning and evaluating rehabilitation, enhancement, stocking, habitat protection, and access acquisition projects; for stock assessment; for forecasting; for gauging the economic and social significance of sport fishing; and for satisfying requests for information from individuals, special interest groups, government agencies, and the recreational industry.

Because of Alaska's vastness, meeting all these information requirements statewide by onsite creel surveys would be prohibitively expensive, thus an economical supplementary program has been developed. Described herein are results from the seventeenth year of that program, whose primary objective is to provide statewide estimates of participation, catch, and harvest for major Alaskan sport-caught species by area and fishery.

Species covered are listed in Appendix A3. Alaska sport fishing regulatory and management areas are delineated in Appendix A1 and Appendix A2.

METHODS

Two types of questionnaires were used to estimate participation, catch, and harvest associated with sport fishing in Alaska in 1993. One type, the "standard" type, was a multipage questionnaire similar to those used annually since 1977 (Appendix B1). The other type, the "supplementary" type, was a single fold-out page accompanied by a list of sites (Appendix B4). The standard type was mailed to a stratified random sample of 29,999 households containing one or more individuals who purchased 1993 sport fishing licenses. The supplementary type was mailed to a stratified random sample of 15,000 such households. Stratification for both types was by household residence: Alaska, other United States, Canada, other foreign. Reminder letters and questionnaires were mailed to first-time and second-time nonrespondents to both types.

For both types each household was asked for information for 1993 on number of licensees, on participation (number of anglers, trips, and days fished), and number of fish caught and number of fish kept (harvested) by species and site. Information from both types was pooled and catch or harvest for each species or participation for each site was estimated by:

$$Y_{ijk} = N_h R_h \frac{\sum_{i=1}^3 \sum_{j=1}^{n_{hi}} Y_{hijk}}{\sum_{i=1}^3 n_{hi}} \quad (1)$$

where

Y_{hijk} = harvest, catch, or participation at the k^{th} site by the j^{th} household responding to the i^{th} mailing for the h^{th} residential stratum;

n_{hi} = number of households responding to the i^{th} mailing for the h^{th} residential stratum;

N_h = estimated number of households with at least one fishing license holder in 1993 for the h^{th} residential stratum

$$= M_h / m_h ; \quad (2)$$

M_h = number of license holders residing in stratum h in 1993;

m_h = mean number of license holders per responding household for residential stratum h ; and

R_h = nonresponse ratio for residential stratum h .

The R_h were obtained by simulation based on the following exponential regression models developed for responding households:

$$\ln(n_{hi}) = \alpha_{eh} + \beta_{eh}i + \epsilon_{ehi}, \text{ for } i = 1, 2, 3; \quad (3)$$

$$\ln(r_{hi} + 10^{-7}) = \alpha_{rh} + \beta_{rh}i + \epsilon_{rhi}, \text{ for } i = 1, 2, 3; \quad (4)$$

where

r_{hi} = mean participation or catch, for a species, over all sites by respondents to the i^{th} mailing for residential stratum h ;

and ϵ_{ehi} and ϵ_{rhi} are normal variates with mean 0 and variance σ^2 .

Parameters α_{eh} , α_{rh} , β_{eh} , and β_{rh} were estimated using the method of least squares (Draper and Smith 1981). The set $(n_4, n_5, \dots, n_I)$ was estimated from regression (3), and the set $(r_4, r_5, \dots, r_I)$ was estimated from regression (4), where I was the simulated mailing for which:

$$\left\{ \sum_{i=1}^3 n_{hi} + \sum_{i=4}^I n_{hi} = n_h \right\} \quad \text{or} \quad \left\{ n_{h(I+1)} < 10^{-7} \right\}; \quad (5)$$

and where

n_{hi} = estimated number of households responding to the i^{th} simulated mailing, for $i = 4, 5, \dots, I$, for residential stratum h

$$= e^{(\alpha_{eh} + \beta_{eh}i)}; \text{ and} \quad (6)$$

n_h = the number of households sampled in residential stratum h .

The R_h were then calculated as follows:

$$R_h = \frac{Y_{esh}}{(Y_{esh} + Y_{rsh})}; \quad (7)$$

where

$$Y_{esh} = \theta_h \frac{\sum_{i=1}^3 \sum_{j=1}^{n_{hi}} y_{hij}}{\sum_{i=1}^3 n_{hi}}; \quad (8)$$

y_{hi} = reported participation or catch, for a species, over all sites for residential stratum h ;

θ_h = proportion of sampled households that responded for residential stratum h ;

$$Y_{sinh} = (1-\theta) \frac{\sum_{i=4}^I n_{hi} r_{hi}}{n_h - \sum_{i=1}^3 n_{hi}} ; \text{ and} \quad (9)$$

r_{hi} = simulated mean participation or catch, for a species, over all sites for nonresponding households, $i = 4, 5, \dots, I$ for residential stratum h

$$= e^{(\alpha_{sh} + \beta_{sh} i)} \cdot 10^{-7}. \quad (10)$$

Confidence intervals were calculated using the percentile method of bootstrap resampling (Efron and Tibshirani 1993) with 1,000 replications.

RESULTS

In 1993, 426,514 anglers took 1,809,419 household trips and fished 2,559,408 days to catch 6,307,062 fish and harvest 2,989,720 fish.

Participation

Of the 426,514 anglers who fished in 1993, 237,452 (56%) were Alaska residents and 189,062 (44%) were nonresidents (Appendix A9). Of the 2,559,408 angler-days fished in 1993, 1,867,233 (73%) were expended in the Southcentral region of Alaska, 471,203 (18%) were expended in the Southeast region, and 220,972 (9%) were expended in the Arctic-Yukon-Kuskokwim region (Appendix A13). The Cook Inlet area had 1,365,894 days, 53% of the state's total sport fishing. The Kenai Peninsula had 946,232 angler-days or 37% of the state total. The Kenai River had 324,120 angler-days, 13% of the state total. An estimated 920,710 days, 36% of all sport fishing, were in saltwater; 1,638,698 days, 64% of all sport fishing, were in freshwater.

Residents of Alaska fished 1,748,132 days, 68% of all fishing; nonresidents fished 811,236 days, 32% of all fishing. In Southeast Alaska, residents fished 238,612 days, 53% of all Southeast fishing; and nonresidents fished 212,591 days, 47% of Southeast fishing. In Southcentral Alaska, residents fished 1,301,367 days, 70% of all Southcentral fishing; and nonresidents fished 365,666 days, 30% of Southcentral fishing. In the Arctic-Yukon-Kuskokwim Region of Alaska, residents fished 187,973 days, 85% of that region's fishing; and nonresidents fished 32,999 days, 15% of the regional total.

Harvest

The 2,989,720 fish harvested in 1993 (Appendix A14) included 1,011,959 razor clams *Siliqua patula* and 61,495 smelt and capelin *Osmeridae*. Of the remaining 1,916,266 harvested fish, 1,052,082 (55%) were anadromous (sea-run) salmon *Oncorhynchus*, 313,147 (16%) were Pacific halibut *Hippoglossus stenolepis*, 136,681 (7%) were rainbow trout *Oncorhynchus mykiss*, 100,428 (5%) were Dolly Varden *Salvelinus malma* and Arctic char *Salvelinus alpinus*, 82,625 (4%) were rockfish *Sebastes*, 58,385 (3%) were landlocked salmon (chinook salmon *Oncorhynchus tshawytscha*, coho salmon *Oncorhynchus kisutch*, and kokanee *Oncorhynchus nerka*), and 49,740 (3%) were Arctic grayling *Thymallus arcticus*. Also harvested were 22,857 lingcod *Ophiodon elongatus*, 19,366 northern pike *Esox lucius*, 16,291 cutthroat trout *Oncorhynchus clarki*, 13,094 lake trout *Salvelinus namaycush*, 9,858 burbot *Lota lota*, 4,223 whitefish *Coregonus* and *Prosopium*, 3,818 steelhead *Oncorhynchus mykiss*, 1,619 sheefish *Stenodus leucichthys*, and 762 brook trout *Salvelinus fontinalis*.

The 1993 total anadromous salmon harvest of 1,052,082 included 210,833 chinook salmon, 412,487 coho salmon, 283,661 sockeye salmon, 124,582 pink salmon *Oncorhynchus gorbuscha*, and 20,519 chum salmon *Oncorhynchus keta* (Appendix A14). The marine salmon harvest total of 408,354 included 82,064 chinook salmon, 195,361 coho salmon, 20,340 sockeye salmon, 98,419 pink salmon, and 12,170 chum salmon (Appendix A15). The freshwater total of 643,728 anadromous salmon included 128,769 chinook salmon, 217,126 coho salmon, 263,321 sockeye salmon, 26,163 pink salmon, and 8,349 chum salmon (Appendix A16). Regionally, 249,355 anadromous salmon were harvested in Southeast Alaska (Appendix A17), 786,570 in Southcentral (Appendix A18), and 16,157 in the Arctic-Yukon-Kuskokwim area (Appendix A19).

Except for razor clams, shell fisheries are not included in the 2,989,720 total fish harvest reported above. For the Kenai Peninsula, however, these fisheries were surveyed for dungeness crab *Cancer magister*, tanner crab *Chionoecetes bairdi*, shrimp *Pandalidae*, and hardshell clams. Harvest and participation for these species are reported in Appendix A89. Also not included in the total fish harvests are personal use fisheries. However, harvests and catches for the China Foot, Fox Creek, and Kenai River personal use dipnet fisheries are in Appendices A85 and A86; and harvests and catches for the Fish Creek personal use dipnet fisheries are in Appendices A73 and A74.

Catch

The catch of 6,307,062 fish in 1993 (Appendix A14) included 1,011,959 razor clams and 63,429 smelt. Of the remaining 5,231,674 fish caught, 732,004 (14%) were rainbow trout, 601,091 (11%) were coho salmon, 589,189 (11%) were Pacific halibut, 577,943 (11%) were sockeye salmon, 526,524 (10%) were Dolly Varden and Arctic char, 502,201 (10%) were chinook salmon, 489,539 (9%) were Arctic grayling, 361,619 (7%) were pink salmon, and 194,870 (4%) were rockfish. Also caught were 121,717 northern pike, 114,293 landlocked salmon (chinook, coho, and kokanee), 97,581 chum salmon, 75,067 cutthroat trout, 53,578 lake trout, 48,575 lingcod, 30,832 steelhead, 13,206 burbot, 12,506 whitefish, 6,666 sheefish, and 1,631 brook trout.

Harvest, catch, and participation for 1993 are tabulated by region, area, fishery, and species in Appendix A. Detailed tabulations for harvest and participation for 1977 through 1992 may be found in Mills (1979, 1980, 1981a, 1981b, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993).

DISCUSSION

The estimated number of anglers who sport fished in Alaska in 1993 decreased slightly, 0.5% from 1992 (Appendix A9). The number of resident anglers decreased 4%, but the number of nonresident anglers increased by 4%. Since 1983, the number of anglers fishing in Alaska has increased 38%, 3% per year. Resident angler participation since 1983 has increased 6%, 1% per year; nonresident participation has increased 121%, 8% per year.

Anglers-days fished in Alaska in 1993 was a record high, up 1% from 1992 (Appendix A13). Regionally, days fished increased 1% in Southeast, decreased 1% in Southcentral, and increased 22% in the Arctic-Yukon-Kuskokwim region (days fished was unusually low in 1992 in the Arctic-Yukon-Kuskokwim region). Since 1983, days fished statewide has increased 48%, 4% per year. Regional increases since 1983 were 47% for Southeast, 4% per year; 36% for Southcentral, 4% per year; and 11% for the Arctic-Yukon-Kuskokwim region, 1% per year.

The statewide harvest of anadromous salmon was the second highest on record, exceeded only by the 1989 harvest. It was up 1% from 1992 and was 26% above the 1983-1992 mean (Appendices A20 and A21). The chinook and coho salmon harvests were record highs. The chinook salmon harvest was 8% above the previous ten-year mean and was up 37%, nearly 57,000 fish, above 1992 (Appendix A23). Approximately 35,000 of the 57,000 increase in chinook salmon harvest was generated by Kenai Peninsula fisheries; approximately 20,000 of the 35,000 Kenai Peninsula increase was generated by the Kenai River. The coho salmon harvest was up 19% from 1992 and 49% above the previous ten-year mean (Appendix A25). Also a record high was halibut, up 18% from 1992 and 6% above the previous 10-year mean. In contrast, the statewide harvest of whitefish and smelt were the lowest on record.

Estimated statewide catches were up 3% from 5,993,865 in 1992 to 6,307,062 in 1993. Regionally, catches were up 7% in Southeast Alaska, 1% in the Southcentral Region, and 39% in the Arctic-Yukon-Kuskokwim Region. Major contributors to statewide increases were increases in chinook salmon, coho salmon, halibut, rainbow trout, Dolly Varden/Arctic char, and Arctic grayling.

Over the past seventeen years the statewide sport fish survey has proved effectual in economically meeting management needs for estimates of participation and harvest for Alaska's sport fisheries. The survey has been well received by the angling public. For the larger fisheries harvest results have been consistent with on-site creel surveys (Appendix A10, Mills and How 1992), and sport fish biologists report that statewide survey harvest estimates for areas not creel surveyed are generally in accordance with their own knowledge and observations.

Thus, in the interest of economic efficiency, the statewide survey has replaced onsite creel surveys in cases where creel surveys are not required for inseason management or ensuring compliance with regulatory and management policies, quotas, and guidelines. It is planned that in 1996 surveys similar to this year's will be undertaken.

ACKNOWLEDGEMENTS

I thank Boon Sigurdson and Allan Howe for questionnaire development; Carol Hughes for preparation of cover art and maps; Gail Helmsman for obtaining the sport license file, developing software to prepare the sample, generating mail labels, and updating bar code software; Gary Fidler for drawing the sample; Boon Sigurdson and Allan Howe for survey implementation and supervision; Ardyce Armstrong, Sean Bringham, Karl Cookson, and Paula Kettire for processing returned questionnaires; Donna Buchholz, Marilyn Coomb, and Kathryn Kuch for editing sport license records and coding and key entering of survey data; Cynthia Olms for updating data entry forms and editing programs and for developing and computer-based editing of survey response files; Gary Fidler for updating logic software, for generating site-specific estimates and distributions, and for supervising programming and editing activities; Cynthia Olms for generating summary estimates and for production and formatting of tables; Allan Howe for production of graphics; Boon Sigurdson for reviewing edited data and assembling auxiliary data; Gail Helmsman for generating confidence intervals; Cynthia Olms for preparation of the manuscript for publication; Allan Bringham for technical consultation and review; and Lynn Alexander for review of the manuscript for style and format and for coordinating its publication. I also thank the angling public for participating in the survey and for its funding (through payment of state license fees and through payment of excise taxes collected pursuant to the Federal Aid in Sport Fish Restoration Act).

LITERATURE CITED

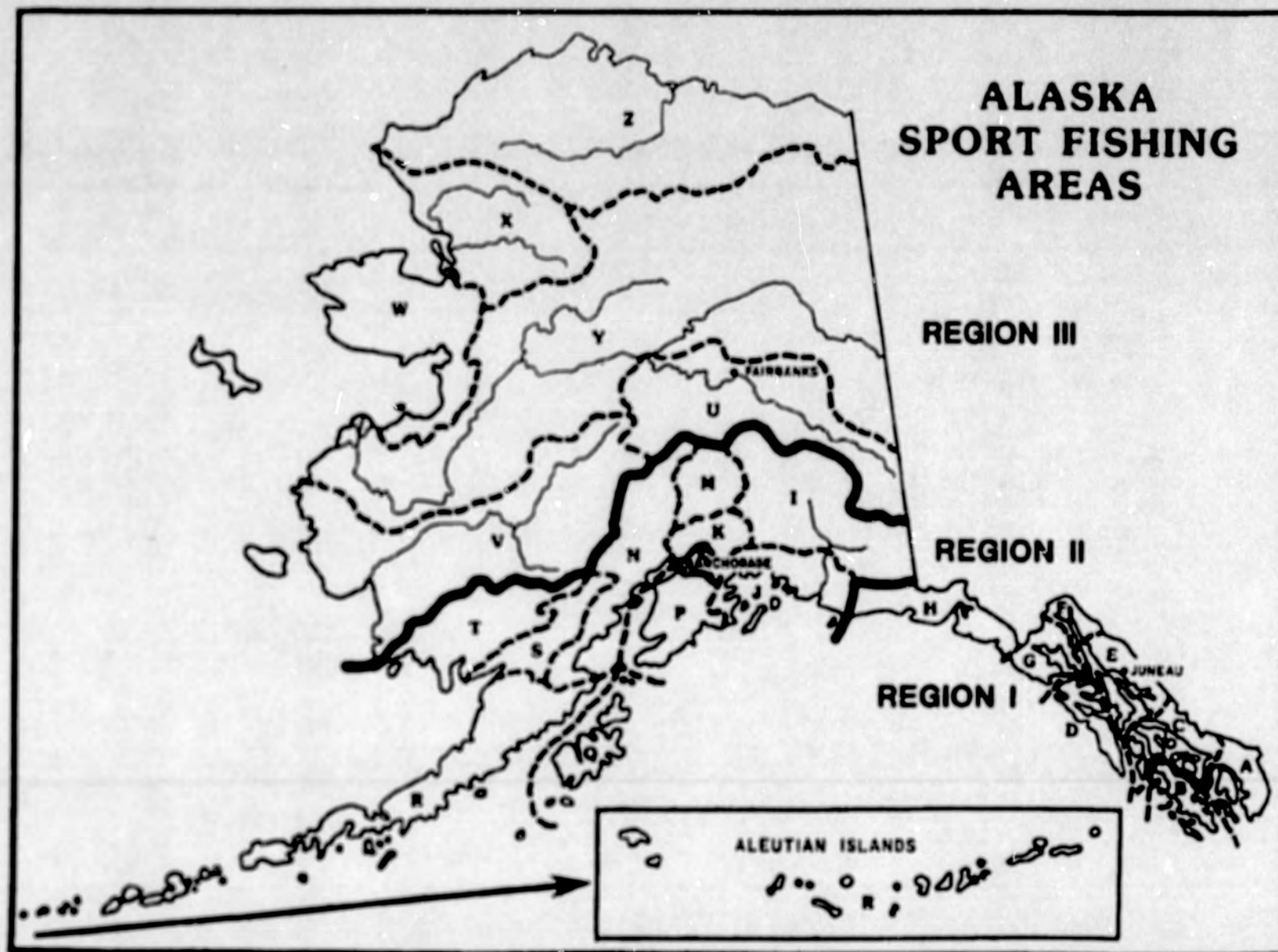
- Burgess, B. R. and B. Smith. 1981. Applied regression analysis, second edition. John Wiley and Sons, New York, New York.
- Effron, B., and B. J. Tibshirani. 1993. An introduction to the bootstrap. Chapman and Hall, New York.
- Wells, W. J. 1979. Alaska statewide sport fish harvest studies. Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1979-1979, Project F-9-11, 20 (SB-1-A), Juneau.
- _____. 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 (SB-1-A), Juneau.
- _____. 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 (SB-1-A), Juneau.

LITERATURE CITED (Continued)

- , 1981b. Alaska statewide sport fish harvest studies (1980). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1980-1981, Project F-9-13, 22 (SW-1-A), Juneau.
- , 1982. Alaska statewide sport fish harvest studies (1981). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1981-1982, Project F-9-14, 23 (SW-1-A), Juneau.
- , 1983. Alaska statewide sport fish harvest studies (1982). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1982-1983, Project F-9-15, 24 (SW-1-A), Juneau.
- , 1984. Alaska statewide sport fish harvest studies (1983). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1983-1984, Project F-9-16, 25 (SW-1-A), Juneau.
- , 1985. Alaska statewide sport fish harvest studies (1984). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1984-1985, Project F-9-17, 26 (SW-1-A), Juneau.
- , 1986. Alaska statewide sport fish harvest studies (1985). Alaska Department of Fish and Game. Federal Aid in Fish Restoration, Annual Performance Report, 1985-1986, Project F-10-1, 27 (RT-2), Juneau.
- , 1987. Alaska statewide sport fisheries harvest report (1986). Alaska Department of Fish and Game, Fishery Data Series No. 2, Anchorage.
- , 1988. Alaska statewide sport fisheries harvest report (1987). Alaska Department of Fish and Game, Fishery Data Series No. 52, Anchorage.
- , 1989. Alaska statewide sport fisheries harvest report (1988). Alaska Department of Fish and Game, Fishery Data Series No. 122, Anchorage.
- , 1990. Harvest and participation in Alaska sport fisheries during 1989. Alaska Department of Fish and Game, Fishery Data Series No. 90-66, Anchorage.
- , 1991. Harvest, catch, and participation in Alaska sport fisheries during 1990. Alaska Department of Fish and Game, Fishery Data Series No. 91-58, Anchorage.
- , 1992. Harvest, catch, and participation in Alaska sport fisheries during 1991. Alaska Department of Fish and Game, Fishery Data Series No. 92-68, Anchorage.
- , 1993. Harvest, catch, and participation in Alaska sport fisheries during 1992. Alaska Department of Fish and Game, Fishery Data Series No. 93-62, Anchorage.

Wills, M. J. and A. Howe. 1992. An evaluation of estimates of sport fish harvest from the Alaska statewide mail survey. Alaska Department of Fish and Game, Special Publication No. 92-2, Anchorage.

APPENDIX A
TABLES AND FIGURES



Appendix A1. Map of Alaska sport fishing regions and areas.

Appendix A2. List of Alaska sport fishing regions and areas.

Regions

- I Southeast Alaska
- II Southcentral Alaska
- III Arctic-Yukon-Kuskokwim

Areas

Southeast Alaska

- A Ketchikan
- B Prince of Wales Island
- C Kake, Petersburg, Wrangell, Stikine
- D Sitka
- E Juneau
- F Haines-Skagway
- G Glacier Bay
- H Yakutat

Southcentral Alaska

- I Glennallen
- J Prince William Sound
- K Knik Arm Drainage
- L Anchorage
- M East Susitna River Drainage
- N West Cook Inlet-West Susitna River Drainages
- P Kenai Peninsula
- Q Kodiak
- R Naknek River Drainage-Alaska Peninsula
- S Kvichak River Drainage
- T Nushagak

Arctic-Yukon-Kuskokwim

- U Tanana River Drainage
 - V Kuskokwim River Drainage
 - W Seward Peninsula-Norton Sound
 - X Northwest Alaska
 - Y Yukon River Drainage
 - Z North Slope Brooks Range
-

Appendix A3. List of common names, scientific names, and abbreviations.

Common Name	Scientific Name	Abbreviation
Chinook salmon	<i>Oncorhynchus tshawytscha</i>	KS
Small chinook salmon	<i>Oncorhynchus tshawytscha</i>	KI
Coho salmon	<i>Oncorhynchus kisutch</i>	SS
Landlocked salmon		LL
coho	<i>Oncorhynchus kisutch</i>	
chinook	<i>Oncorhynchus tshawytscha</i>	
Sockeye salmon	<i>Oncorhynchus nerka</i>	RS
Kokanee salmon	<i>Oncorhynchus nerka</i>	KO
Pink salmon	<i>Oncorhynchus gorbuscha</i>	PS
Chum salmon	<i>Oncorhynchus keta</i>	CS
Steelhead	<i>Oncorhynchus mykiss</i>	SH
Rainbow trout	<i>Oncorhynchus mykiss</i>	RT
Cutthroat trout	<i>Oncorhynchus clarki</i>	CT
Brook trout	<i>Salvelinus fontinalis</i>	BT
Lake trout	<i>Salvelinus namaycush</i>	LT
Dolly Varden	<i>Salvelinus malma</i>	DV
Arctic char	<i>Salvelinus alpinus</i>	AC
Arctic grayling	<i>Thymallus arcticus</i>	GR
Northern pike	<i>Esox lucius</i>	NP
Whitefish	<i>Coregonus</i> spp. and <i>Prosopium</i> spp.	WF
Burbot	<i>Lota lota</i>	BB

-continued-

Appendix A3. (Page 2 of 2).

Common Name	Scientific Name	Abbreviation
Inconnu (Sheefish)	<i>Stenodus leucichthys</i>	SF
Pacific halibut	<i>Hippoglossus stenolepis</i>	HA
Rockfish	<i>Sebastes</i> spp.	RF
Lingcod	<i>Ophiodon elongatus</i>	LC
Smelt	Osmeridae	SM
Capelin	<i>Mallotus villosus</i>	SM
King crab	<i>Paralithodes camtschatica</i>	KC
Dungeness crab	<i>Cancer magister</i>	DC
Tanner crab	<i>Chionoecetes bairdi</i>	TC
Shrimp	Pandalidae	SHR
Razor clam	<i>Siliqua patula</i>	RCL
Hardshell clams		HCL
Butter clam	<i>Saxidomus giganteus</i>	
Littleneck clam	<i>Protothaca staminea</i>	
Cockle	<i>Clinocardium nuttallii</i>	
Gaper clam	<i>Tresus capax</i>	
Eastern softshell clam	<i>Mya arenaria</i>	
Truncated mya	<i>Mya truncata</i>	
Alaska surf clam	<i>Spisula polynyma</i>	

Appendix A4. Response to the standard Alaska sport fish survey mailing, 1993.

	Mailing 1	Mailing 2	Mailing 3	Total
Date of Mailing	10/20/93	12/3/93	1/19/94	
Number Mailed	29,999	25,627	17,880	73,506
Number Returned Nondeliverable ^a	1,289	314	183	1,786
Number not Returned ^a	20,011	16,070	13,383	49,464
Responses				
Number ^a	8,699	3,745	2,567	15,011
Percent of 1st Mailing not Returned as Nondeliverable	30.3	13.0	8.9	52.3
Cumulative Responses				
Number	8,699	12,444	15,011	
Percent of 1st Mailing not Returned as Nondeliverable	30.3	43.3	52.3	

^a Does not include returns after April 1, 1994.

Appendix A5. Response to the supplementary Alaska sport fish survey mailing, 1993.

	Mailing 1	Mailing 2	Mailing 3	Total
Date of Mailing	10/20/93	12/3/93	1/19/94	
Number Mailed	15,000	13,195	9,879	38,074
Number Returned Nondeliverable ^a	709	179	104	992
Number not Returned ^a	10,702	8,748	7,493	26,943
Responses				
Number ^a	3,589	1,781	1,159	6,529
Percent of 1st Mailing not Returned as Nondeliverable	25.1	12.5	8.1	45.7
Cumulative Responses				
Number	3,589	5,370	6,529	
Percent of 1st Mailing not Returned as Nondeliverable	25.1	37.6	45.7	

^a Does not include returns after April 1, 1994.

Appendix A6. Number and percent of Alaska sport fishing licenses by residency, 1961-1993.

Year	Resident		Nonresident		Total
	Number	Percent	Number	Percent	
1961	41,120	74.0	14,444	26.0	55,564
1962	42,015	74.0	14,783	26.0	56,798
1963	46,160	73.1	16,977	26.9	63,137
1964	45,355	74.5	15,527	25.5	60,882
1965	48,421	71.3	19,483	28.7	67,904
1966	50,287	70.3	21,256	29.7	71,543
1967	50,357	65.4	26,594	34.6	76,951
1968	58,344	64.4	32,221	35.6	90,565
1969	62,546	63.0	36,777	37.0	99,323
1970	71,711	63.2	41,683	36.8	113,394
1971	75,952	65.8	39,543	34.2	115,495
1972	82,088	66.0	42,347	34.0	124,435
1973	89,823	70.2	38,179	29.8	128,002
1974	95,485	70.8	39,415	29.2	134,900
1975	101,900	69.0	45,821	31.0	147,721
1976	118,679	70.7	49,194	29.3	167,873
1977	121,913	68.6	55,821	31.4	177,734
1978	129,750	66.5	65,481	33.5	195,231
1979	130,458	64.4	72,090	35.6	202,548
1980	132,103	63.9	74,699	36.1	206,802
1981	138,784	61.4	87,407	38.6	226,191
1982	156,324	59.8	105,014	40.2	261,338
1983	169,761	62.4	102,481	37.6	272,242
1984	177,949	60.7	115,127	39.3	293,076
1985	176,725	58.2	127,077	41.8	303,802
1986	180,936	57.6	133,051	42.4	313,987
1987	181,721	56.3	140,773	43.7	322,494
1988	177,383	54.0	151,308	46.0	328,691
1989	174,942	51.8	163,098	48.2	338,040
1990	180,214	49.6	182,779	50.4	362,993
1991	184,813	50.5	181,182	49.5	365,995
1992	182,245	46.6	208,516	53.4	390,761
1993	181,843	45.9	205,720	53.1	387,563

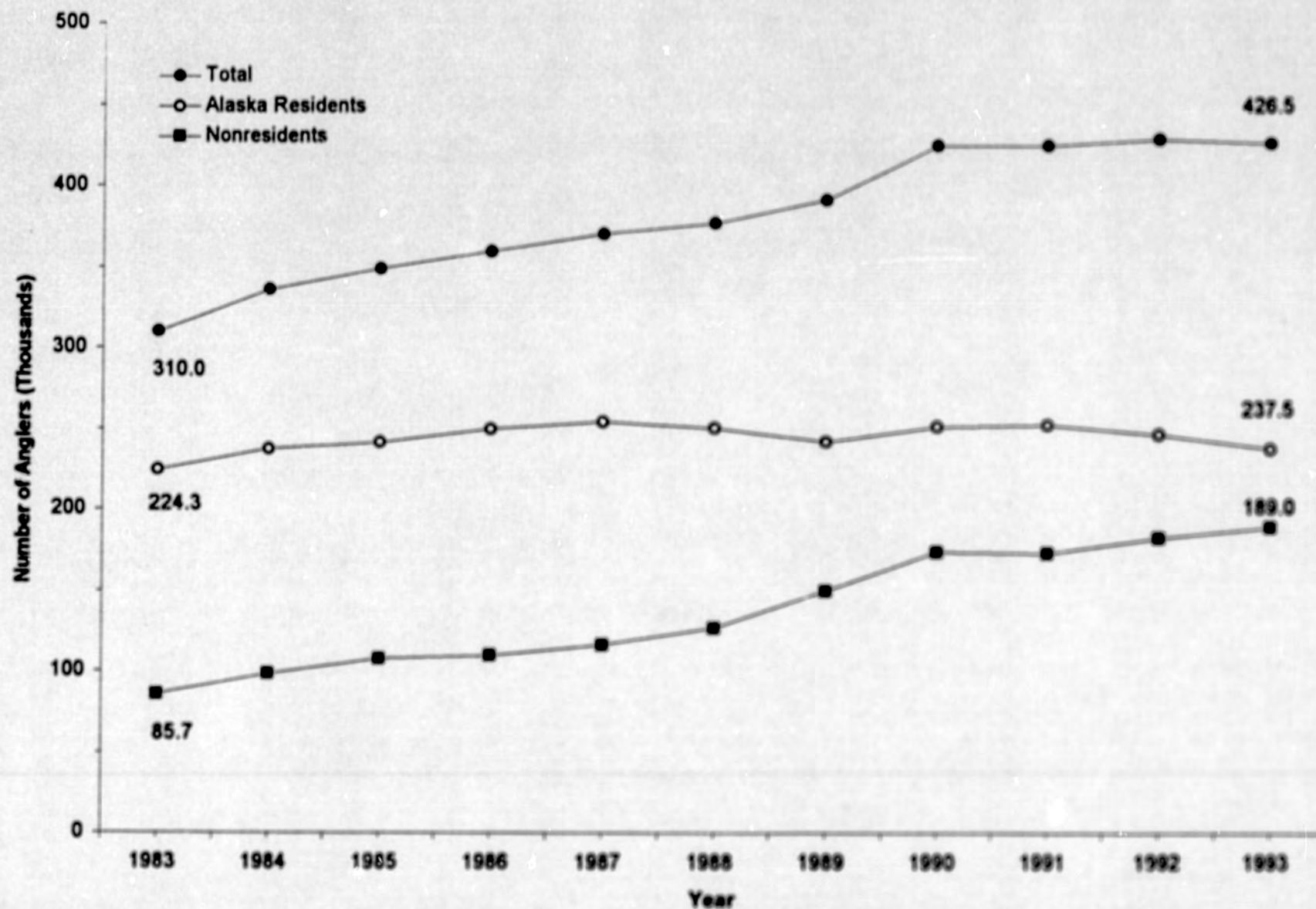
Appendix A7. Statewide and regional participation in Alaska sport fishing by residency, 1991-1993.

Region	1991					1992					1993				
	Residents of Alaska		Nonresidents of Alaska		Total	Residents of Alaska		Nonresidents of Alaska		Total	Residents of Alaska		Nonresidents of Alaska		Total
	Number	Percent	Number	Percent		Number	Percent	Number	Percent		Number	Percent			
Anglers															
SE ^a	37,018	39.8	55,896	60.2	92,914	36,835	37.8	60,616	62.2	97,451	35,320	36.6	61,152	63.4	96,472
SC ^b	199,225	62.5	119,639	37.5	318,864	198,034	62.0	121,316	38.0	319,350	194,313	59.5	132,405	40.5	326,718
AYK ^c	38,237	82.4	8,189	17.6	46,426	34,328	80.6	8,264	19.4	42,592	33,802	76.8	10,202	23.2	44,004
TOTAL	252,116	59.3	172,909	40.7	425,025	246,108	57.4	182,660	42.6	428,768	237,452	55.7	189,062	44.3	426,514
Days Fished															
SE ^a	251,954	55.5	202,397	44.5	454,351	247,014	52.7	221,578	47.3	468,592	258,612	54.9	212,591	45.1	471,203
SC ^b	1,270,319	71.3	511,736	28.7	1,782,055	1,364,454	72.2	525,476	27.8	1,889,930	1,301,567	69.7	565,666	30.3	1,867,233
AYK ^c	190,772	86.7	29,150	13.3	219,922	156,924	86.3	24,928	13.7	181,852	187,973	85.1	32,999	14.9	220,972
TOTAL	1,713,045	69.7	743,283	30.3	2,456,328	1,768,392	69.6	771,982	30.4	2,540,374	1,748,152	68.3	811,256	31.7	2,559,408

^a Southeast

^b Southcentral

^c Arctic-Yukon-Kuskokwim

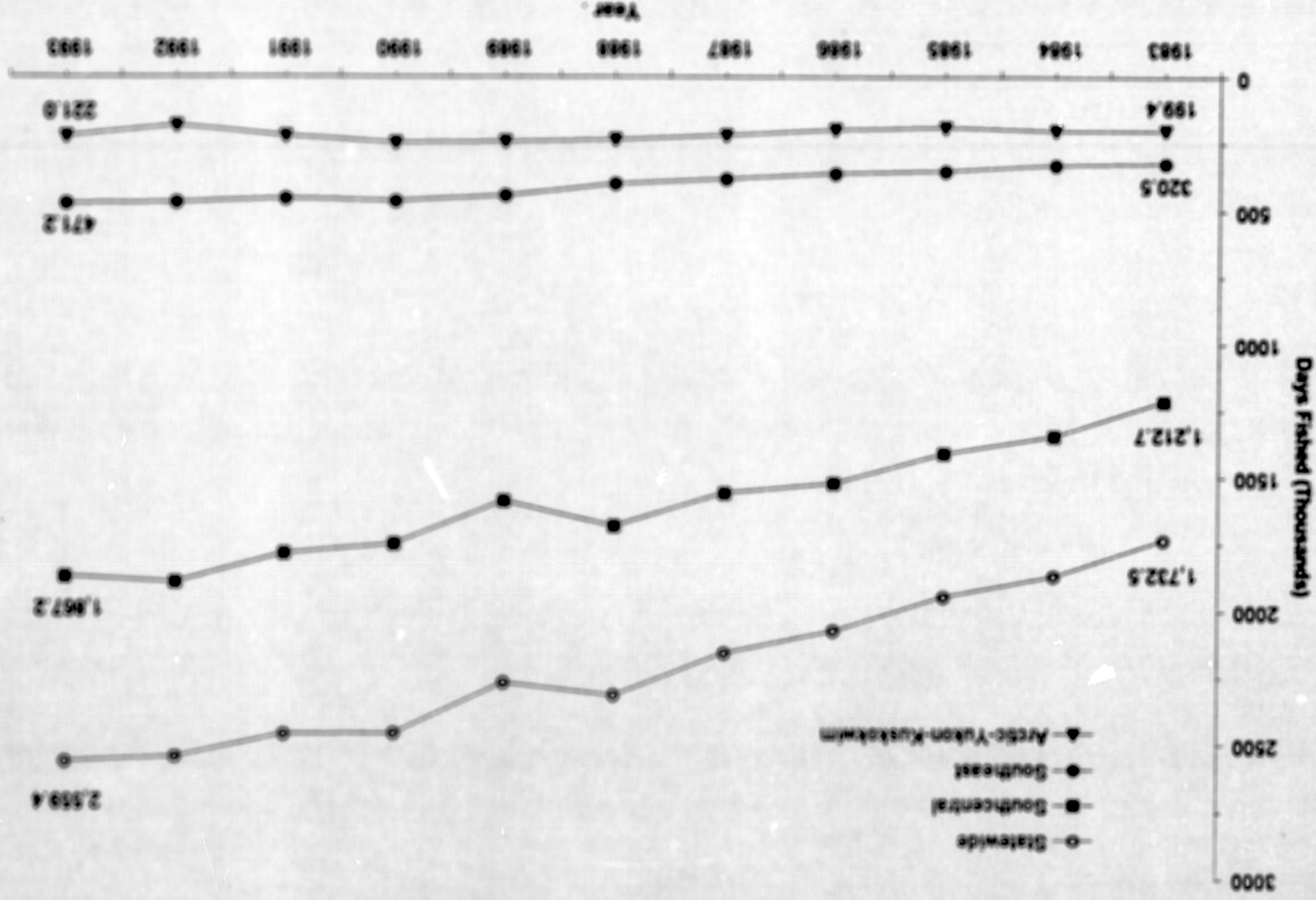


Appendix A8. Anglers who sport fished in Alaska by area of residence, 1983-1993.

Appendix A9. Number of anglers who sport fished in Alaska by area of residence, 1983-1993.

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Alaska											
Southeast	31,671	34,252	35,287	36,426	37,237	38,798	37,433	38,831	39,388	39,837	39,532
Upper Copper- Sustine River	3,600	3,323	3,470	3,539	3,633	3,793	3,520	3,528	3,480	3,588	3,808
Prince William Sound	3,344	3,622	4,243	4,313	4,358	4,348	3,731	4,237	3,806	3,844	4,377
Ketchikan Peninsula	23,769	21,423	21,332	22,038	24,023	24,340	24,311	24,304	24,888	24,432	24,448
West Cook Inlet- Lower Sustine River	115,324	123,454	124,333	123,713	123,478	124,433	124,237	124,349	123,388	127,324	122,808
Kodiak	6,324	6,893	7,338	7,797	8,342	7,893	7,330	8,711	7,762	8,827	8,834
British Bay	2,823	2,328	3,113	3,286	3,823	3,330	3,823	4,339	3,733	3,331	4,367
Admiral-Palom- Kodiak	41,872	41,474	34,838	40,433	38,883	38,438	38,732	43,347	41,738	42,334	38,343
Total Kachikwa	224,259	237,343	242,333	248,628	254,333	253,388	243,831	253,373	252,338	248,338	237,428
Other Than Alaska											
Other United States	77,432	88,794	88,382	100,323	103,388	118,373	118,373	188,383	158,388	188,743	173,788
Foreign	8,237	8,443	8,373	8,834	11,733	8,343	11,334	11,338	14,737	11,838	11,888
Total Nonresidents	85,729	97,237	96,755	109,157	115,121	126,716	129,707	199,721	173,126	199,681	185,676
Percent	27.7	28.3	30.8	30.3	30.4	30.8	30.3	40.8	40.7	42.8	44.3
TOTAL	310,008	335,608	348,787	358,785	370,509	379,101	373,101	424,101	423,516	428,798	423,524

Appendix A12. Angler-days fished in Alaska, statewide and by region, 1983-1993.



Appendix A13. Number of angler-days fished in Alaska and percentage by region and area, 1983-1993.

Area Fished	1983		1984		1985		1986		1987		1988		1989		1990		1991		1992		1993	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Southeast																						
Ketchikan	68,161	8.9	72,112	9.9	81,303	6.2	82,934	6.0	89,637	9.9	98,166	4.2	99,637	9.9	99,166	4.2	99,166	4.2	99,166	4.2	99,166	4.2
Prince of Wales Island	28,408	3.7	26,406	3.5	29,209	2.2	25,012	1.8	30,663	3.4	31,371	1.3	30,663	3.4	31,371	1.3	30,663	3.4	31,371	1.3	30,663	3.4
Kake, Petersburg																						
Wrangell, Sitka	27,724	3.6	34,639	4.6	29,469	2.2	30,512	2.2	37,181	4.2	38,016	1.5	37,181	4.2	38,016	1.5	37,181	4.2	38,016	1.5	37,181	4.2
Eldora	68,158	2.3	63,663	2.1	38,413	2.9	38,748	2.8	45,583	2.1	48,080	2.1	45,583	2.1	48,080	2.1	45,583	2.1	48,080	2.1	45,583	2.1
Juneau	128,179	6.2	118,112	5.8	122,793	6.3	121,015	5.8	118,736	5.3	118,880	4.7	118,736	5.3	118,880	4.7	118,736	5.3	118,880	4.7	118,736	5.3
Haines-Elkway	10,183	1.7	32,922	1.8	43,412	2.1	43,870	2.1	48,011	2.1	48,011	2.1	48,011	2.1	48,011	2.1	48,011	2.1	48,011	2.1	48,011	2.1
Glacier Bay	3,480	0.3	3,383	0.2	3,401	0.2	3,401	0.2	7,178	0.3	8,278	0.4	7,178	0.3	8,278	0.4	7,178	0.3	8,278	0.4	7,178	0.3
Tukwila	8,486	0.4	11,125	0.5	11,488	0.6	11,125	0.5	16,476	0.7	18,027	0.8	16,476	0.7	18,027	0.8	16,476	0.7	18,027	0.8	16,476	0.7
Total	120,447	16.5	129,119	17.5	143,747	18.0	137,487	17.3	178,727	17.6	187,783	17.2	178,727	17.6	187,783	17.2	178,727	17.6	187,783	17.2	178,727	17.6
Southeast																						
Chignik	21,112	3.8	21,112	2.8	43,717	2.3	21,112	2.3	22,126	2.4	43,487	2.0	22,126	2.4	43,487	2.0	22,126	2.4	43,487	2.0	22,126	2.4
Petersen Wildlife	67,414	2.7	67,414	3.1	72,412	2.7	64,248	3.1	81,221	3.6	84,871	3.7	81,221	3.6	84,871	3.7	81,221	3.6	84,871	3.7	81,221	3.6
Kuk-Auk	118,109	6.0	118,109	7.0	122,628	6.3	131,406	6.6	140,187	6.5	143,123	7.0	140,187	6.5	143,123	7.0	140,187	6.5	143,123	7.0	140,187	6.5
Anchorage	76,852	6.3	118,872	6.4	88,740	5.0	118,112	5.0	123,145	5.3	118,823	5.0	123,145	5.3	118,823	5.0	123,145	5.3	118,823	5.0	123,145	5.3
East Sitka River Drainage	67,471	3.9	81,718	6.6	67,746	3.3	82,248	6.3	77,817	3.6	117,477	4.9	77,817	3.6	117,477	4.9	77,817	3.6	117,477	4.9	77,817	3.6
West Cook Inlet																						
West Sitka River Drainage	76,852	6.3	71,378	6.0	82,837	6.9	118,748	5.1	118,112	4.8	111,163	4.8	118,112	4.8	111,163	4.8	118,112	4.8	111,163	4.8	118,112	4.8
Kuk-Auk	118,109	6.0	118,109	7.0	122,628	6.3	131,406	6.6	140,187	6.5	143,123	7.0	140,187	6.5	143,123	7.0	140,187	6.5	143,123	7.0	140,187	6.5
Kuk-Auk	68,436	5.0	62,810	6.6	84,841	6.4	77,188	3.7	75,410	3.3	63,123	3.0	75,410	3.3	63,123	3.0	75,410	3.3	63,123	3.0	75,410	3.3
Kuk-Auk River Drainage																						
Alaska Peninsula	118,413	2.2	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3
Kuk-Auk River Drainage	118,413	2.3	118,413	2.1	118,413	2.8	118,413	2.3	118,413	2.3	118,413	2.3	118,413	2.3	11							

Appendix A13. (Page 2 of 2).

Area Fished	1989		1990		1991		1992		1993	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Southwest										
Ketchikan	92,647	4.1	91,127	3.7	98,284	4.0	84,482	3.3	77,145	3.0
Prince of Wales Island	50,659	2.2	50,214	2.0	47,237	1.9	44,470	1.8	62,544	2.4
Kake, Petersburg										
Wongah, Sitka	53,955	2.4	59,965	2.4	48,013	2.0	56,106	2.2	47,382	1.9
Sitka	59,230	2.6	61,956	2.5	68,193	2.8	76,281	3.1	74,944	2.9
Juneau	115,360	5.1	122,045	5.0	113,913	4.6	149,382	5.9	132,896	5.2
Heinen-Shagway	48,618	2.1	56,746	2.3	39,624	1.6	25,836	1.0	41,655	1.6
Glacier Bay	8,895	0.4	7,857	0.3	21,965	0.9	15,279	0.6	15,054	0.6
Yakutat	12,142	0.5	12,685	0.5	17,062	0.7	14,486	0.6	18,583	0.7
Total	449,906	19.5	462,545	18.9	454,351	18.5	468,592	18.4	471,203	18.4
Southcentral										
Siemiatycki	52,262	2.3	50,781	2.1	64,207	2.6	72,052	2.8	77,870	3.0
Prince William Sound	95,295	4.2	105,739	4.3	113,115	4.6	113,443	4.5	104,601	4.1
Kodiak Arm Drainage	146,912	6.5	142,884	5.8	146,605	6.0	141,825	5.6	118,214	4.6
Anchorage	137,613	6.0	125,849	5.1	117,780	4.8	141,571	5.6	143,492	5.6
East Sitka River Drainage	56,664	2.5	101,917	4.2	113,178	4.6	149,484	5.9	128,382	5.0
West Cook Inlet										
West Sukhina River Drainage	115,034	5.1	110,927	4.5	121,505	4.9	116,360	4.6	129,165	5.0
Kodiak Peninsula	739,409	32.3	896,360	36.5	869,715	35.4	945,272	37.2	946,252	37.0
Kodiak	86,542	3.8	81,603	3.3	96,481	3.9	84,777	3.3	93,320	3.6
Kukuk River Drainage	45,114	2.0	67,192	2.7	69,010	2.8	61,415	2.4	51,132	2.0
Alaska Peninsula	17,854	0.8	30,857	1.3	28,553	1.2	34,876	1.4	41,097	1.6
Kotikuk River Drainage	20,828	0.9	30,991	1.3	41,906	1.7	28,855	1.1	33,108	1.3
Kotikuk	1,387,547	60.9	1,745,110	71.1	1,782,055	72.5	1,889,920	74.4	1,867,223	73.0
Total	183,715	8.2	184,887	7.5	155,662	6.3	120,848	4.8	160,117	6.3
Arctic-Yukon-Kuskokwim	18,457	0.7	15,816	0.6	13,655	0.5	14,404	0.6	14,505	0.6
Tanana River Drainage										
Kuskokwim River Drainage										
Seward Peninsula										
North Sound	17,682	0.8	21,799	0.9	23,622	1.0	22,684	0.9	18,930	0.7
Northwest Alaska	4,932	0.2	3,782	0.2	9,543	0.4	6,145	0.2	7,809	0.3
Yukon River Drainage	10,712	0.5	15,339	0.6	10,749	0.4	12,631	0.5	14,011	0.5
North Slope Brooks Range	4,116	0.2	3,764	0.2	7,291	0.3	4,940	0.2	5,600	0.2
Total	239,626	10.6	245,629	10.0	219,922	9.0	181,652	7.2	220,972	8.6
Alaska Total	2,284,879	100.0	2,453,284	100.0	2,456,326	100.0	2,542,374	100.0	2,559,408	100.0

Appendix A14. Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.

Species	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
SALMON SPECIES:												
Chinook	83,112	85,010	90,718	105,482	116,402	134,452	122,737	123,908	150,420	153,919	210,833	502,201
Sea-run Coho	149,270	238,536	200,773	255,887	235,435	281,450	338,195	325,936	389,569	345,513	412,487	601,091
Landlocked Coho/Chinook	69,038	49,937	60,795	43,562	46,754	57,679	46,697	37,831	51,799	46,843	54,182	107,833
Sockeye	178,761	124,443	172,630	186,448	478,243	291,067	436,871	239,118	327,047	372,752	283,661	577,943
Kokanee	1,972	925	3,762	2,620	2,966	2,461	2,727	2,071	6,276	2,478	4,203	6,460
Pink	104,365	153,841	138,297	145,960	119,070	156,759	164,778	205,602	151,316	149,372	124,582	361,619
Chum	19,011	24,016	16,539	26,725	20,787	44,029	34,647	14,525	18,209	17,299	20,519	97,581
OTHER SPECIES:												
Steelhead	5,364	8,539	4,723	5,850	5,914	6,288	6,387	5,645	5,109	3,149	3,818	30,832
Rainbow Trout	168,677	170,117	181,991	152,855	138,698	241,831	209,861	191,809	205,642	139,973	136,681	732,004
Cutthroat Trout	20,429	19,536	21,394	16,230	15,605	16,936	20,372	16,183	10,088	13,972	16,291	75,067
Brook Trout	1,606	636	1,058	526	298	1,273	887	450	477	1,026	762	1,631
Lake Trout	20,304	16,925	18,473	21,463	15,209	17,193	17,070	12,602	13,772	12,525	13,094	53,578
Dolly Varden/ Arctic Char	221,977	169,777	166,680	165,165	129,495	150,502	136,127	132,553	142,594	97,071	100,428	526,524
Arctic Grayling	181,006	147,348	139,171	117,637	110,714	116,379	105,469	64,814	82,831	45,073	49,740	489,539
Northern Pike	21,476	18,641	17,943	21,890	19,079	23,440	21,659	15,985	29,611	18,616	19,366	121,717
Whitefish	16,872	16,719	30,337	39,718	32,602	20,312	24,337	15,595	6,828	6,738	4,223	12,506
Burbot	14,465	19,164	27,230	18,849	13,543	9,478	9,268	10,577	4,882	7,245	9,858	13,206
Sheefish	3,323	3,947	2,520	3,721	2,597	3,221	2,306	750	2,256	2,933	1,619	6,666
Smelt	360,856	408,323	334,775	182,620	264,696	210,145	207,826	194,068	111,834	148,540	61,495	63,429
Halibut	117,042	124,970	127,634	160,885	145,829	225,106	229,016	247,202	266,523	264,943	313,147	589,189
Rockfish	82,796	80,724	67,610	101,258	73,525	128,121	86,776	62,572	67,263	86,523	82,625	194,870
Lingcod									23,049	28,894	22,857	48,575
Razor Clams	1,186,751	1,197,475	1,206,660	1,299,248	1,125,589	1,261,819	917,963	1,037,941	1,207,520	1,237,140	1,011,959	1,011,959
Other Fish	59,807	38,417	64,331	88,834	94,088	83,365	71,791	75,564	36,598	31,511	31,290	81,042
Total	3,086,280	3,115,966	3,096,044	3,163,433	3,207,138	3,483,306	3,213,867	3,033,301	3,311,513	3,234,048	2,989,720	6,307,062

Appendix A15. Alaska saltwater sport fish harvest by species, 1983-1993, and catch by species, 1993.

Species	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
SALMON SPECIES:												
Chinook	29,594	29,773	32,859	28,942	33,510	44,647	44,366	63,997	73,662	62,290	82,064	160,777
Sea-run Coho	72,651	76,786	80,928	88,309	96,338	77,498	129,884	165,104	176,056	146,620	195,361	240,243
Landlocked Coho/Chinook	0	0	0	0	0	0	0	0	0	0	0	0
Sockeye	19,409	11,787	10,263	6,711	9,507	11,475	18,131	11,216	12,460	17,047	20,340	29,983
Kokanee	0	0	0	0	0	0	0	0	0	0	0	0
Pink	76,066	75,214	109,100	71,942	89,142	88,440	124,537	126,946	119,591	94,213	98,419	217,894
Chum	6,158	8,981	6,543	9,015	7,945	19,403	13,134	6,287	7,378	7,759	12,170	31,280
OTHER SPECIES:												
Steelhead	191	439	731	914	1,031	2,006	2,125	1,420	1,058	1,083	923	2,459
Rainbow Trout	0	0	122	0	0	0	0	0	0	0	0	0
Cutthroat Trout	2,062	2,726	1,317	1,993	2,122	1,962	1,897	1,128	1,410	2,259	2,662	7,021
Brook Trout	0	0	0	0	0	0	0	0	0	0	0	0
Lake Trout	0	0	0	0	0	0	0	0	0	0	0	0
Dolly Varden/ Arctic Char	40,529	31,674	28,103	32,654	25,102	39,948	32,273	32,929	30,481	19,896	19,618	60,063
Arctic Grayling	0	0	0	472	0	55	116	0	0	0	19	467
Northern Pike	0	0	0	0	0	0	0	0	0	0	0	0
Whitefish	0	0	0	0	61	36	408	17	0	18	9	9
Burbot	0	0	0	0	0	0	0	0	0	0	0	0
Sheefish	0	1,012	315	168	813	0	568	0	0	779	398	879
Smelt	160,985	128,835	43,190	34,191	89,974	42,265	39,424	16,561	10,444	22,435	9,381	10,501
Halibut	117,042	124,970	127,634	160,885	145,829	225,106	229,016	247,202	266,523	264,943	313,147	589,189
Rockfish	82,796	80,724	67,610	101,258	73,525	128,121	86,776	62,572	67,263	86,523	82,625	194,870
Lingcod									23,049	28,894	22,857	48,575
Razor Clams	1,186,751	1,197,475	1,206,660	1,299,248	1,125,589	1,261,819	917,963	1,037,941	1,207,520	1,237,140	1,011,959	1,011,959
Other Fish	49,115	34,944	63,117	81,351	90,749	82,591	71,086	74,378	32,077	28,531	30,117	77,641
Total	1,843,349	1,805,340	1,778,492	1,918,053	1,791,237	2,025,372	1,711,704	1,847,698	2,028,972	2,020,430	1,902,069	2,683,810

Appendix A16. Alaska freshwater sport fish harvest by species, 1983-1993, and catch by species, 1993.

Species	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
SALMON SPECIES:												
Chinook	53,518	55,237	57,859	76,540	82,892	89,805	78,371	59,911	76,758	91,629	128,769	341,424
Sea-run Coho	76,619	161,750	119,845	167,578	139,097	203,952	208,311	160,832	213,513	198,893	217,126	360,848
Landlocked Coho/Chinook	69,038	49,937	60,795	43,562	46,754	57,679	46,697	37,831	51,799	46,843	54,182	107,833
Sockeye	157,352	112,656	162,367	179,737	468,736	279,592	418,740	227,902	314,587	355,705	263,321	547,960
Kokanee	1,972	925	3,762	2,620	2,966	2,461	2,727	2,071	6,276	2,478	4,203	6,460
Pink	28,299	78,627	29,197	74,018	29,928	68,319	40,241	78,656	31,725	55,159	26,163	143,725
Chum	12,853	15,035	9,996	17,710	12,842	24,626	21,513	8,238	10,831	9,540	8,349	66,301
OTHER SPECIES:												
Steelhead	5,173	6,100	3,992	4,936	4,883	4,282	4,262	4,225	4,051	2,066	2,895	28,373
Rainbow Trout	168,677	170,117	181,869	152,855	138,698	241,831	209,961	191,809	205,642	139,973	136,681	732,004
Cutthroat Trout	18,367	16,810	20,077	14,237	13,483	14,974	18,475	15,055	8,678	11,713	13,629	68,046
Brook Trout	1,606	636	1,058	526	298	1,273	887	450	477	1,026	762	1,631
Lake Trout	20,304	16,925	18,473	21,463	15,209	17,193	17,070	12,602	13,772	12,525	13,094	53,578
Dolly Varden/ Arctic Char	181,448	138,103	138,577	132,511	104,393	110,554	103,854	99,624	112,113	77,175	80,810	466,461
Arctic Grayling	181,006	147,348	139,171	117,165	110,714	116,324	105,353	64,814	82,831	45,073	49,721	489,072
Northern Pike	21,476	18,641	17,943	21,890	19,079	23,440	21,659	15,985	29,611	18,616	19,366	121,717
Whitefish	16,872	16,719	30,337	39,718	32,541	20,276	23,929	15,578	6,828	6,720	4,214	12,497
Burbot	14,465	19,164	27,230	18,849	13,543	9,478	9,268	10,577	4,882	7,245	9,858	13,206
Sheefish	3,323	2,935	2,205	3,553	1,784	3,221	1,738	750	2,256	2,154	1,221	5,787
Smelt	199,871	279,488	291,585	148,429	174,722	167,880	168,402	177,507	101,390	126,105	52,114	52,928
Halibut	0	0	0	0	0	0	0	0	0	0	0	0
Rockfish	0	0	0	0	0	0	0	0	0	0	0	0
Lingcod	0	0	0	0	0	0	0	0	0	0	0	0
Razor Clams	0	0	0	0	0	0	0	0	0	0	0	0
Other Fish	10,692	3,473	1,214	7,483	3,339	774	705	1,186	4,521	2,980	1,173	3,401
Total	1,242,931	1,310,626	1,317,552	1,245,380	1,415,901	1,457,934	1,502,163	1,185,603	1,282,541	1,213,618	1,087,651	3,623,252

Appendix A17. Southeast Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.

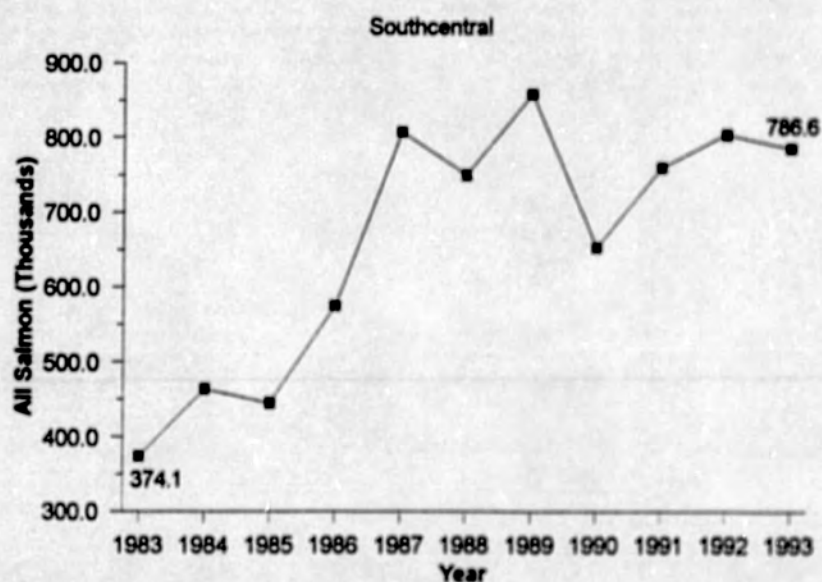
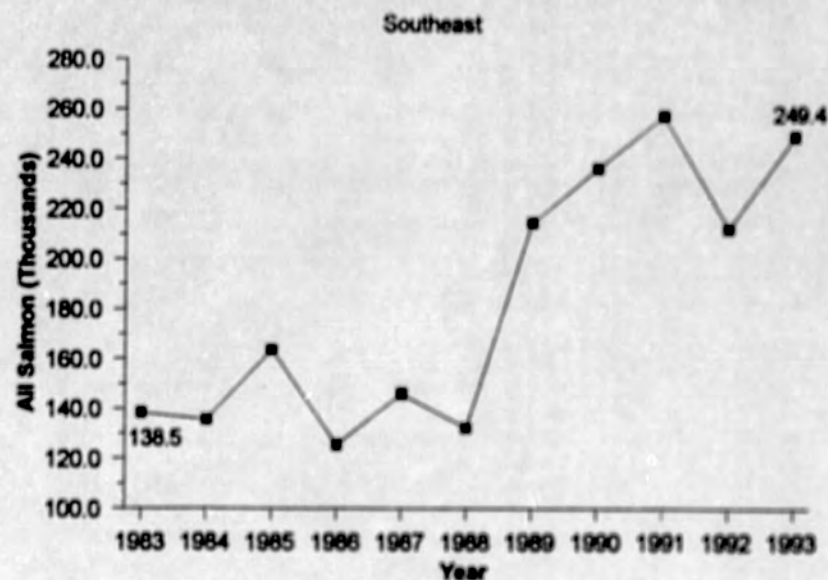
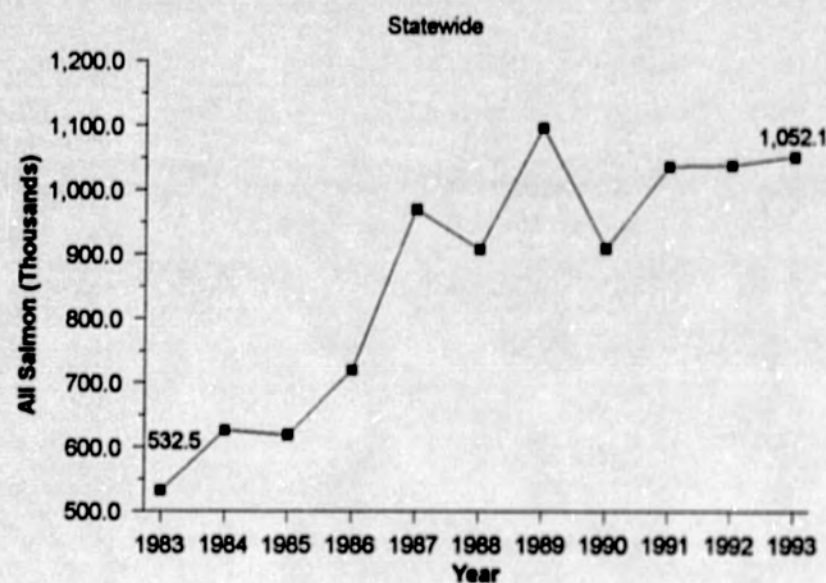
Species	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
SALMON SPECIES:												
Chinook	22,321	22,050	24,858	22,551	24,324	26,160	31,071	51,218	60,492	42,892	49,246	112,526
Sea-run Coho	55,403	59,812	59,910	58,322	50,284	43,688	90,789	105,212	123,946	99,939	121,874	165,113
Landlocked Coho/Chinook	1,301	568	69	56	0	728	528	413	1,222	1,536	1,454	2,958
Sockeye	5,701	4,695	4,250	6,300	9,374	7,711	13,114	9,848	9,715	9,318	17,419	32,080
Kokanee	73	139	433	257	385	474	520	99	362	769	206	1,494
Pink	51,815	44,197	69,253	33,483	57,060	45,023	70,822	65,208	57,859	54,101	51,436	120,415
Chum	3,270	4,936	5,608	5,032	5,207	9,913	8,932	4,962	5,593	6,041	9,380	25,138
OTHER SPECIES:												
Steelhead	3,469	4,160	3,088	4,722	4,677	4,309	5,409	4,274	4,632	2,439	1,249	12,942
Rainbow Trout	4,672	5,991	5,584	6,244	4,885	5,927	7,085	4,204	5,352	4,292	4,190	21,540
Cutthroat Trout	18,605	16,994	20,479	14,610	14,247	16,317	18,861	15,660	9,672	12,957	15,351	70,426
Brook Trout	1,606	636	1,058	526	298	1,273	887	450	477	1,026	762	1,631
Lake Trout	0	0	0	0	0	0	0	0	0	0	0	0
Dolly Varden/ Arctic Char	49,752	46,066	60,675	61,139	46,721	59,371	51,636	48,300	45,954	26,238	26,893	100,522
Arctic Grayling	947	381	225	447	742	527	214	368	81	512	95	661
Northern Pike	0	0	0	0	18	18	42	0	136	0	0	0
Whitefish	31	21	140	34	0	91	61	16	60	18	0	9
Burbot	0	0	0	0	0	0	0	0	0	0	0	0
Sheefish	0	0	0	0	0	0	0	0	0	0	0	0
Smelt	62,708	37,670	11,410	8,952	60,412	6,869	4,564	3,678	6,202	36,940	2,374	2,486
Halibut	41,995	46,925	46,114	45,028	44,347	56,580	74,304	66,490	74,038	71,861	87,779	138,414
Rockfish	50,268	36,899	34,039	41,568	42,261	56,839	39,504	25,959	26,828	31,213	32,030	98,635
Lingcod									9,758	13,193	14,969	22,843
Razor Clams	8,791	2,543	11,830	8,422	2,149	3,284	5,104	4,428	618	2,445	1,001	1,001
Other Fish	19,590	19,015	26,076	19,610	53,650	32,800	17,579	20,167	14,204	8,892	13,237	22,594
Total	402,318	353,698	385,099	337,303	421,041	377,902	441,026	430,954	457,201	426,622	450,945	953,428

Appendix A18. Southcentral Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.

	Harvest											Catch
Species	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
SALMON SPECIES:												
Chinook	57,094	61,141	63,173	80,071	89,885	104,474	88,253	70,885	87,965	109,338	157,623	371,027
Sea-run Coho	87,935	166,688	137,671	188,872	176,710	225,812	237,155	214,114	254,961	237,204	283,868	416,490
Landlocked Coho/Chinook	33,482	20,124	19,684	19,445	20,130	24,609	27,555	23,475	28,452	31,288	36,994	73,858
Sockeye	170,799	119,098	168,211	179,709	467,505	281,828	423,301	228,452	316,701	363,056	265,517	542,101
Kokanee	1,899	786	3,329	2,363	2,581	1,987	2,207	1,972	5,729	1,525	3,997	4,966
Pink	47,264	100,932	67,838	109,073	60,688	107,877	90,191	132,400	91,592	86,837	70,869	233,645
Chum	11,043	15,806	7,895	17,357	12,812	30,424	19,833	7,417	9,458	8,265	8,693	55,141
OTHER SPECIES:												
Steelhead	1,895	2,379	1,635	1,128	1,237	1,979	978	1,371	477	710	2,569	17,890
Rainbow Trout	141,705	128,649	142,316	114,837	101,397	155,960	127,444	122,987	127,492	97,730	82,312	553,119
Cutthroat Trout	1,824	2,542	915	1,620	1,358	619	1,511	523	416	1,015	940	4,641
Brook Trout	0	0	0	0	0	0	0	0	0	0	0	0
Lake Trout	16,241	13,301	13,119	18,213	14,096	14,463	13,465	10,859	10,739	10,334	10,496	43,795
Dolly Varden/ Arctic Char	151,503	110,479	91,345	93,653	70,405	78,984	70,219	75,992	76,869	63,371	59,722	341,542
Arctic Grayling	57,158	47,825	57,720	51,465	52,016	46,891	33,618	26,940	30,396	22,257	23,786	227,978
Northern Pike	2,642	4,424	2,240	2,894	4,839	3,598	4,434	3,655	8,704	7,314	7,131	48,761
Whitefish	3,784	4,806	9,337	7,914	5,443	6,591	5,344	7,878	3,832	2,867	2,480	9,665
Burbot	8,870	13,231	22,015	13,238	9,526	5,600	4,374	5,094	1,827	2,992	3,392	5,715
Sheefish	0	0	0	0	0	0	0	0	0	0	0	0
Smelt	298,148	370,653	314,615	173,204	197,204	200,800	200,838	188,681	103,814	109,599	55,421	57,243
Halibut	75,047	78,045	81,458	115,857	101,446	168,526	154,712	180,568	192,485	193,049	225,314	450,704
Rockfish	32,528	43,825	33,571	59,690	31,264	71,282	47,272	36,613	40,435	55,310	50,595	96,235
Lingcod									13,291	15,701	7,888	25,732
Razor Clams	1,177,960	1,194,932	1,194,830	1,290,826	1,123,440	1,258,535	912,859	1,033,513	1,206,902	1,234,695	1,010,958	1,010,958
Other Fish	31,390	17,519	36,919	67,875	40,438	50,194	53,841	54,783	20,611	21,483	16,659	56,898
Total	2,410,211	2,517,185	2,469,836	2,609,304	2,584,420	2,841,033	2,519,404	2,428,172	2,633,148	2,675,940	2,387,224	4,648,104

Appendix A19. Arctic-Yukon-Kuskokwim Alaska sport fish harvest by species, 1983-1993, and catch by species, 1993.

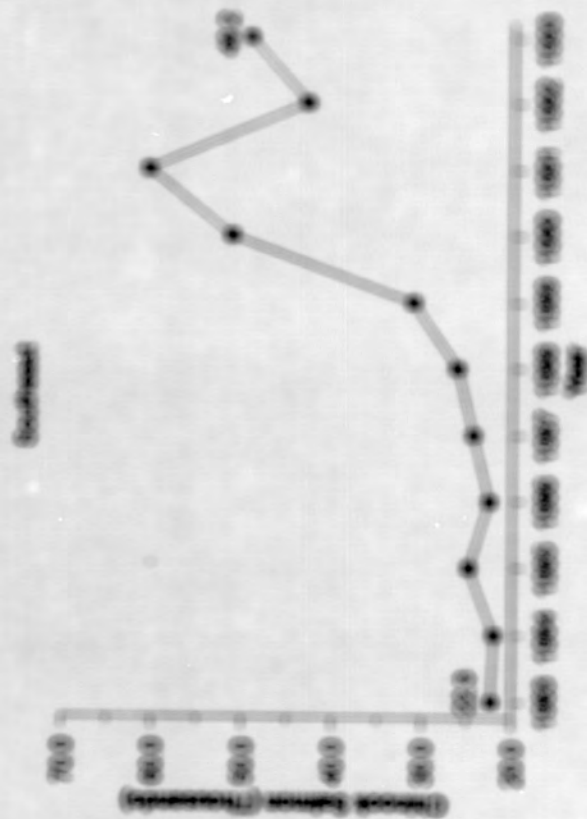
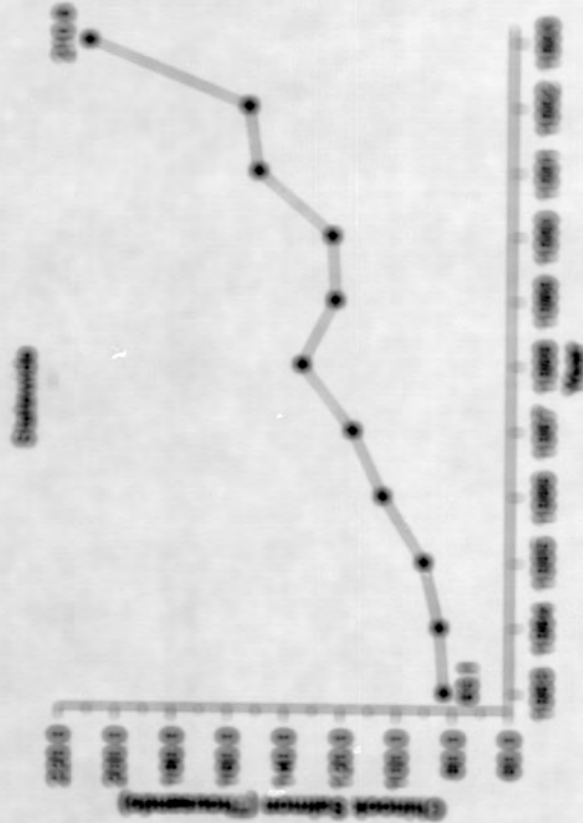
Species	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
SALMON SPECIES:												
Chinook	3,697	1,819	2,687	2,860	2,193	3,818	3,413	1,805	1,963	1,689	3,964	18,648
Sea-run Coho	5,932	12,036	3,192	8,693	8,441	11,950	10,251	6,610	10,662	8,370	6,745	19,488
Landlocked Coho/Chinook	34,255	29,245	41,042	24,061	26,624	32,342	18,614	13,943	22,125	14,019	15,734	31,017
Sockeye	261	650	169	439	1,364	1,528	456	818	631	378	725	3,762
Kokanee	0	0	0	0	0	0	0	0	185	184	0	0
Pink	5,286	8,712	1,206	3,404	1,322	3,859	3,765	7,994	1,865	8,434	2,277	7,559
Chum	4,698	3,274	3,036	4,336	2,768	3,692	5,882	2,146	3,158	2,993	2,446	17,302
OTHER SPECIES:												
Steelhead	0	0	0	0	0	0	0	0	0	0	0	0
Rainbow Trout	22,300	35,477	34,091	31,774	32,416	79,944	75,432	64,618	72,798	37,951	50,179	157,345
Cutthroat Trout	0	0	0	0	0	0	0	0	0	0	0	0
Brook Trout	0	0	0	0	0	0	0	0	0	0	0	0
Lake Trout	4,063	3,624	5,354	3,250	1,113	2,730	3,605	1,743	3,033	2,191	2,598	9,783
Dolly Varden/ Arctic Char	20,722	13,232	14,660	10,373	12,369	12,147	14,272	8,261	19,771	7,462	13,813	84,460
Arctic Grayling	122,901	99,142	81,226	65,725	57,956	68,961	71,637	37,506	52,354	22,304	25,859	260,900
Northern Pike	18,834	14,217	15,703	18,996	14,222	19,824	17,183	12,330	20,771	11,302	12,235	72,956
Whitefish	13,057	11,892	20,860	31,770	27,159	13,630	18,932	7,701	2,936	3,853	1,743	2,832
Burbot	5,595	5,933	5,215	5,611	4,017	3,878	4,894	5,483	3,055	4,253	6,466	7,491
Sheefish	3,323	3,947	2,520	3,721	2,597	3,221	2,306	750	2,256	2,933	1,619	6,666
Smelt	0	0	8,750	464	7,080	2,476	2,424	1,709	1,818	2,001	3,700	3,700
Halibut	0	0	62	0	36	0	0	144	0	33	54	71
Rockfish	0	0	0	0	0	0	0	0	0	0	0	0
Lingcod	0	0	0	0	0	0	0	0	0	0	0	0
Razor Clams	0	0	0	0	0	0	0	0	0	0	0	0
Other Fish	8,827	1,883	1,336	1,349	0	371	371	614	1,783	1,136	1,394	1,550
Total	273,751	245,083	241,109	216,826	201,677	264,371	253,437	174,175	221,164	131,486	151,551	705,530



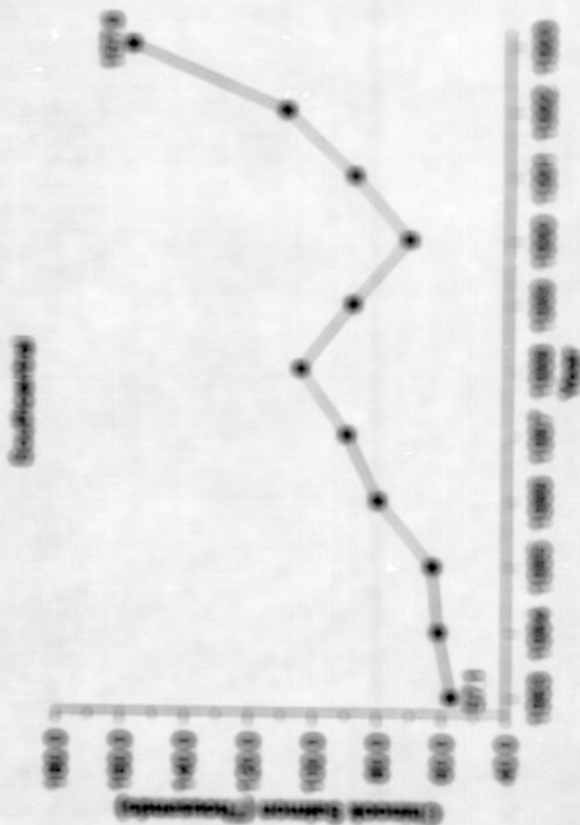
Appendix A20. Alaska sport sea-run salmon harvests, statewide and by region, 1983-1993.

Appendix A21. Alaska sport sea-run salmon harvests, 1983-1993, and catch, 1993, by region and area.

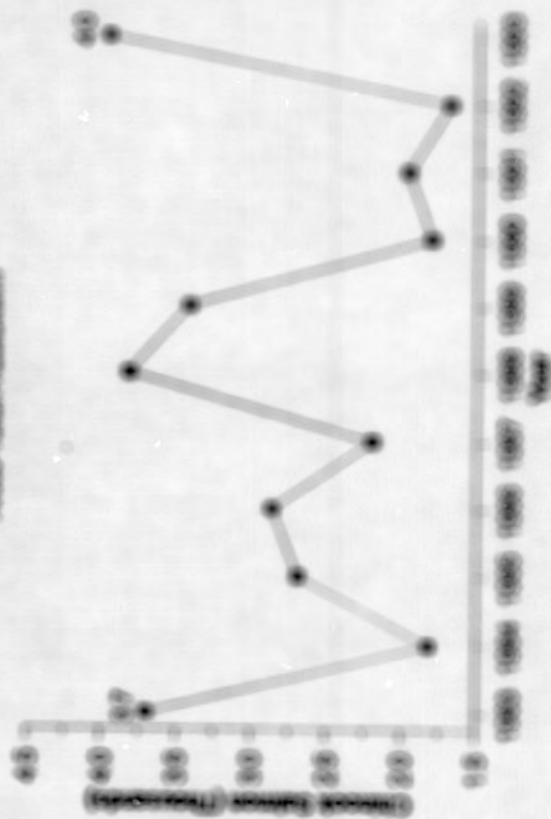
Area Fished	Harvest												Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993		
Southeast													
Kachikum	35,712	44,039	41,481	44,348	33,330	30,336	42,320	43,333	44,316	53,317	48,377	77,948	
Prince of Wales Island	18,185	19,810	11,879	14,719	14,831	9,344	32,009	28,038	18,120	21,448	68,302	108,305	
Kake, Petersburg													
Wainwright, Sitka	8,728	9,487	8,533	6,878	8,482	8,178	11,319	18,836	13,810	14,323	12,878	28,491	
Sitka	13,789	12,979	14,875	19,834	8,311	13,432	21,248	21,818	10,375	21,818	34,528	48,367	
Juneau	47,157	55,154	61,783	10,415	37,433	32,412	72,847	71,887	72,838	77,838	58,743	167,327	
Baines-Stragway	7,319	11,833	18,383	10,081	12,317	11,184	8,373	22,188	8,320	8,718	8,808	12,881	
Glaister Bay	1,112	762	1,215	775	2,544	2,456	8,313	2,822	17,748	4,818	8,474	11,384	
Tadoussac	3,341	7,788	7,817	7,818	5,331	4,878	11,083	4,361	8,383	8,338	14,818	18,333	
Total	128,510	153,630	163,879	123,688	148,248	118,483	214,728	218,448	227,813	212,281	288,593	452,373	
Southeast													
Glennallen	5,282	6,510	7,111	8,012	7,517	4,881	8,883	5,871	18,484	8,883	18,734	18,884	
Prince William Sound	32,134	31,248	48,187	48,818	51,718	82,183	72,282	81,718	77,814	87,718	88,138	117,518	
Edik Arm Drainage	23,343	33,311	23,343	23,484	41,718	58,177	48,323	28,718	31,458	38,888	48,818	74,523	
Admiral	3,271	7,644	3,184	18,343	7,812	11,343	8,884	8,818	8,817	18,818	21,818	48,818	
East Forks River Drainage	20,183	33,711	17,311	44,871	28,818	42,347	38,234	28,311	37,413	48,818	58,818	108,317	
West Fork Drainage													
West Forks River Drainage	24,812	24,811	37,383	42,339	38,348	48,348	52,873	44,818	37,113	48,818	51,347	108,347	
Kent Peninsula	213,813	241,213	244,083	103,647	117,213	422,273	112,248	102,812	430,138	412,812	412,560	488,138	
Kodiak	21,414	31,118	38,211	41,487	37,881	47,183	68,113	28,413	18,518	28,818	47,818	108,317	
Kachik River Drainage													
Alaska Peninsula	14,888	18,478	12,883	21,818	20,783	11,818	34,212	42,414	27,284	21,210	11,341	32,718	
Kryuk River Drainage	5,233	7,818	7,272	5,211	12,348	9,373	28,283	11,382	18,718	14,888	21,818	32,818	
Kudluk River Drainage	8,232	8,237	4,432	24,118	7,472	7,814	11,488	7,188	18,882	8,581	11,713	18,131	
Total	274,133	423,683	444,788	571,082	617,810	730,413	838,713	672,288	748,877	808,710	798,570	1,408,418	
Arctic-Yukon-Kuskokwim													
Tanana River Drainage	1,344	1,734	3,437	2,848	2,313	1,341	3,888	2,813	1,383	1,403	2,212	11,418	
Kuskokwim River Drainage	1,748	8,312	2,818	5,884	8,883	8,432	8,124	8,871	8,773	4,414	2,213	18,184	
Seward Peninsula													
Northwest Sound	11,113	17,883	3,813	8,813	5,878	10,713	8,947	12,418	8,384	11,418	7,318	17,873	
Northwest Alaska	483	511	428	811	528	274	51	9	139	521	418	488	
Yukon River Drainage	411	81	18	478	287	818	1,112	718	1,112	1,047	814	1,888	
North Slope Brooks Range	283	0	0	0	30	55	0	0	0	18	17	87	
Total	19,874	28,431	10,210	18,712	18,888	29,447	21,787	18,873	18,278	21,284	18,137	48,738	
Alaska Total	512,119	623,488	618,817	721,512	818,117	847,727	1,037,218	818,088	1,018,581	1,018,813	1,052,388	1,548,418	



Staphenoid



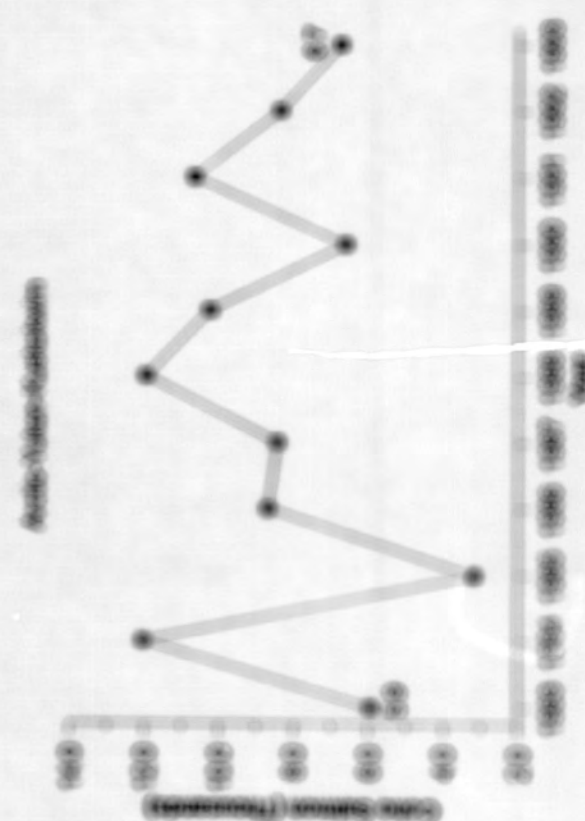
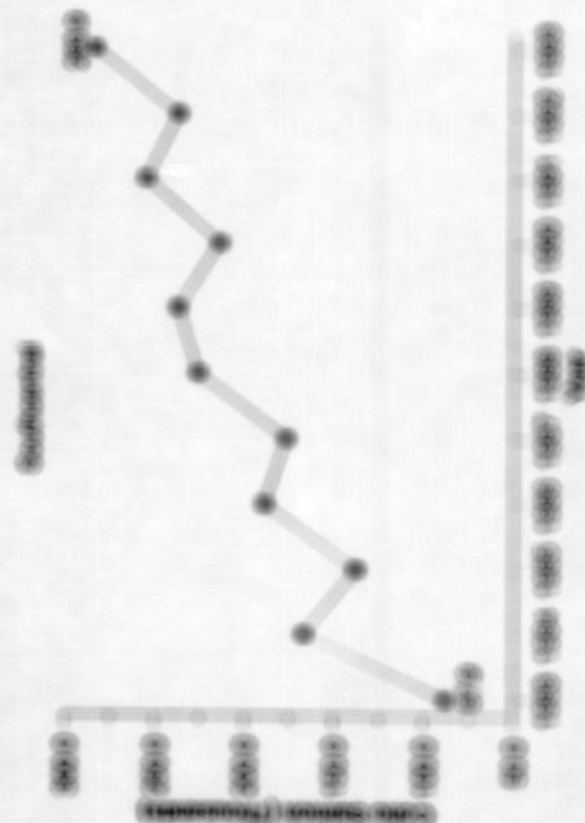
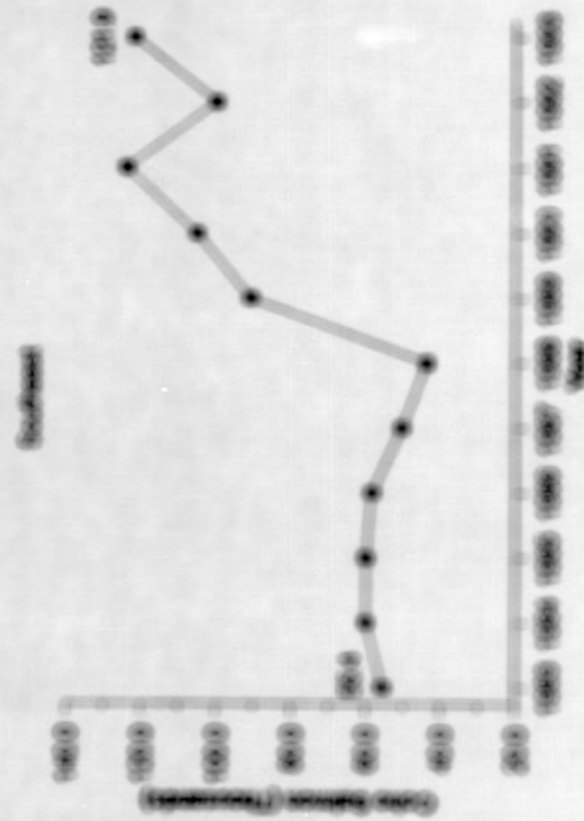
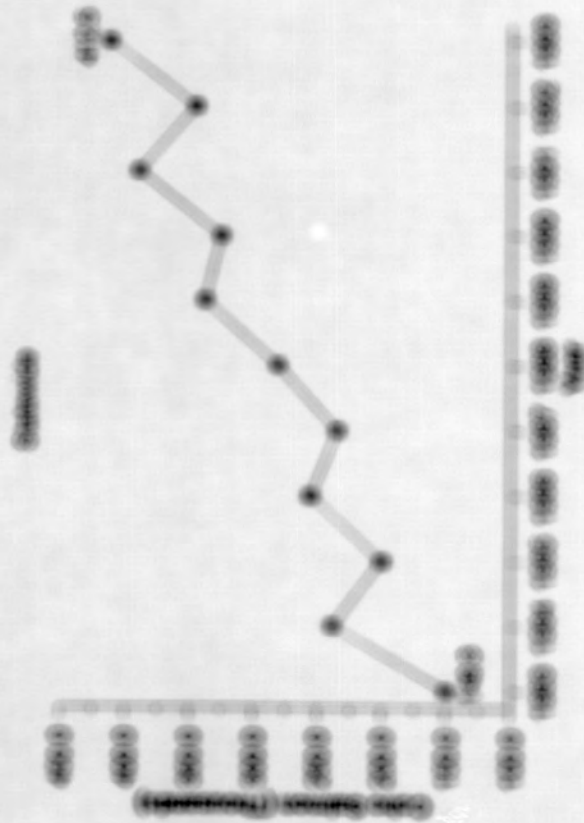
Acoustic Values (mm)



Appendix A.2.2. Acoustic values of the staphenoid bone, staphenoid and by region, 1983-1993.

Appendix A23. Climate impact and risk assessment scenarios, 2000-2050, and 2050-2100, by region and year

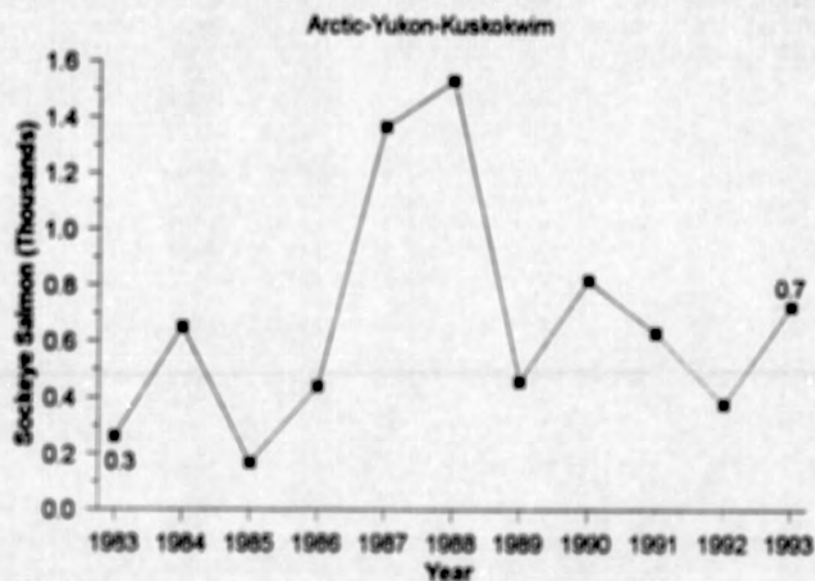
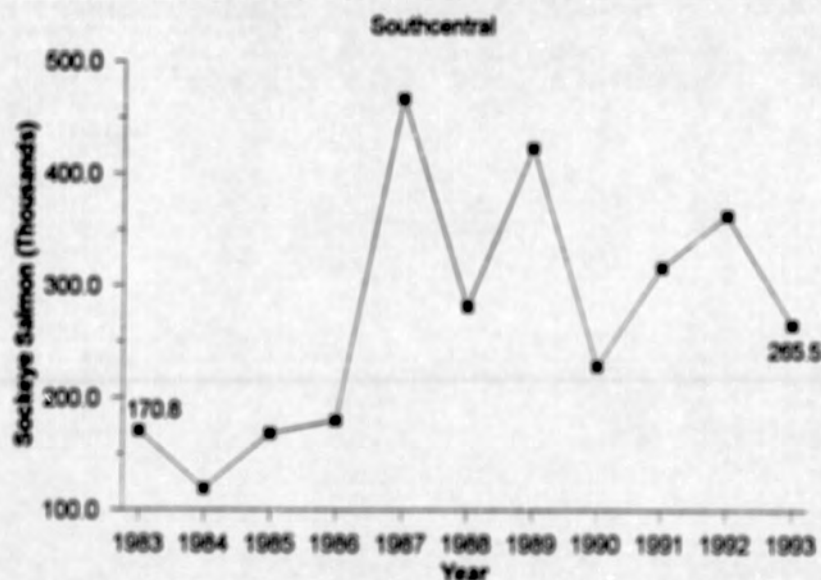
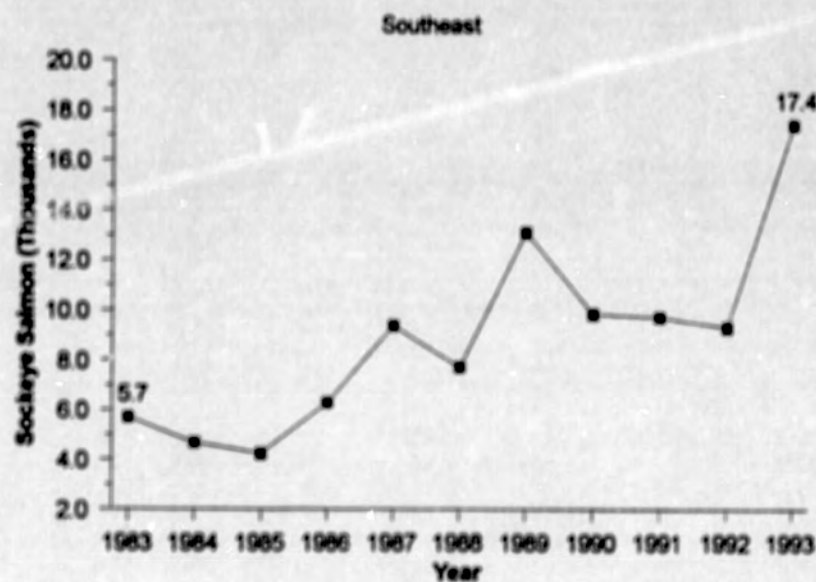
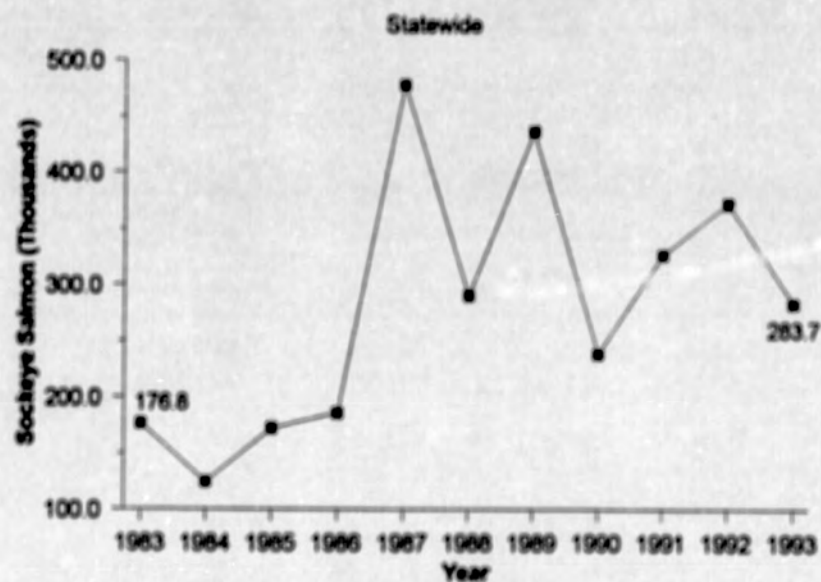
[illegible]



Appendix 40a. Windows against non-war value national currencies, stockpiles and by region, 1955-1963.

Appendix A25. Alaska sport sea-run coho salmon harvests, 1983-1993, and catch, 1993, by region and area.

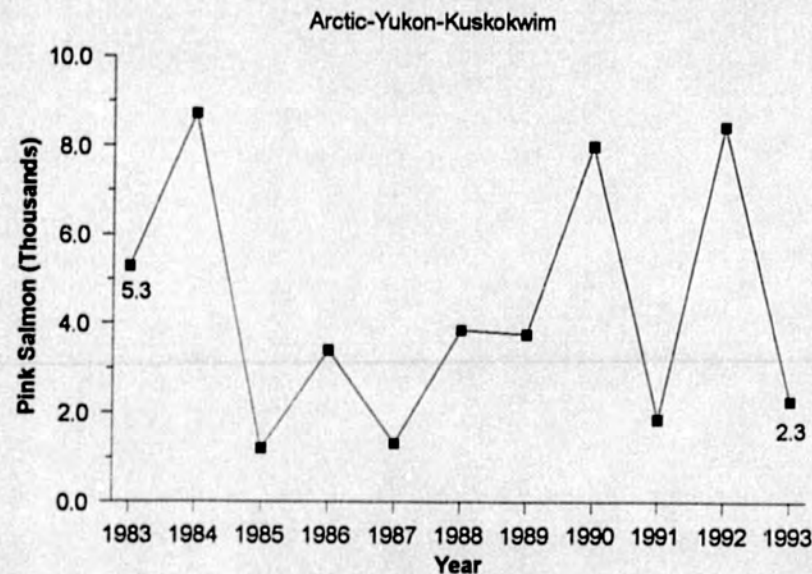
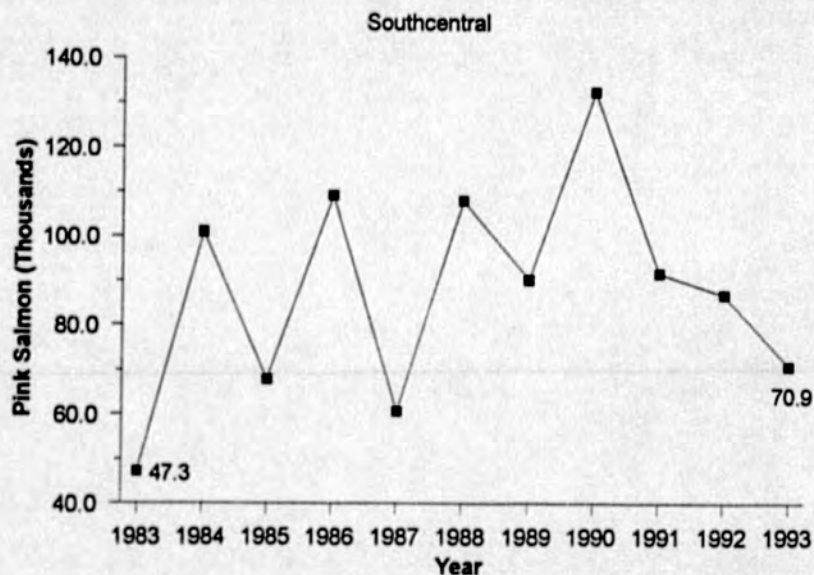
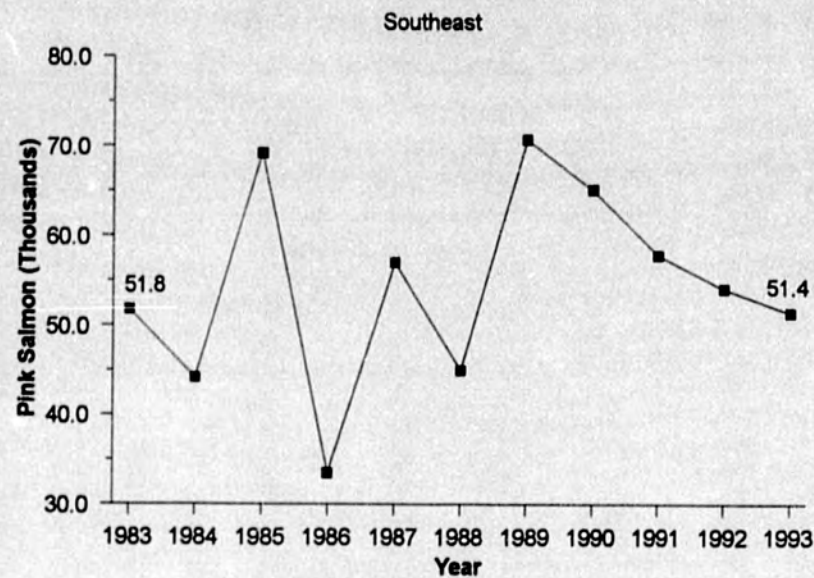
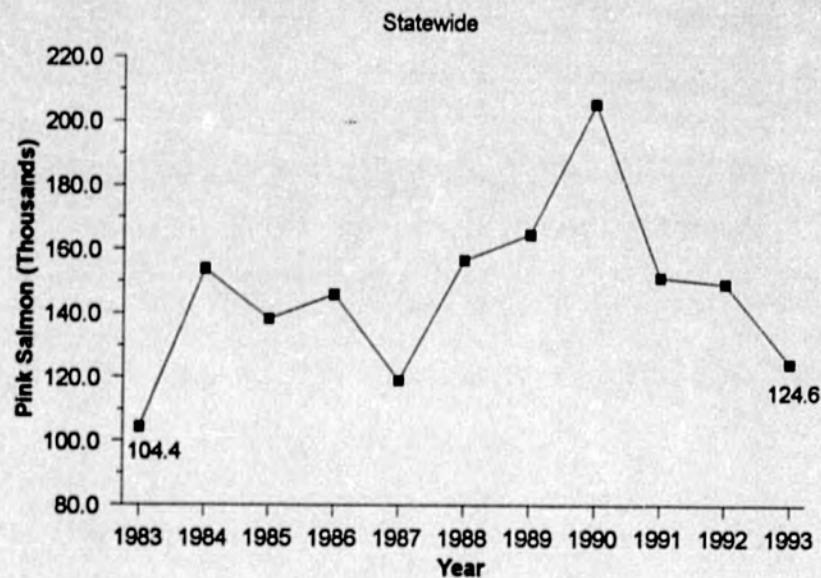
Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	14,181	21,296	17,751	21,191	13,435	7,785	13,328	35,197	26,839	22,016	19,459	22,618
Prince of Wales Island	8,374	7,487	7,360	8,639	6,557	3,094	15,099	17,049	24,964	13,419	40,366	54,924
Kake, Petersburg												
Wrangell, Stikine	4,133	4,046	1,580	2,215	2,540	2,581	2,602	5,387	5,117	4,967	4,241	6,173
Sitka	4,648	2,644	3,680	4,077	2,715	2,745	8,291	7,808	11,474	9,167	14,518	18,799
Juneau	18,861	15,677	19,744	12,959	19,485	20,862	39,063	33,961	40,269	40,170	30,428	36,949
Haines-Skagway	2,259	1,616	2,888	2,420	1,521	1,673	2,047	1,498	3,678	3,067	3,133	5,189
Glacier Bay	619	371	336	391	1,044	1,345	2,376	1,746	5,853	1,507	2,720	3,541
Yakutat	2,328	6,675	6,571	6,430	2,987	3,603	7,983	2,566	5,952	5,626	6,809	16,920
Total	55,403	59,812	59,910	58,322	50,284	43,688	90,789	105,212	123,946	99,939	121,674	165,113
Southcentral												
Glennallen	84	496	410	202	330	291	18	0	69	113	249	354
Prince William Sound	10,405	10,363	11,633	16,098	16,680	19,262	25,631	26,639	19,783	25,259	21,793	28,722
Knik Arm Drainage	6,139	23,429	14,339	12,361	25,787	40,037	23,846	18,762	22,166	25,814	35,763	53,674
Anchorage	1,538	2,768	2,002	3,419	2,915	6,639	4,734	2,488	4,393	5,698	16,387	23,462
East Susitna River Drainage	5,176	13,916	7,042	16,190	11,028	19,518	17,078	11,743	19,479	33,790	26,063	39,688
West Cook Inlet-												
West Susitna River Drainages	8,182	12,828	17,714	17,998	17,982	23,740	26,725	20,219	29,518	23,748	26,712	48,415
Kenai Peninsula	42,959	81,067	66,485	86,263	76,106	87,238	104,026	107,519	132,765	100,848	130,207	163,694
Kodiak	7,823	14,612	13,625	20,873	16,915	18,809	19,802	13,728	17,506	13,668	21,241	41,408
Naknek River Drainage-												
Alaska Peninsula	3,512	4,609	2,737	6,940	5,670	7,089	7,850	10,276	6,025	6,124	3,253	10,634
Kvichak River Drainage	189	861	744	2,891	1,695	1,022	2,142	1,162	1,510	655	1,519	5,854
Nushagak	1,928	1,739	940	5,537	1,602	2,167	5,303	1,578	1,727	1,487	681	3,385
Total	87,935	166,688	137,671	188,872	176,710	225,812	237,155	214,114	254,961	237,204	283,868	416,490
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	147	831	796	1,374	1,231	2,237	1,596	1,719	2,345	1,115	278	3,658
Kuskokwim River Drainage	1,910	3,623	1,156	3,232	4,819	4,492	4,282	1,358	2,087	2,033	2,056	6,390
Seward Peninsula-												
Norton Sound	3,823	7,582	1,177	3,926	2,319	5,038	4,158	3,305	5,800	4,671	3,783	6,174
Northwest Alaska	0	0	51	0	11	0	0	0	0	0	0	43
Yukon River Drainage	52	0	12	161	61	183	215	228	430	551	619	1,023
North Slope Brooks Range	0	0	0	0	0	0	0	0	0	0	0	0
Total	5,932	12,036	3,192	8,693	8,441	11,950	10,251	6,610	10,662	8,370	6,745	19,488
Alaska Total	149,270	238,536	200,773	255,887	235,435	281,450	338,195	325,936	389,569	345,513	412,487	601,091



Appendix A26. Alaska sport sea-run sockeye salmon harvests, statewide and by region, 1983-1993.

Appendix A27. Alaska sport sockeye salmon harvests, 1983-1993, and catch, 1993, by region and area.

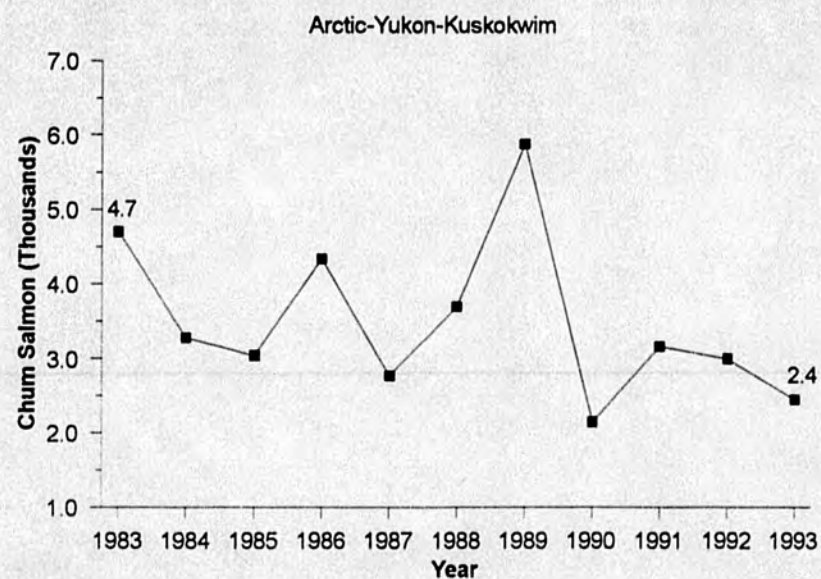
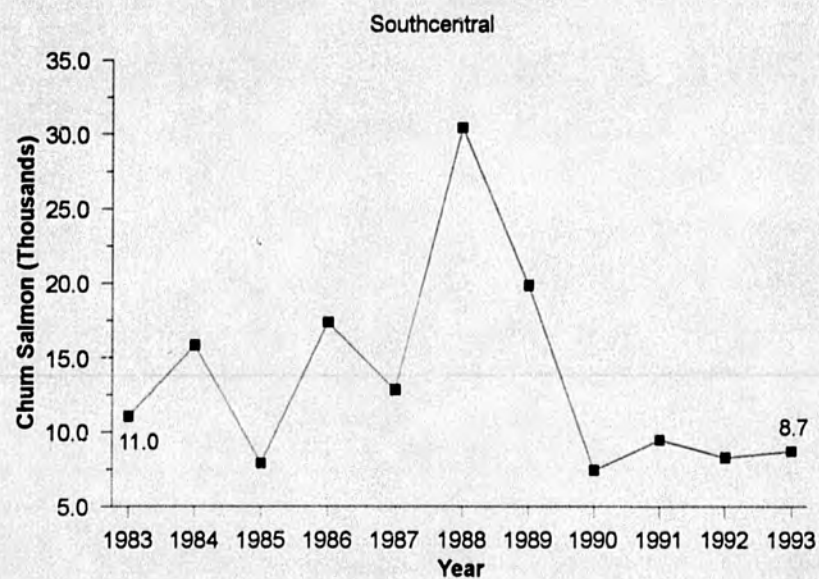
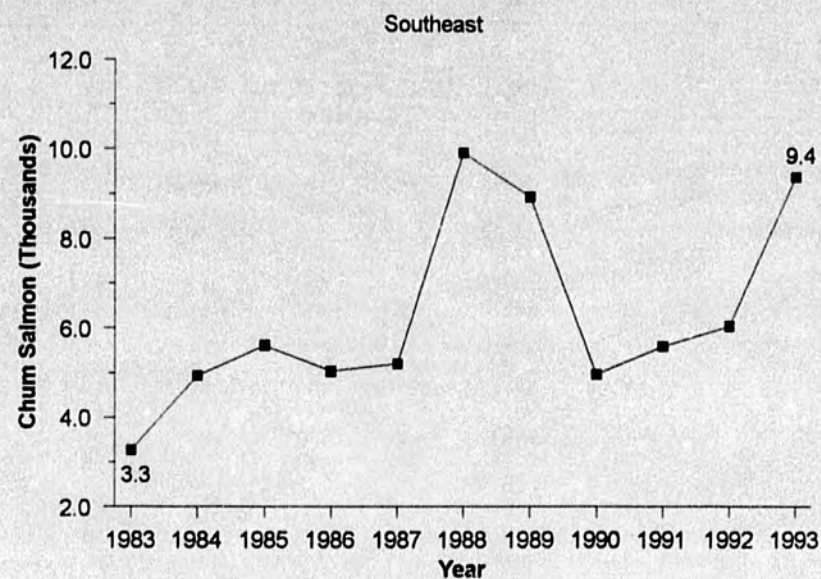
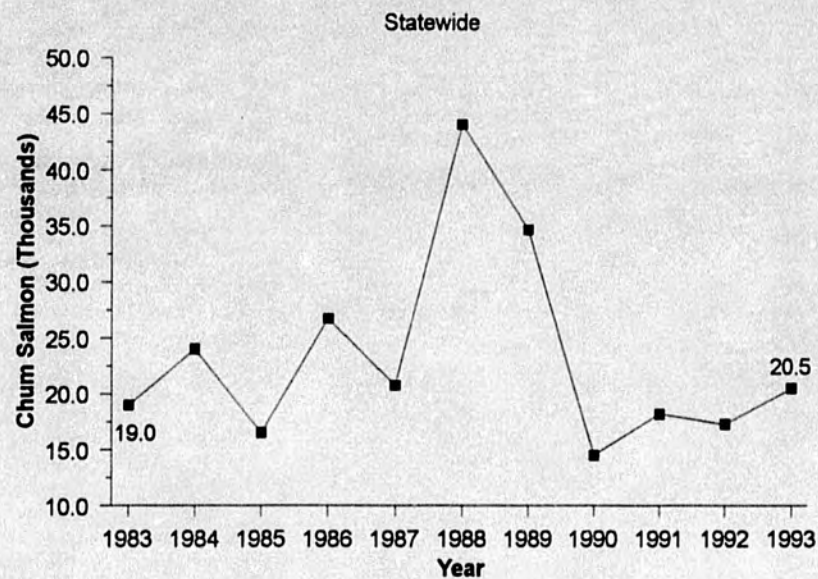
Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	314	355	384	648	1,135	327	1,010	1,134	2,480	1,313	1,057	1,618
Prince of Wales Island	2,040	790	970	963	2,333	1,729	3,332	1,402	1,021	1,740	3,591	5,731
Kake, Petersburg Wrangell, Stikine	428	544	118	153	111	163	1,001	488	612	1,133	1,208	1,615
Sitka	382	635	210	366	447	3,147	2,148	1,344	810	434	1,126	2,346
Juneau	604	627	859	480	321	436	1,461	974	1,017	985	2,530	3,799
Haines-Skagway	1,413	1,257	1,648	3,135	2,970	672	1,692	3,062	1,272	1,436	538	1,404
Glacier Bay	41	78	0	11	264	510	216	21	132	379	314	366
Yakutat	479	409	61	544	1,793	727	2,254	1,423	2,371	1,898	7,055	15,201
Total	5,701	4,695	4,250	6,300	9,374	7,711	13,114	9,848	9,715	9,318	17,419	32,080
Southcentral												
Glennallen	2,619	3,267	4,752	4,137	4,876	3,038	4,509	3,569	5,511	4,560	5,288	10,813
Prince William Sound	5,124	4,077	2,908	4,878	4,889	4,783	3,939	3,562	3,792	8,358	5,269	7,625
Knik Arm Drainage	14,297	9,240	5,612	6,009	8,785	8,076	9,040	6,588	4,968	5,349	5,926	8,964
Anchorage	589	598	621	603	1,431	472	564	244	749	1,315	3,085	6,052
East Susitna River Drainage	3,221	2,705	1,465	4,029	2,046	2,857	2,527	2,677	2,897	3,468	4,137	8,007
West Cook Inlet- West Susitna River Drainages	4,358	3,751	2,924	4,165	2,916	3,640	3,009	2,634	3,887	3,367	4,577	10,578
Kenai Peninsula	128,145	82,034	133,329	144,930	427,856	242,557	354,981	185,711	270,424	312,302	201,906	340,972
Kodiak	3,150	5,385	7,536	5,259	4,165	6,222	6,789	6,056	4,937	6,240	7,849	27,111
Naknek River Drainage- Alaska Peninsula	2,521	2,119	2,501	1,769	2,391	4,920	9,515	4,754	4,225	4,699	5,060	22,095
Kvichak River Drainage	4,392	4,826	5,638	1,156	7,193	4,334	24,295	11,002	13,341	11,746	19,671	79,817
Nushagak	2,383	1,096	925	2,774	957	929	4,133	1,655	1,970	1,652	2,746	20,067
Total	170,799	119,098	168,211	179,709	467,505	281,828	423,301	228,452	316,701	363,056	265,517	542,101
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Kuskokwim River Drainage	261	299	149	420	419	746	291	620	214	189	715	3,637
Seward Peninsula- Norton Sound	0	351	20	19	924	782	165	198	237	131	10	116
Northwest Alaska	0	0	0	0	21	0	0	0	0	0	0	0
Yukon River Drainage	0	0	0	0	0	0	0	0	180	58	0	9
North Slope Brooks Range	0	0	0	0	0	0	0	0	0	0	0	0
Total	261	650	169	439	1,364	1,528	456	818	631	378	725	3,762
Alaska Total	176,761	124,443	172,630	186,448	478,243	291,067	436,871	239,118	327,047	372,752	283,661	577,943



Appendix A28. Alaska sport pink salmon harvests, statewide and by region, 1983-1993.

Appendix A29. Alaska sport pink salmon harvests, 1983-1993, and catch, 1993, by region and area.

Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	13,600	16,861	16,469	14,958	14,765	12,896	25,174	15,246	21,964	18,510	19,651	35,272
Prince of Wales Island	5,578	4,363	2,808	3,424	5,064	2,567	10,338	4,847	5,063	3,699	14,817	33,266
Kake, Petersburg												
Wrangell, Stikine	810	1,699	2,619	488	2,533	601	2,420	3,426	1,889	2,058	955	5,244
Sitka	8,319	7,428	9,057	3,676	3,235	2,709	3,694	3,083	4,476	2,699	3,376	10,511
Juneau	20,950	8,487	28,448	8,487	25,543	18,082	22,488	22,385	14,998	21,411	9,216	26,373
Haines-Skagway	1,886	4,743	7,919	1,568	4,764	7,096	3,201	15,362	3,171	3,811	360	1,118
Glacier Bay	294	144	709	168	703	1,000	2,913	637	5,358	1,556	2,612	4,888
Yakutat	378	472	1,224	714	453	72	594	222	940	357	449	3,743
Total	51,815	44,197	69,253	33,483	57,060	45,023	70,822	65,208	57,859	54,101	51,436	120,415
Southcentral												
Glennallen	0	0	0	0	0	0	0	0	0	0	0	0
Prince William Sound	14,696	14,488	32,670	25,272	31,382	31,470	37,994	49,146	52,290	32,011	35,735	73,082
Knik Arm Drainage	1,009	2,743	787	1,800	886	1,927	1,321	650	926	1,044	230	2,263
Anchorage	1,132	4,042	1,866	11,528	2,282	5,075	1,631	4,932	1,986	8,901	2,767	11,124
East Susitna River Drainage	3,954	9,491	2,510	10,527	2,209	4,129	2,715	4,093	2,001	5,899	3,941	34,652
West Cook Inlet-												
West Susitna River Drainages	796	2,529	721	3,676	1,684	2,637	1,255	1,298	623	1,446	725	11,187
Kenai Peninsula	12,797	47,316	13,791	35,398	8,581	26,980	15,377	41,257	12,280	24,407	11,601	34,624
Kodiak	8,936	12,779	13,423	14,509	11,662	19,041	17,794	7,464	12,071	5,904	12,324	57,579
Naknek River Drainage-												
Alaska Peninsula	3,934	6,447	2,027	5,926	1,893	16,336	11,359	23,178	8,891	6,137	3,331	7,269
Kvichak River Drainage	0	960	0	204	0	62	277	235	423	750	215	1,503
Nushagak	10	137	43	233	109	217	468	147	101	338	0	362
Total	47,264	100,932	67,838	109,073	60,688	107,877	90,191	132,400	91,592	86,837	70,869	233,645
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Kuskokwim River Drainage	420	273	0	72	18	892	191	347	36	219	27	1,132
Seward Peninsula-												
Norton Sound	4,583	8,322	1,138	3,172	1,304	2,912	3,564	7,647	1,738	7,877	2,250	6,397
Northwest Alaska	0	39	68	62	0	0	10	0	91	293	0	20
Yukon River Drainage	0	78	0	98	0	0	0	0	0	27	0	0
North Slope Brooks Range	283	0	0	0	0	55	0	0	0	18	0	10
Total	5,286	8,712	1,206	3,404	1,322	3,859	3,765	7,994	1,865	8,434	2,277	7,559
Alaska Total	104,365	153,841	138,297	145,960	119,070	156,759	164,778	205,602	151,316	149,372	124,582	361,619



Appendix A30. Alaska sport chum salmon harvests, statewide and by region, 1983-1993.

Appendix A31. Alaska sport chum salmon harvests, 1983-1993, and catch, 1993, by region and area.

Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	649	484	707	1,394	389	2,164	1,966	872	1,168	1,268	1,882	4,051
Prince of Wales Island	650	95	198	696	48	819	640	234	326	207	961	2,273
Kake, Petersburg												
Wrangell, Stikine	23	131	176	116	144	163	614	178	207	321	140	383
Sitka	312	371	298	613	367	1,312	1,541	762	373	459	2,038	5,058
Juneau	1,311	1,415	2,338	1,296	2,247	4,147	3,260	2,218	2,741	3,147	3,453	11,060
Haines-Skagway	325	2,354	1,867	884	1,683	854	675	637	420	213	725	1,404
Glacier Bay	0	40	24	22	275	163	166	49	260	426	112	495
Yakutat	0	46	0	11	54	291	70	12	98	0	69	414
Total	3,270	4,936	5,608	5,032	5,207	9,913	8,932	4,962	5,593	6,041	9,380	25,138
Southcentral												
Glennallen	0	0	0	0	0	0	0	0	0	0	0	0
Prince William Sound	1,353	1,907	1,628	2,858	1,894	7,237	3,635	1,945	1,622	964	2,018	5,805
Knik Arm Drainage	643	2,032	514	3,770	2,574	5,221	4,477	746	1,099	510	885	4,098
Anchorage	10	162	634	982	579	691	985	315	360	297	383	1,359
East Susitna River Drainage	4,982	5,211	2,142	4,756	3,042	6,604	4,151	1,565	1,950	2,044	1,480	9,192
West Cook Inlet-												
West Susitna River Drainages	408	872	447	828	778	1,583	469	281	225	456	179	4,916
Kenai Peninsula	1,846	2,780	1,080	2,639	2,334	5,467	2,925	1,111	1,065	1,605	1,416	4,429
Kodiak	816	1,321	865	336	560	1,546	631	191	1,517	625	504	3,547
Naknek River Drainage-												
Alaska Peninsula	188	287	186	653	614	929	832	460	607	532	426	1,854
Kvichak River Drainage	0	474	53	68	246	62	428	300	556	486	595	11,658
Nushagak	797	760	346	467	191	1,084	1,300	503	457	746	807	8,283
Total	11,043	15,806	7,895	17,357	12,812	30,424	19,833	7,417	9,458	8,265	8,693	55,141
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	649	585	1,255	693	620	491	1,134	55	588	690	371	2,330
Kuskokwim River Drainage	1,195	896	423	973	656	836	2,213	749	647	927	731	10,741
Seward Peninsula-												
Norton Sound	2,042	1,481	1,036	1,719	814	1,583	1,497	925	1,415	523	691	2,219
Northwest Alaska	463	312	310	749	402	236	41	0	59	220	443	771
Yukon River Drainage	349	0	12	202	226	546	997	417	449	618	193	1,224
North Slope Brooks Range	0	0	0	0	50	0	0	0	0	15	17	17
Total	4,698	3,274	3,036	4,336	2,768	3,692	5,882	2,146	3,158	2,993	2,446	17,302
Alaska Total	19,011	24,016	16,539	26,725	20,787	44,029	34,647	14,525	18,209	17,299	20,519	97,581

Appendix A32. Alaska sport landlocked coho salmon and chinook salmon harvests, 1983-1993, and catch, 1993, by region and area.

Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	0	0	0	0	0	0	0	0	0	0	0	0
Prince of Wales Island	0	0	0	0	0	0	0	0	0	0	0	0
Kake, Petersburg												
Wrangell, Stikine	0	0	0	0	0	0	0	0	0	0	0	0
Sitka	0	0	0	0	0	0	0	0	0	0	0	0
Juneau	1,301	568	69	56	0	728	528	413	1,222	1,536	1,454	2,958
Haines-Skagway	0	0	0	0	0	0	0	0	0	0	0	0
Glacier Bay	0	0	0	0	0	0	0	0	0	0	0	0
Yakutat	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,301	568	69	56	0	728	528	413	1,222	1,536	1,454	2,958
Southcentral												
Glennallen	4,175	992	2,238	89	0	109	281	17	111	433	56	145
Prince William Sound	0	0	0	0	0	0	0	0	0	0	0	0
Knik Arm Drainage	22,805	14,768	14,461	14,299	14,887	16,588	11,041	15,950	15,740	11,875	13,829	29,125
Anchorage	524	997	399	749	2,263	4,364	14,483	6,775	10,817	13,985	17,489	36,072
East Susitna River Drainage	1,049	660	884	2,106	145	619	536	151	14	86	738	1,263
West Cook Inlet-												
West Susitna River Drainages	0	0	0	0	0	0	0	0	0	0	0	0
Kenai Peninsula	3,975	1,160	1,596	2,202	2,401	2,929	1,154	530	1,770	4,758	4,882	7,253
Kodiak	954	1,547	106	0	434	0	60	52	0	151	0	0
Naknek River Drainage-												
Alaska Peninsula	0	0	0	0	0	0	0	0	0	0	0	0
Kvichak River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Nushagak	0	0	0	0	0	0	0	0	0	0	0	0
Total	33,482	20,124	19,684	19,445	20,130	24,609	27,555	23,475	28,452	31,288	36,994	73,858
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	34,255	29,245	41,042	24,061	26,566	32,342	18,614	13,943	22,125	14,019	15,734	31,017
Kuskokwim River Drainage	0	0	0	0	58	0	0	0	0	0	0	0
Seward Peninsula-												
Norton Sound	0	0	0	0	0	0	0	0	0	0	0	0
Northwest Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Yukon River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
North Slope Brooks Range	0	0	0	0	0	0	0	0	0	0	0	0
Total	34,255	29,245	41,042	24,061	26,624	32,342	18,614	13,943	22,125	14,019	15,734	31,017
Alaska Total	69,038	49,937	60,795	43,562	46,754	57,679	46,697	37,831	51,799	46,843	54,182	107,833

Appendix A33. Alaska sport kokanee salmon harvests, 1983-1993, and catch, 1993, by region and area.

Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	0	47	104	56	18	0	26	16	279	0	15	56
Prince of Wales Island	0	0	0	0	0	0	42	0	0	0	0	8
Kake, Petersburg												
Wrangell, Stikine	0	0	0	0	0	0	0	0	0	22	0	0
Sitka	0	0	0	31	0	55	0	17	0	0	0	98
Juneau	73	92	329	78	349	364	239	0	47	379	191	1,309
Haines-Skagway	0	0	0	92	18	55	213	66	36	368	0	7
Glacier Bay	0	0	0	0	0	0	0	0	0	0	0	0
Yakutat	0	0	0	0	0	0	0	0	0	0	0	16
Total	73	139	433	257	385	474	520	99	362	769	206	1,494
Southcentral												
Glennallen			104	0	75	637	169	153	0	0	98	261
Prince William Sound	0	0	0	0	0	0	0	0	0	0	0	0
Knik Arm Drainage	0	0	0	0	0	0	227	0	170	22	0	0
Anchorage			347	827	561	186	122	0	0	0	0	0
East Susitna River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
West Cook Inlet-												
West Susitna River Drainages	0	0	0	0	0	0	0	0	0	0	0	0
Kenai Peninsula	1,899	786	971	810	1,263	1,146	162	541	1,577	767	396	567
Kodiak	0	0	0	0	0	0	0	0	0	0	0	0
Naknek River Drainage-												
Alaska Peninsula			1,907	726	682	18	1,527	1,278	3,982	736	3,503	4,138
Kvichak River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Nushagak	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,899	786	3,329	2,363	2,581	1,987	2,207	1,972	5,729	1,525	3,997	4,966
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	0	0	0	0	0	0	0	0	185	184	0	0
Kuskokwim River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Seward Peninsula-												
Norton Sound	0	0	0	0	0	0	0	0	0	0	0	0
Northwest Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Yukon River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
North Slope Brooks Range	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	185	184	0	0
Alaska Total	1,972	925	3,762	2,620	2,966	2,461	2,727	2,071	6,276	2,478	4,203	6,460

Appendix A34. Alaska sport steelhead harvests, 1983-1993, and catch, 1993, by region and area.

Area Fished	Harvest											Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
Southeast												
Ketchikan	634	791	907	1,002	737	1,400	1,654	1,423	793	786	69	1,809
Prince of Wales Island	1,115	1,698	1,108	1,834	1,950	831	1,277	789	1,666	739	260	2,077
Kake, Petersburg												
Wrangell, Stikine	475	826	305	865	848	756	609	1,046	394	390	351	1,386
Sitka	176	109	156	145	270	64	193	153	388	156	243	1,847
Juneau	209	33	111	206	382	265	280	240	400	258	258	1,051
Haines-Skagway	0	7	153	168	36	123	142	32	253	24	28	123
Glacier Bay	0	0	0	8	0	0	42	0	173	31	19	134
Yakutat	860	696	348	494	454	870	1,212	591	565	55	21	4,515
Total	3,469	4,160	3,088	4,722	4,677	4,309	5,409	4,274	4,632	2,439	1,249	12,942
Southcentral												
Glennallen	21	137	162	58	134	91	84	34	114	8	0	102
Prince William Sound			0	15	0	18	39	0	0	0	0	0
Knik Arm Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Anchorage	0	0	0	0	0	0	0	0	0	0	0	0
East Susitna River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
West Cook Inlet-												
West Susitna River Drainages	0	0	0	0	0	0	0	0	0	0	0	0
Kenai Peninsula	1,572	1,546	683	734	850	1,017	67	217	36	606	2,237	12,678
Kodiak	302	696	790	321	253	853	788	1,120	327	96	332	5,110
Naknek River Drainage-												
Alaska Peninsula	0	0	0	0	0	0	0	0	0	0	0	0
Kvichak River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Nushagak	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,895	2,379	1,635	1,128	1,237	1,979	978	1,371	477	710	2,569	17,890
Arctic-Yukon-Kuskokwim												
Tanana River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Kuskokwim River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
Seward Peninsula-												
Norton Sound	0	0	0	0	0	0	0	0	0	0	0	0
Northwest Alaska	0	0	0	0	0	0	0	0	0	0	0	0
Yukon River Drainage	0	0	0	0	0	0	0	0	0	0	0	0
North Slope Brooks Range	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Alaska Total	5,364	6,539	4,723	5,850	5,914	6,288	6,387	5,645	5,109	3,149	3,818	30,832

Appendix A35. Alaska sport rainbow trout harvests, 1983-1993, and catch, 1993, by region and area.

Area Fished	Harvest												Catch
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993		
Southeast													
Kachik	1,244	2,572	1,500	1,933	623	1,710	2,201	1,100	662	641	1,500	7,594	
Prince of Wales Island	1,551	1,274	1,561	1,061	1,271	1,145	2,003	767	1,038	607	703	2,003	
Kake, Petersburg													
Wenatchell, Sitka	338	610	363	1,060	1,028	742	1,077	1,014	583	601	417	1,471	
Sitka	1,323	787	1,473	1,188	1,534	1,383	1,382	670	1,000	1,002	1,000	7,500	
Tongue	209	245	530	215	288	481	228	241	48	552	107	600	
Halibut-Sagehen	0	118	201	1,287	0	200	182	12	34	79	100	450	
Gleason Bay	0	0	0	69	11	26	0	17	22	0	0	50	
Yakutat	147	145	0	14	72	200	31	24	151	0	77	600	
Total	4,672	5,881	5,384	6,244	4,483	5,867	7,043	4,874	5,552	4,200	4,180	30,500	
Southcentral													
Glennallen	2,400	0,500	0,143	0,110	7,438	0,000	0,000	0,000	0,000	0,000	7,000	20,000	
Prince William Sound	1,585	523	277	317	128	510	677	502	627	518	108	500	
Fort Am Drainsage	25,421	28,418	46,431	27,630	24,063	58,000	44,718	10,000	18,000	27,000	20,000	68,000	
Anchorage	44,078	43,582	43,020	39,004	31,538	39,004	39,004	39,004	48,000	33,000	28,000	107,000	
East Seward River Drainsage	9,039	7,036	7,072	0,000	0,000	7,000	0,000	0,000	7,000	0,000	0,000	20,000	
West Cook Inlet-													
West Seward River Drainsages	19,124	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	10,000	
Kodiak Peninsula	32,587	18,708	18,287	18,820	18,405	10,510	7,000	14,000	12,000	18,000	14,000	10,000	
Kodiak	4,206	2,582	2,584	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
Kachik River Drainsage-													
Alaska Peninsula	4,100	3,579	3,100	3,511	1,000	1,400	1,000	0,000	1,000	1,000	1,000	44,000	
Kachik River Drainsage	1,400	1,246	2,200	1,528	2,200	344	0,000	1,400	1,000	1,000	1,000	40,000	
Kachik	4,024	2,332	1,000	2,000	2,000	1,000	1,000	1,000	1,000	1,000	1,000	47,000	
Total	143,705	129,849	142,318	114,817	103,587	113,000	127,000	103,000	127,000	97,000	82,000	520,000	
Arctic-Yukon-Kuskowin													
Tanana River Drainsage	20,022	24,022	10,012	10,270	10,024	79,045	79,073	69,045	72,024	37,047	48,000	104,000	
Kuskowin River Drainsage	1,678	1,442	610	504	582	1,500	717	675	774	450	480	18,000	
Seward Peninsula-													
Barrow Sound	0	0	0	0	0	0	0	0	0	0	0	0	
Northwest Alaska	0	0	0	0	0	0	0	0	0	0	0	0	
Yukon River Drainsage	0	0	0	0	0	0	0	0	0	0	0	0	
North Slope Brooks Range	0	10	0	0	0	0	0	0	0	0	0	0	
Total	22,300	25,477	10,621	10,774	10,608	79,044	79,073	69,045	72,798	37,047	48,480	122,000	
Alaska Total	188,077	170,117	181,001	152,010	118,000	241,011	208,001	181,000	203,000	108,000	108,000	700,000	

