

CFEC Permit Holdings and Estimates of Gross  
Earnings in the Prince William Sound Salmon Fisheries,  
1975-2013

CFEC Report Number 14-7N  
November, 2014

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## **Abstract**

This report examines limited entry permit holdings in each of the three Prince William Sound salmon fisheries: salmon purse seine; drift gillnet; and set gillnet fisheries. The report includes summary statistics on limited entry permit holdings, permanent and emergency transfers of permits, permit value, DNR shore fishery leases, permit latency, new entrants in the fisheries, permit holder median age, and estimated gross earnings. The report also contains a description of the computer files and methods used to generate the statistics.

Prepared by Marcus Gho

## **Acknowledgements**

Special thanks to Kurt Iverson and Craig Farrington for their insights and contributions to this document.

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## Introduction

This report was prepared by the Commercial Fisheries Entry Commission to provide an overview of limited entry permit holdings and estimated gross earnings in the Prince William Sound salmon fisheries.

Commercial fishing in Prince William Sound has been documented as far back as 1889.<sup>1</sup> Historically, several gear types have been employed to commercially catch salmon, including fish traps, gillnets, and purse seines.

In 1972, Alaskan voters amended the state constitution to allow limited entry in the state's commercial fisheries. Following the amendment, in 1973 the Alaska State Legislature enacted the Limited Entry Act (AS 16.43), giving the Commercial Fisheries Entry Commission (CFEC) the authority to administer the program. Permit fisheries are defined by CFEC as a specific gear type for a fishery resource within a defined administrative area.

The Prince William Sound salmon permit fisheries were part of the original group of 19 salmon fisheries that were limited in 1974. For the Prince William Sound salmon permit fisheries, limited entry permits for the salmon purse seine (S01E), drift gillnet (S03E), and set gillnet (S04E) permit fisheries were first issued in 1975.

The majority of ex-vessel value for the Prince William Sound salmon drift and set gillnet fisheries comes from sockeye salmon, while the majority of ex-vessel value for the purse seine fishery is from pink salmon, as illustrated in Table 1.

Table 1. Percent of Total Ex-vessel Value of Prince William Sound Salmon Fisheries by Species, 1975-2013

Species	Purse Seine	Drift Gillnet	Set Gillnet
<i>Chinook</i>	0.03%	9.4%	0.1%
<i>sockeye</i>	2.5%	60.5%	78.3%
<i>coho</i>	1.2%	15.3%	1.9%
<i>pink</i>	84.7%	3.5%	8.2%
<i>chum</i>	11.5%	11.3%	11.5%

<sup>1</sup> See *Alaska's Commercial Salmon Catches, 1878-1997*. ADF&G RIR No. 5J99-05.

## Description of the Data Files Used to Generate This Report

Four data files were used to generate the statistics in this report: the CFEC permit file, the CFEC gross earnings file, the CFEC Census file, and the CFEC shore fishery lease file. In addition to these files, a shape file from the Alaska Department of Natural Resources (DNR) was combined with geographic information systems to create a map depicting set gillnet sites that have active DNR shore fishery leases. The following is a brief description of each file. Please contact CFEC for more detail about these files if you are interested.

### CFEC Gross Earnings File

The CFEC gross earnings file is based on Alaska Department of Fish and Game (ADF&G) fish tickets and is enhanced with CFEC permit holder data. The ex-vessel value for salmon in the CFEC gross earnings file largely come from COAR, ADF&G fish tickets, and was enhanced by additional information provided by processors.

### CFEC Permit File

The CFEC permit file contains data on persons who hold or have held CFEC permits. It originates from CFEC permit renewal and permit transfer forms. The permit data file contains a field indicating the declared residency of permit holders.

In this report, resident status is broken into three resident types:

- *Alaska Locals* – permits held by persons residing locally to Prince William Sound
- *Alaska Nonlocals* – permits held by persons who reside in Alaska outside of Prince William Sound
- *Nonresidents* – permits held by nonresidents of Alaska

### CFEC Census File

CFEC maintains a computer file of places within Alaska where permit holders reside. Table 2 shows the places that are currently designated as local to the Prince William Sound salmon fisheries in the CFEC Census File.

Table 2. Communities Local to the Prince William Sound Salmon Fisheries, as Indicated in the CFEC Census File

Cape Yakataga	Evans Island	Katalla	Port Nellie Juan
Chenega	Eyak	Knight Island	Ptarmigan
Chenega Bay	Falls Bay	Latouche	Tatitlek
Cordova	Golden	Nuchek	Valdez
Ellamar	Icy Bay	Port Ashton	Whittier

### DNR Data File

The DNR Land Administration System contains records used to maintain the DNR Shore Fishery Lease program. These records were merged with CFEC permit records to create a dataset. Creation of the dataset is described in CFEC Report Number 14-4N, *CFEC Salmon Set Gillnet Permits and DNR Shore Fishery Leases in Prince William Sound, Cook Inlet, Kodiak, Alaska Peninsula, and Bristol Bay 1975-2013*.



## Prince William Sound Salmon Purse Seine Fishery

### Limited Entry Permit Holdings in the S01E Fishery

With the advent of limited entry, Prince William Sound salmon permits were issued in the purse seine, drift gillnet, and set gillnet fisheries starting in 1975. Table 3 indicates the initial distribution and historical net changes in permit holdings for the salmon purse seine (S01E) fishery. CFEC has issued 267 S01E permits. Of this total, Alaska Locals received 68.9% (184) of the permits. Nonlocal Alaskans received 10.1% (27) of the permits, and Nonresidents received the remaining 21.0% (56).

**Table 3. Initial Issuance and Year-end 2013 Totals of Prince William Sound Salmon Purse Seine Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type**

Residency	Total Initially Issued		TRANSFERS		MIGRATIONS		CANCELLED		2013 YEAR-END	
	Count	Percent	Change	Percent Change from Initial	Change	Percent Change from Initial	Change	Percent Change from Initial	2013 Year-End Total	Percentage of Year-End Total
Local	184	68.9%	-49	-26.6%	-47	-25.5%	0	0.0%	88	33.0%
Nonlocal	27	10.1%	53	196.3%	16	59.3%	0	0.0%	96	36.0%
Nonresident	56	21.0%	-4	-7.1%	31	55.4%	0	0.0%	83	31.1%
<b>Total</b>	<b>267</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>267</b>	<b>100.0%</b>

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled (such as when a permit holder does not pay the renewal fee for two consecutive years). Table 3 indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery. In the purse seine fishery, transfers have had the largest impact on the changes of resident type. Migrations have also had a large impact.

## Permit Transfers of S01E Permits

Under the Limited Entry Act’s terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer. The transfer surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

**Table 4. Transfer Acquisition Methods in the S01E Fishery, 1980-2013**

Transfer Type	Prince William Sound Salmon Purse Seine		All Prince William Sound Salmon Fisheries		All Fisheries Statewide	
<i>Gift</i>	255	32.2%	617	26.3%	12,150	35.6%
<i>Sale</i>	493	62.2%	1,616	68.8%	20,371	59.7%
<i>Trade</i>	13	1.6%	32	1.4%	470	1.4%
<i>Other</i>	32	4.0%	83	3.5%	1,152	3.4%
<b>Total</b>	<b>793</b>		<b>2,348</b>		<b>34,143</b>	

*All Prince William Sound includes all three Prince William Sound salmon permit fisheries: seine, set gillnet, and drift gillnet.*

Table 4 presents transfer acquisition methods for the Prince William Sound salmon purse seine fishery between 1980 and 2013.<sup>2</sup> During the 1980 – 2013 period, more than half (62.2%) of all transfers were sales, and almost one third (32.2%) of the transfers were gifts. The remaining transfers were trades, or fell into the ‘other’ category. The annual acquisition methods for the limited Prince William Sound salmon permits have not changed substantially throughout the time period.<sup>3</sup>

**Table 5. Relationships of Transferor to Transfer Recipients in the S01E Fishery, 1980-2013**

Relationship	Prince William Sound Salmon Purse Seine		All Prince William Sound Salmon Fisheries		All Fisheries Statewide	
<i>Business Partner/Friend</i>	138	17.4%	412	17.5%	6,309	18.5%
<i>Member of Immediate Family</i>	265	33.4%	657	28.0%	11,452	33.5%
<i>Other Relative</i>	36	4.5%	94	4.0%	1,616	4.7%
<i>Other</i>	354	44.6%	1,185	50.5%	14,765	43.2%
<b>Total</b>	<b>793</b>		<b>2,348</b>		<b>34,142</b>	

*All Prince William Sound includes all three Prince William Sound salmon permit fisheries: seine, set gillnet, and drift gillnet. The 1981 Yakutat salmon set gillnet permit fishery includes one survey in which the relationship was not indicated which affects the totals for ‘All Fisheries Statewide’.*

Table 5 shows the relationships between the transferors and transfer recipients for permits in the Prince William Sound salmon purse seine fishery. Statistics are also provided for all Prince William Sound salmon fisheries (salmon purse seine, drift gillnet, and set gillnet), and all fisheries statewide. Permit transfers between family members, both immediate and non-immediate, vary between 32.0% and 38.2% among each of the three classes of permit holders.

<sup>2</sup> CFEC implemented the transfer survey in 1980.

<sup>3</sup> See *Changes in the Distribution of Alaska’s Commercial Fisheries Entry Permits, 1975-2013*, CFEC Report No. 14-2.

## S01E Permit Value

Many permit transfers are non-monetary transactions (Table 4). This section considers solely the average values of arms-length market transactions where permits are sold. Average values are expressed in both nominal and real (adjusted for inflation) terms.

Table 6. CFEC Estimated S01E Permit Value

Year	S01E Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	15	\$97,578	-	\$235,559	-
1983	19	\$143,186	-	\$334,901	-
1984	11	\$131,695	-	\$295,277	-
1985	17	\$109,625	-	\$237,341	-
1986	13	\$98,841	-	\$210,089	-
1987	21	\$93,500	-	\$191,738	-
1988	18	\$145,972	-	\$287,449	-
1989	6	\$236,333	-	\$443,995	-
1990	6	\$273,333	-	\$487,183	-
1991	10	\$215,500	\$26,500	\$368,592	\$45,326
1992	19	\$98,300	\$10,700	\$163,219	\$17,766
1993	10	\$88,900	\$23,600	\$143,321	\$38,047
1994	17	\$35,300	\$9,200	\$55,488	\$14,462
1995	7	\$64,300	\$12,750	\$98,288	\$19,490
1996	6	\$33,800	\$5,800	\$50,184	\$8,612
1997	17	\$36,400	\$4,850	\$52,833	\$7,040
1998	10	\$36,600	\$5,850	\$52,308	\$8,361
1999	10	\$23,100	\$2,600	\$32,301	\$3,636
2000	18	\$22,000	\$2,400	\$29,762	\$3,247
2001	10	\$21,400	\$1,150	\$28,150	\$1,513
2002	8	\$20,000	\$5,550	\$25,898	\$7,187
2003	3	\$13,500	\$2,400	\$17,092	\$3,039
2004	6	\$14,000	\$1,550	\$17,265	\$1,912
2005	11	\$19,200	\$2,400	\$22,902	\$2,863
2006	12	\$26,100	\$1,900	\$30,160	\$2,196
2007	15	\$30,900	\$4,200	\$34,717	\$4,719
2008	37	\$70,200	\$24,950	\$75,956	\$26,996
2009	7	\$75,300	\$13,400	\$81,765	\$14,551
2010	20	\$100,500	\$26,650	\$107,368	\$28,471
2011	26	\$140,000	\$10,400	\$144,990	\$10,771
2012	13	\$168,700	\$10,100	\$171,171	\$10,248
2013	19	\$168,000	\$23,200	\$168,000	\$23,200
2014	8	\$213,800	\$35,000	\$209,243	\$34,254

1) Permit values represent averages of all arms-length sale transactions over the year. Since 1991, where insufficient data existed, additional data from recent months in the preceding year are included until at least four observations can be averaged.

2) Real permit values were calculated using the 2013 Consumer Price Index from the U.S. Bureau of Labor Statistics.

3) The Standard Deviation was not calculated prior to 1991.

4) Values for 2014 current as of October 2014.

Real permit values were at an all-time high in 1990 before facing a precipitous decline. Permit values bottomed out in the early 2000s. Likewise, the value of many other salmon limited entry permits around the state have experienced similar trajectories.

## Emergency Transfers of S01E Permits

Commercial landings can be made with permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers are granted if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permit holder from participating in the fishery. "Hardship" with respect to the emergency transfer does not include the results of a permit holder's own economic decisions, nor the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, permits that were emergency transferred automatically revert back to the permanent permit holder.

Table 7 shows the total number of unique individuals who recorded landings in the S01E permit fishery each year, and of that group, the number of individuals who made landings with permits held through emergency transfer. Some individuals who made landings with emergency transfer permits also made landings with permanent permits in the same year.

Table 7. Use of Emergency Transfer Permits in the Prince William Sound Salmon Purse Seine Fishery

Year	Total Individuals With Landings	ET Permit Holders with Landings	Rate ET
1975	220	6	2.7%
1976	262	7	2.7%
1977	233	2	0.9%
1978	203	1	0.5%
1979	247	9	3.6%
1980	241	11	4.6%
1981	271	11	4.1%
1982	260	9	3.5%
1983	268	10	3.7%
1984	264	7	2.7%
1985	269	12	4.5%
1986	251	13	5.2%
1987	263	10	3.8%
1988	258	8	3.1%
1989	247	15	6.1%
1990	278	21	7.6%
1991	255	14	5.5%
1992	209	5	2.4%
1993	146	6	4.1%
1994	172	8	4.7%
1995	189	11	5.8%
1996	90	1	1.1%
1997	115	2	1.7%
1998	149	7	4.7%
1999	139	12	8.6%
2000	132	6	4.5%
2001	147	8	5.4%
2002	121	6	5.0%
2003	105	3	2.9%
2004	105	4	3.8%
2005	101	5	5.0%
2006	111	3	2.7%
2007	122	4	3.3%
2008	144	11	7.6%
2009	154	9	5.8%
2010	177	19	10.7%
2011	185	15	8.1%
2012	226	18	8.0%
2013	213	24	11.3%

## Latent S01E Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used to record landings are referred to herein as “latent” permits.

Table 8 indicates the total number of viable permits issued each year in the S01E fishery, and reports the number of permits with commercial landings, and the rate of permit latency. Viable permits include both interim and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted.

After the 1970s, the rate of permit latency dropped to single digit rates which persisted through most of the 1980s. In the early 1990s, the rate of latency increased, reaching a maximum of 66.3% in 1996. It was not until the late 2000s when the latency rate began to decline again.

There are many reasons why an individual might not fish in any given year. This table does not explain any of these reasons, but estimates the rate of permit latency.

**Table 8. Prince William Sound Salmon Purse Seine Permit Latency**

Year	Viable Permits	Fished Permits	Latency Rate
1975	274	219	20.1%
1976	277	259	6.5%
1977	273	232	15.0%
1978	271	203	25.1%
1979	268	244	9.0%
1980	270	239	11.5%
1981	270	268	0.7%
1982	270	258	4.4%
1983	270	266	1.5%
1984	269	262	2.6%
1985	271	265	2.2%
1986	271	248	8.5%
1987	269	257	4.5%
1988	270	255	5.6%
1989	270	241	10.7%
1990	271	265	2.2%
1991	271	253	6.6%
1992	271	207	23.6%
1993	270	144	46.7%
1994	270	171	36.7%
1995	268	187	30.2%
1996	267	90	66.3%
1997	269	114	57.6%
1998	267	148	44.6%
1999	267	138	48.3%
2000	268	130	51.5%
2001	268	147	45.1%
2002	267	120	55.1%
2003	266	105	60.5%
2004	266	104	60.9%
2005	266	101	62.0%
2006	266	111	58.3%
2007	266	120	54.9%
2008	267	141	47.2%
2009	267	154	42.3%
2010	268	174	35.1%
2011	267	183	31.5%
2012	267	224	16.1%
2013	267	210	21.3%

*'Viable Permits' is the number of S01E permits issued in the year. When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted.*

*'Fished Permits' is the number of CFEC permits that were used to record commercial landings in that year.*

## New Entrants into the S01E Fishery

New entrants are defined herein as individuals who record a landing for the first time in the permit fishery. It is important to note that initial permit holders are not considered new entrants; individuals needed a proven fishing history prior to 1975 in order to become an initial permit holder of a limited entry permit.

This table describes individuals rather than permits. Individuals may hold up to two separate S01E permits. Most permits are transferable, so over the years an individual may hold one S01E permit, and then in subsequent years hold a different S01E permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once and only in the year in which they made their first documented landing since 1975.

Table 9. New Entrants into the Prince William Sound Salmon Purse Seine Fishery

Year	Individuals With Landings	New Entrants	Rate of New Entrants	Difference from Mean	Year	Individuals With Landings	New Entrants	Rate of New Entrants	Difference from Mean
1975	220	15	6.8%	-2.9%	1995	189	18	9.5%	-0.3%
1976	262	40	15.3%	5.6%	1996	90	1	1.1%	-8.7%
1977	233	14	6.0%	-3.7%	1997	115	4	3.5%	-6.3%
1978	203	14	6.9%	-2.8%	1998	149	16	10.7%	0.9%
1979	247	39	15.8%	6.1%	1999	139	12	8.6%	-1.2%
1980	241	24	10.0%	0.3%	2000	132	9	6.8%	-3.0%
1981	271	32	11.8%	2.1%	2001	147	15	10.2%	0.4%
1982	260	21	8.1%	-1.6%	2002	121	4	3.3%	-6.5%
1983	268	37	13.8%	4.1%	2003	105	8	7.6%	-2.2%
1984	264	14	5.3%	-4.4%	2004	105	4	3.8%	-6.0%
1985	269	31	11.5%	1.8%	2005	101	3	3.0%	-6.8%
1986	251	22	8.8%	-0.9%	2006	111	6	5.4%	-4.4%
1987	263	23	8.7%	-1.0%	2007	122	6	4.9%	-4.9%
1988	258	23	8.9%	-0.8%	2008	144	26	18.1%	8.3%
1989	247	23	9.3%	-0.4%	2009	154	25	16.2%	6.4%
1990	278	23	8.3%	-1.4%	2010	177	27	15.3%	5.5%
1991	255	22	8.6%	-1.1%	2011	185	20	10.8%	1.0%
1992	209	13	6.2%	-3.5%	2012	226	41	18.1%	8.3%
1993	146	15	10.3%	0.6%	2013	213	22	10.3%	0.5%
1994	172	21	12.2%	2.5%					

1975 - 1994 average 9.7%

1995 - 2013 average 9.8%

Between 1975 and 2007 the rate of new entrants was on average 8.9%, with annual fluctuations ranging between 1.1% and 15.8%. Since 2008, the rate of new entrants fluctuated between 10.3% and 18.1%, with an annual average of 14.6%.

## Age of S01E Permit Holders

Table 10. Median Age of S01E and Select CFEC Permit Holders

Year	Salmon Purse Seine	PWS Salmon	Statewide Salmon Purse Seine	Statewide All Limited Entry Permits	AK Median Age
1975	45.0	39.9	44.0	42.9	24.3
1976	42.8	38.3	43.3	41.3	24.7
1977	42.5	38.4	42.5	40.5	25.1
1978	42.6	38.2	41.7	40.1	25.4
1979	42.2	38.1	41.2	40.1	25.8
1980	42.0	38.5	40.9	39.6	26.0
1981	41.6	38.3	40.9	39.5	26.5
1982	41.1	38.0	40.7	39.5	26.6
1983	40.8	38.0	40.4	39.6	26.8
1984	41.2	38.6	40.9	39.9	27.1
1985	41.7	38.9	41.2	40.1	27.5
1986	41.7	39.1	40.9	40.1	27.8
1987	41.6	39.4	40.8	40.4	28.3
1988	42.3	40.0	40.9	40.6	28.9
1989	42.4	40.6	41.1	41.0	29.4
1990	43.2	40.8	41.7	41.4	29.3
1991	43.2	41.1	41.9	41.9	29.7
1992	44.2	42.5	42.7	42.4	30.1
1993	44.6	42.9	43.2	43.0	30.5
1994	45.4	43.7	43.5	43.5	30.8
1995	46.4	44.0	43.9	43.9	31.1
1996	47.5	44.5	44.6	44.5	31.5
1997	47.9	45.2	45.5	45.0	31.8
1998	48.3	45.9	46.0	45.6	32.1
1999	48.3	46.1	46.9	46.1	32.3
2000	48.0	45.9	47.1	46.6	32.4
2001	48.6	46.9	48.1	47.0	32.7
2002	49.4	47.6	48.8	47.7	33.0
2003	50.1	48.2	49.7	48.4	33.2
2004	50.7	49.0	50.7	48.8	33.4
2005	51.4	49.6	51.4	49.3	33.6
2006	51.4	50.2	51.9	49.7	33.8
2007	51.5	50.4	52.5	50.1	33.9
2008	49.5	50.5	52.6	50.5	33.9
2009	50.4	51.2	53.5	51.1	33.9
2010	50.1	50.9	53.8	51.4	33.8
2011	49.6	50.9	53.9	51.8	33.9
2012	50.0	51.2	54.2	52.1	34.1
2013	50.5	51.4	53.9	52.4	34.3

Table 10 shows the annual median age of five different cohorts for each of the years between 1975 and 2013: 1) Prince William Sound salmon purse seine (S01E) permit holders; 2) all Prince William Sound salmon permit holders (combined set gillnet, drift gillnet, and salmon purse seine); 3) all salmon purse seine permit holders statewide; 4) all CFEC limited entry permit holders; and 5) the median age of all Alaskans.

Note that these figures include ages of permit holders for both transferable and nontransferable permits; however, there were no nontransferable S01E permits issued. Only permanent permits are included. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holders is counted once for each permit that he or she holds.

The median age of Alaskans has increased 10.0 years between 1975 and 2013, which represents a 41.2% increase. The percent change in ages over the same period for all CFEC permit holders, for statewide salmon purse seine permit holders, and for the overall Prince William Sound salmon permit holders increased between 22.0% and 28.6%.

In the Prince William Sound salmon purse seine fishery, changes in median age of permit holders have fluctuated over the years. In 15 of the 38 years, the median age decreased. Overall, the median age of permit holders increased 5.5 years, which is a 12.2% increase.

## S01E Permits, Participation, and Estimated Gross Earnings

Table 11 reports the number of permits, permits with landings, number of vessels with landings, and estimated gross earnings in the Prince William Sound salmon purse seine fishery. Ex-vessel prices used in this table come from the CFEC Gross Earnings file. The table contains figures for 1975 through 2013. Note that the figures by permit in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, largely stem from the Commercial Operators Annual Report and fish ticket values. Earnings are shown in both nominal and real (inflation-adjusted) dollars using the 2013 consumer price index from the U.S. Bureau of Labor.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last interim-entry permit issued for the Prince William Sound salmon purse seine fishery was in 2000. Some individuals made landings on both interim-entry permits and subsequently on their adjudicated permanent permit in these same year; only the permanent permit is counted.

Figure 1. Nominal and Real S01E Average Estimated Ex-vessel Earnings Per Permit

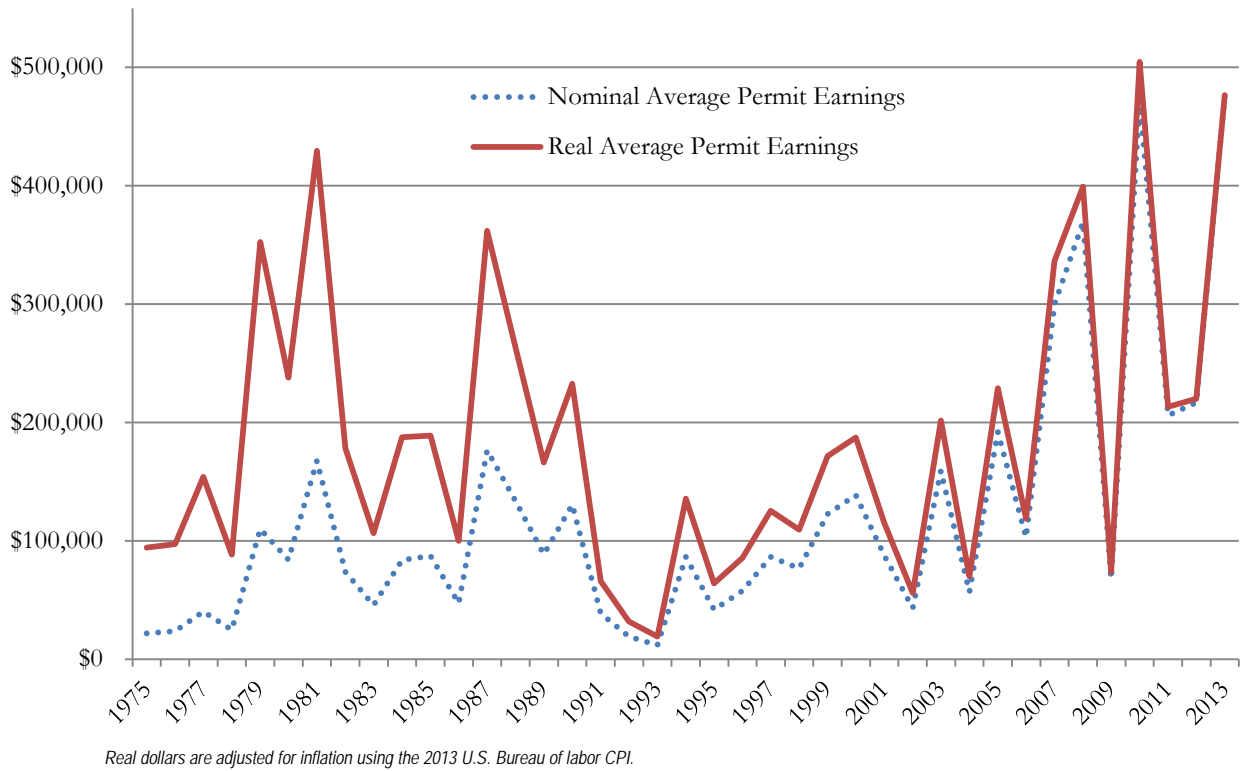




Table 11. Prince William Sound Salmon Purse Seine Permits, Vessels, and Estimated Total Gross Earnings (Real and Nominal) by Permit

Year	Viable Permits	Permits With Landings	Vessels With Landings	Nominal Total Permits Earnings	Nominal Average Permit Earnings	Real* Total Permits Earnings	Real* Average Permit Earnings
1975	274	219	222	\$4,768,363	\$21,773	\$20,647,277	\$94,280
1976	277	259	261	\$6,158,317	\$23,777	\$25,213,061	\$97,348
1977	273	232	248	\$9,302,375	\$40,096	\$35,759,956	\$154,138
1978	271	203	207	\$5,023,899	\$24,748	\$17,950,190	\$88,425
1979	268	244	247	\$26,799,746	\$109,835	\$85,994,332	\$352,436
1980	270	239	243	\$20,096,871	\$84,087	\$56,816,829	\$237,727
1981	270	268	270	\$44,925,101	\$167,631	\$115,133,298	\$429,602
1982	270	258	263	\$19,044,219	\$73,815	\$45,973,929	\$178,194
1983	270	266	273	\$12,097,476	\$45,479	\$28,295,098	\$106,373
1984	269	262	263	\$21,901,232	\$83,592	\$49,105,345	\$187,425
1985	271	265	278	\$23,132,557	\$87,293	\$50,082,632	\$188,991
1986	271	248	253	\$11,674,069	\$47,073	\$24,813,467	\$100,054
1987	269	257	269	\$45,360,842	\$176,501	\$93,020,473	\$361,947
1988	270	255	257	\$34,064,369	\$133,586	\$67,079,740	\$263,058
1989	270	241	255	\$21,316,552	\$88,450	\$40,047,097	\$166,171
1990	271	265	281	\$34,589,475	\$130,526	\$61,651,571	\$232,647
1991	271	253	253	\$9,727,713	\$38,449	\$16,638,318	\$65,764
1992	271	207	212	\$3,957,118	\$19,117	\$6,570,479	\$31,741
1993	270	144	145	\$1,706,858	\$11,853	\$2,751,726	\$19,109
1994	270	171	176	\$14,752,481	\$86,272	\$23,189,566	\$135,611
1995	268	187	187	\$7,832,685	\$41,886	\$11,972,959	\$64,027
1996	267	90	91	\$5,188,891	\$57,654	\$7,704,197	\$85,602
1997	269	114	115	\$9,841,935	\$86,333	\$14,285,032	\$125,307
1998	267	148	150	\$11,334,626	\$76,585	\$16,199,267	\$109,455
1999	267	138	137	\$16,942,605	\$122,772	\$23,690,867	\$171,673
2000	268	130	132	\$18,003,064	\$138,485	\$24,355,051	\$187,347
2001	268	147	145	\$12,862,182	\$87,498	\$16,918,889	\$115,094
2002	267	120	120	\$5,166,570	\$43,055	\$6,690,320	\$55,753
2003	266	105	103	\$16,719,325	\$159,232	\$21,167,847	\$201,599
2004	266	104	103	\$5,898,622	\$56,718	\$7,274,353	\$69,946
2005	266	101	98	\$19,390,127	\$191,981	\$23,128,857	\$228,999
2006	266	111	107	\$11,413,062	\$102,820	\$13,188,257	\$118,813
2007	266	120	116	\$35,955,115	\$299,626	\$40,397,005	\$336,642
2008	267	141	131	\$52,047,970	\$369,135	\$56,315,699	\$399,402
2009	267	154	152	\$10,451,033	\$67,864	\$11,348,352	\$73,691
2010	268	174	173	\$82,212,884	\$472,488	\$87,830,956	\$504,776
2011	267	183	183	\$37,692,355	\$205,969	\$39,035,907	\$213,311
2012	267	224	226	\$48,550,233	\$216,742	\$49,261,377	\$219,917
2013	267	210	207	\$100,114,897	\$476,738	\$100,114,897	\$476,738

\* Adjusted for inflation to 2013 dollars using U.S. Bureau of Labor Consumer Price Index.

## Prince William Sound Salmon Drift Gillnet Fishery

### Limited Entry Permit Holdings in the S03E Fishery

With the advent of limited entry, Prince William Sound salmon permits were issued in the purse seine, drift, and set gillnet fisheries starting in 1975. Table 12 indicates the initial distribution and historical net changes in permit holdings for the drift gillnet (S03E) fishery. CFEC has issued 537 S03E permits. Of this total, Alaska Locals received 65.9% (354) of the permits. Nonlocal Alaskans received 8.8% (47) of the permits, and Nonresidents received the remaining 25.3% (136).

Table 12. Initial Issuance and Year-end 2013 Totals of Prince William Sound Drift Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

Residency	Total		TRANSFERS		MIGRATIONS		CANCELLED		2013 YEAR-END	
	Initially Issued	Percent Issued	Change	Percent Change from Initial	Change	Percent Change from Initial	Change	Percent Change from Initial	2013 Year-End Total	Percentage of Year-End Total
Local	354	65.9%	-46	-13.0%	-61	-17.2%	-1	-0.3%	246	45.9%
Nonlocal	47	8.8%	116	246.8%	6	12.8%	0	0.0%	169	31.5%
Nonresident	136	25.3%	-70	-51.5%	55	40.4%	0	0.0%	121	22.6%
<b>Total</b>	<b>537</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>-1</b>	<b>-0.2%</b>	<b>536</b>	<b>100.0%</b>

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled (such as when a permit holder does not pay the renewal fee for two consecutive years). Table 12 indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery. In the drift gillnet fishery, transfers have had the largest impact on the changes in permit holders among resident types. Migrations have also had a large impact. By the end of 2013, only one permit had been cancelled due to nonpayment.

## Permit Transfers of S03E Permits

Under the Limited Entry Act’s terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer. The transfer surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

**Table 13. Transfer Acquisition Methods in the S03E Fishery, 1980-2013**

Transfer Type	Prince William Sound Drift Gillnet		All Prince William Sound Salmon Fisheries		All Fisheries Statewide	
Gift	318	22.1%	617	26.3%	12,150	35.6%
Sale	1,055	73.4%	1,616	68.8%	20,371	59.7%
Trade	18	1.3%	32	1.4%	470	1.4%
Other	46	3.2%	83	3.5%	1,152	3.4%
<b>Total</b>	<b>1,437</b>		<b>2,348</b>		<b>34,143</b>	

All Prince William Sound includes all three Prince William Sound salmon permit fisheries: seine, set gillnet, and drift gillnet.

Table 13 presents transfer acquisition methods for the Prince William Sound drift gillnet fishery between 1980 and 2013.<sup>4</sup> During the 1980 – 2013 period, almost three fourths (73.4%) of all transfers were sales, and most of the rest (22.1%) of the transfers were gifts. The annual acquisition methods for the limited Prince William Sound salmon permits have not changed substantially throughout the time period.<sup>5</sup>

**Table 14. Relationships of Transferor to Transfer Recipients in the S03E Fishery, 1980-2013**

Relationship	Prince William Sound Drift Gillnet		All Prince William Sound Salmon Fisheries		All Fisheries Statewide	
Business Partner/Friend	250	17.4%	412	17.5%	6,309	18.5%
Member of Immediate Family	346	24.1%	657	28.0%	11,452	33.5%
Other Relative	53	3.7%	94	4.0%	1,616	4.7%
Other	788	54.8%	1,185	50.5%	14,765	43.2%
<b>Total</b>	<b>1,437</b>		<b>2,348</b>		<b>34,142</b>	

All Prince William Sound includes all three Prince William Sound salmon permit fisheries: seine, set gillnet, and drift gillnet. The 1981 Yakutat salmon set gillnet permit fishery includes one survey in which the relationship was not indicated which affects the totals for 'All Fisheries Statewide'.

Table 14 shows the relationships between the transferors and transfer recipients for permits in the Prince William Sound drift gillnet fishery. Statistics are also provided for all Prince William Sound salmon fisheries (salmon purse seine, drift gillnet, and set gillnet), and all fisheries statewide.

Permit transfers between family members, both immediate and non-immediate, vary between 27.8% and 38.2% among each of the three classes of permit holders.

<sup>4</sup> CFEC implemented the transfer survey in 1980.

<sup>5</sup> See *Changes in the Distribution of Alaska’s Commercial Fisheries Entry Permits, 1975-2013*, CFEC Report No. 14-2.

## S03E Permit Value

Many permit transfers are non-monetary transactions (Table 13). This section considers solely the average values of arms-length market transactions where permits are sold. Average values are expressed in both nominal and real (adjusted for inflation) terms.

Table 15. CFEC Estimated S03E Permit Value

Year	S03E Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	51	\$46,337	-	\$111,860	-
1983	39	\$61,760	-	\$144,452	-
1984	35	\$53,544	-	\$120,052	-
1985	54	\$55,991	-	\$121,222	-
1986	46	\$61,606	-	\$130,945	-
1987	45	\$62,365	-	\$127,891	-
1988	51	\$75,884	-	\$149,431	-
1989	14	\$141,115	-	\$265,111	-
1990	29	\$159,797	-	\$284,819	-
1991	23	\$127,300	\$20,900	\$217,734	\$35,747
1992	25	\$98,100	\$17,350	\$162,887	\$28,808
1993	14	\$99,300	\$8,450	\$160,087	\$13,623
1994	19	\$65,800	\$12,700	\$103,432	\$19,963
1995	32	\$69,000	\$14,900	\$105,473	\$22,776
1996	27	\$60,600	\$9,450	\$89,976	\$14,031
1997	23	\$67,900	\$7,950	\$98,553	\$11,539
1998	27	\$69,300	\$7,500	\$99,042	\$10,719
1999	24	\$55,200	\$7,600	\$77,186	\$10,627
2000	26	\$59,300	\$4,400	\$80,223	\$5,952
2001	19	\$57,500	\$3,600	\$75,635	\$4,735
2002	15	\$41,000	\$5,900	\$53,092	\$7,640
2003	21	\$35,900	\$2,450	\$45,452	\$3,102
2004	27	\$40,400	\$3,250	\$49,822	\$4,008
2005	24	\$48,300	\$4,750	\$57,613	\$5,666
2006	28	\$51,600	\$3,500	\$59,626	\$4,044
2007	26	\$52,000	\$2,350	\$58,424	\$2,640
2008	33	\$90,300	\$12,050	\$97,704	\$13,038
2009	25	\$110,900	\$7,750	\$120,422	\$8,415
2010	45	\$128,100	\$21,300	\$136,854	\$22,756
2011	32	\$162,100	\$9,250	\$167,878	\$9,580
2012	26	\$180,200	\$7,000	\$182,839	\$7,103
2013	20	\$195,200	\$8,500	\$195,200	\$8,500
2014	18	\$237,500	\$5,000	\$232,437	\$4,893

1) Permit values represent averages of all arms-length sale transactions over the year. Since 1991, where insufficient data existed, additional data from recent months in the preceding year are included until at least four observations can be averaged.

2) Real permit values were calculated using the 2013 Consumer Price Index from the U.S. Bureau of Labor Statistics.

3) The Standard Deviation was not calculated prior to 1991.

4) Values for 2014 current as of October 2014.

Real permit values were at an all-time high in 1990 before facing a precipitous decline. Permit values bottomed out in the early 2000s. Likewise, the value of many other salmon limited entry permits around the state have experienced similar trajectories.

## Emergency Transfers of S03E Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers.

Emergency transfers are granted if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permit holder from participating in the fishery. "Hardship" with respect to the emergency transfer does not include the results of a permit holder's own economic decisions, nor the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, permits that were emergency transferred automatically revert back to the permanent permit holder.

Table 16 shows the total number of unique individuals who recorded landings in the S03E permit fishery each year, and of that group, the number of individuals who made landings with permits held through emergency transfer. Some individuals who made landings with emergency transfer permits also made landings with permanent permits in the same year.

Table 16. Use of Emergency Transfer Permits in the Prince William Sound Drift Gillnet Fishery

Year	Total Individuals With Landings	ET Permit Holders with Landings	Rate ET
1975	442	11	2.5%
1976	498	22	4.4%
1977	508	15	3.0%
1978	528	18	3.4%
1979	518	19	3.7%
1980	397	8	2.0%
1981	491	21	4.3%
1982	544	30	5.5%
1983	543	19	3.5%
1984	542	23	4.2%
1985	559	30	5.4%
1986	547	37	6.8%
1987	530	26	4.9%
1988	542	24	4.4%
1989	502	26	5.2%
1990	543	25	4.6%
1991	527	21	4.0%
1992	537	25	4.7%
1993	523	31	5.9%
1994	522	31	5.9%
1995	533	36	6.8%
1996	521	29	5.6%
1997	534	29	5.4%
1998	533	29	5.4%
1999	535	37	6.9%
2000	537	33	6.1%
2001	527	26	4.9%
2002	529	27	5.1%
2003	519	26	5.0%
2004	520	23	4.4%
2005	514	28	5.4%
2006	503	29	5.8%
2007	509	28	5.5%
2008	518	34	6.6%
2009	539	61	11.3%
2010	548	60	10.9%
2011	534	56	10.5%
2012	545	57	10.5%
2013	540	48	8.9%

## Latent S03E Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used to record landings are referred to herein as “latent” permits.

Table 17 indicates the total number of viable permits issued each year in the S03E fishery, and reports the number of permits with commercial landings, and the rate of permit latency. Viable permits include both interim and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted.

The S03E permit fishery has had the lowest rate of permit latency among the three Prince William Sound salmon fisheries. Since 1989 the latency rate has stayed below 10%.

There are many reasons why an individual might not fish in any given year. This table does not explain any of these reasons, but estimates the rate of permit latency.

Table 17. Prince William Sound Drift Gillnet Permit Latency

Year	Viable Permits	Fished Permits	Latency Rate
1975	533	435	18.4%
1976	534	475	11.0%
1977	532	498	6.4%
1978	544	514	5.5%
1979	549	506	7.8%
1980	545	393	27.9%
1981	546	479	12.3%
1982	543	524	3.5%
1983	543	528	2.8%
1984	543	522	3.9%
1985	544	533	2.0%
1986	544	525	3.5%
1987	542	519	4.2%
1988	541	525	3.0%
1989	542	485	10.5%
1990	541	521	3.7%
1991	541	517	4.4%
1992	541	527	2.6%
1993	541	514	5.0%
1994	541	506	6.5%
1995	542	518	4.4%
1996	539	509	5.6%
1997	540	520	3.7%
1998	541	522	3.5%
1999	541	521	3.7%
2000	541	526	2.8%
2001	541	522	3.5%
2002	540	519	3.9%
2003	540	510	5.6%
2004	540	513	5.0%
2005	538	502	6.7%
2006	538	492	8.6%
2007	537	502	6.5%
2008	537	507	5.6%
2009	537	511	4.8%
2010	537	519	3.4%
2011	537	513	4.5%
2012	537	522	2.8%
2013	536	525	2.1%

*'Viable Permits' is the number of S03E permits issued in the year. When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted.*

*'Fished Permits' is the number of CFEC permits that were used to record commercial landings in that year.*

## New Entrants into the S03E Fishery

New entrants are defined herein as individuals who record a landing for the first time in the permit fishery. It is important to note that initial permit holders are not considered new entrants; individuals needed a proven fishing history prior to 1975 in order to become an initial permit holder of a limited entry permit.

This table describes individuals rather than permits. Individuals may hold up to two separate S03E permits. Most permits are transferable, so over the years an individual may hold one S03E permit, and then in subsequent years hold a different S03E permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once and only in the year in which they made their first documented landing since 1975.

Table 18. New Entrants into the Prince William Sound Drift Gillnet Fishery

Year	Individuals With Landings	New Entrants	Rate of New Entrants	Difference from Mean
1975	442	28	6.3%	-2.9%
1976	498	68	13.7%	4.5%
1977	508	51	10.0%	0.8%
1978	528	63	11.9%	2.7%
1979	518	58	11.2%	2.0%
1980	397	33	8.3%	-0.9%
1981	491	58	11.8%	2.6%
1982	544	74	13.6%	4.4%
1983	543	59	10.9%	1.7%
1984	542	47	8.7%	-0.5%
1985	559	66	11.8%	2.6%
1986	547	57	10.4%	1.2%
1987	530	46	8.7%	-0.5%
1988	542	62	11.4%	2.2%
1989	502	32	6.4%	-2.8%
1990	543	40	7.4%	-1.8%
1991	527	33	6.3%	-2.9%
1992	537	33	6.1%	-3.1%
1993	523	19	3.6%	-5.6%
1994	522	23	4.4%	-4.8%

*1975 - 1994 average 9.2%*

Year	Individuals With Landings	New Entrants	Rate of New Entrants	Difference from Mean
1995	533	40	7.5%	1.2%
1996	521	33	6.3%	0.0%
1997	534	30	5.6%	-0.7%
1998	533	27	5.1%	-1.2%
1999	535	26	4.9%	-1.4%
2000	537	26	4.8%	-1.5%
2001	527	16	3.0%	-3.3%
2002	529	22	4.2%	-2.1%
2003	519	19	3.7%	-2.6%
2004	520	25	4.8%	-1.5%
2005	514	29	5.6%	-0.7%
2006	503	30	6.0%	-0.3%
2007	509	30	5.9%	-0.4%
2008	518	32	6.2%	-0.1%
2009	539	55	10.2%	3.9%
2010	548	59	10.8%	4.5%
2011	534	45	8.4%	2.1%
2012	545	51	9.4%	3.1%
2013	540	35	6.5%	0.2%

*1995 - 2013 average 6.3%*

The highest rate of new entrants occurred between 1975 and the late 1980s. Between the late 1980s and late 2000s, the rate of new entrants was lower, even dipping down to 3.0% in 2001. By 2009, the rate was back up to 10.2%, but has since decreased to 6.5% in 2013.

## Age of S03E Permit Holders

Table 19. Median Age of S03E and Select CFEC Permit Holders

Year	Drift Gillnet	PWS Salmon	Statewide Drift Gillnet	Statewide All Limited Entry Permits	AK Median Age
1975	39.3	39.9	44.0	42.9	24.3
1976	39.0	38.3	43.0	41.3	24.7
1977	38.6	38.4	42.0	40.5	25.1
1978	38.8	38.2	41.6	40.1	25.4
1979	39.2	38.1	41.7	40.1	25.8
1980	39.3	38.5	41.6	39.6	26.0
1981	38.9	38.3	41.2	39.5	26.5
1982	38.3	38.0	40.5	39.5	26.6
1983	38.7	38.0	40.4	39.6	26.8
1984	39.2	38.6	40.7	39.9	27.1
1985	39.4	38.9	40.9	40.1	27.5
1986	40.0	39.1	40.7	40.1	27.8
1987	40.2	39.4	41.1	40.4	28.3
1988	40.4	40.0	41.3	40.6	28.9
1989	40.7	40.6	41.5	41.0	29.4
1990	40.9	40.8	42.0	41.4	29.3
1991	41.5	41.1	42.3	41.9	29.7
1992	42.6	42.5	42.8	42.4	30.1
1993	43.5	42.9	43.1	43.0	30.5
1994	44.3	43.7	43.7	43.5	30.8
1995	44.3	44.0	43.9	43.9	31.1
1996	44.3	44.5	44.3	44.5	31.5
1997	45.0	45.2	45.0	45.0	31.8
1998	45.4	45.9	45.4	45.6	32.1
1999	45.6	46.1	45.9	46.1	32.3
2000	45.7	45.9	46.5	46.6	32.4
2001	46.8	46.9	47.1	47.0	32.7
2002	47.3	47.6	47.9	47.7	33.0
2003	47.5	48.2	48.4	48.4	33.2
2004	48.0	49.0	48.8	48.8	33.4
2005	48.3	49.6	49.0	49.3	33.6
2006	48.5	50.2	49.5	49.7	33.8
2007	48.3	50.4	49.5	50.1	33.9
2008	48.4	50.5	49.9	50.5	33.9
2009	48.5	51.2	50.2	51.1	33.9
2010	47.3	50.9	50.4	51.4	33.8
2011	47.1	50.9	50.6	51.8	33.9
2012	46.6	51.2	50.9	52.1	34.1
2013	47.0	51.4	50.8	52.4	34.3

Table 19 shows the annual median age of five different cohorts for each of the years between 1975 and 2013: 1) Prince William Sound drift gillnet (S03E) permit holders; 2) all Prince William Sound salmon permit holders (combined set gillnet, drift gillnet, and salmon purse seine); 3) all salmon drift gillnet permit holders statewide; 4) all CFEC limited entry permit holders; and 5) the median age of all Alaskans.

Note that these figures include ages of permit holders for both transferable and nontransferable permits; however, there were no nontransferable S03E permits issued. Only permanent permits are included. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The median age of Alaskans has increased 10.0 years between 1975 and 2013, which represents a 41.2% increase. The percent change in ages over the same period for all CFEC permit holders, for statewide drift gillnet permit holders, and for the overall Prince William Sound salmon permit holders increased between 15.5% and 28.6%.

In the Prince William Sound drift gillnet fishery, the median age of permit holders increased 7.7 years, which is a 19.7% increase.



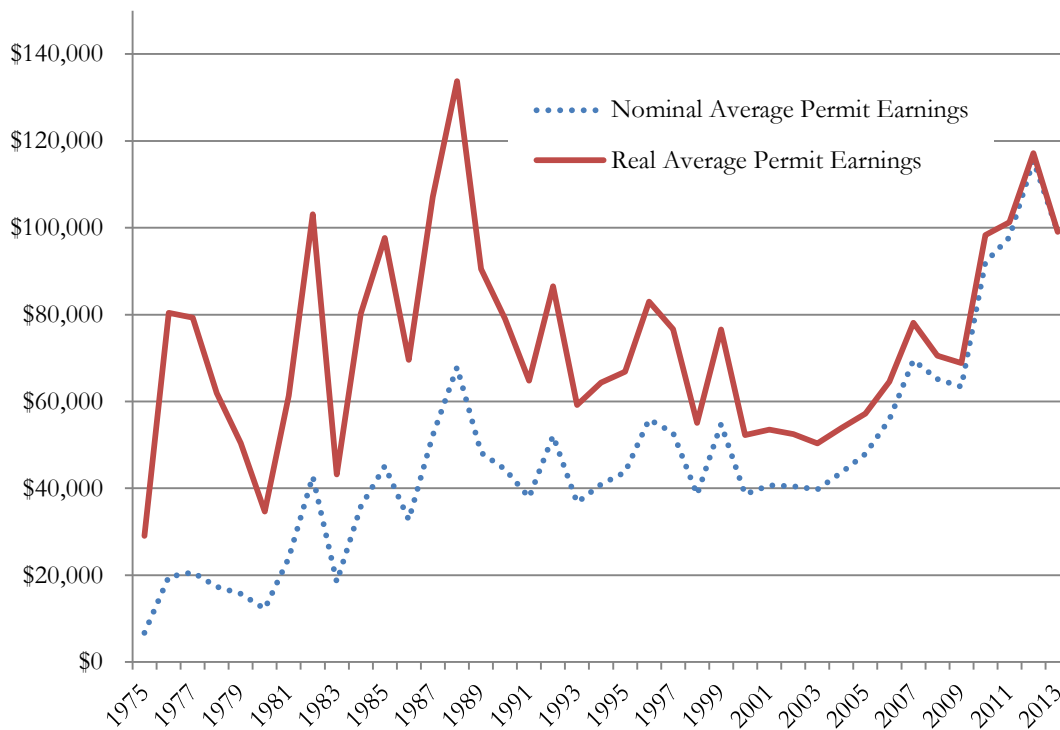
## S03E Permits, Participation, and Estimated Gross Earnings

Table 20 reports the number of permits, permits with landings, number of vessels with landings, and estimated gross earnings in the Prince William Sound drift gillnet fishery. Ex-vessel prices used in this table come from the CFEC Gross Earnings file. The table contains figures for 1975 through 2013. Note that the figures by permit in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, largely stem from the Commercial Operators Annual Report and fish ticket values. Earnings are shown in both nominal and real (inflation-adjusted) dollars using the 2013 consumer price index from the U.S. Bureau of Labor.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last interim-entry permit issued in the Prince William Sound drift gillnet fishery was in 1989. Some individuals made landings on both interim-entry permits and subsequently on their adjudicated permanent permit in these same year, only the permanent permit is counted.

Figure 2. Nominal and Real S03E Average Estimated Ex-vessel Earnings Per Permit



Real dollars are adjusted for inflation using the 2013 U.S. Bureau of labor CPI.

Table 20. Prince William Sound Drift Gillnet Permits, Vessels, and Estimated Total Gross Earnings (Real and Nominal) by Permit

Year	Viable Permits	Permits With Landings	Vessels	Nominal Total Value	Average Permit Nominal Earnings	Real* Total Earnings	Average Permit Real* Earnings
1975	533	435	438	\$2,922,434	\$6,718	\$12,654,302	\$29,090
1976	534	475	477	\$9,332,823	\$19,648	\$38,209,957	\$80,442
1977	532	498	534	\$10,277,264	\$20,637	\$39,507,600	\$79,333
1978	544	514	552	\$8,909,837	\$17,334	\$31,834,491	\$61,935
1979	549	506	529	\$7,950,772	\$15,713	\$25,512,231	\$50,419
1980	545	393	395	\$4,818,321	\$12,260	\$13,622,107	\$34,662
1981	546	479	483	\$11,468,052	\$23,942	\$29,390,133	\$61,357
1982	543	524	552	\$22,388,631	\$42,726	\$54,047,547	\$103,144
1983	543	528	557	\$9,746,248	\$18,459	\$22,795,750	\$43,174
1984	543	522	643	\$18,663,272	\$35,753	\$41,845,426	\$80,164
1985	544	533	732	\$24,051,015	\$45,124	\$52,071,119	\$97,694
1986	544	525	653	\$17,181,009	\$32,726	\$36,518,580	\$69,559
1987	542	519	745	\$27,100,640	\$52,217	\$55,574,682	\$107,080
1988	541	525	749	\$35,656,356	\$67,917	\$70,214,690	\$133,742
1989	542	485	762	\$23,375,424	\$48,197	\$43,915,071	\$90,547
1990	541	521	1,047	\$23,105,657	\$44,349	\$41,183,050	\$79,046
1991	541	517	903	\$19,592,906	\$37,897	\$33,511,782	\$64,820
1992	541	527	642	\$27,458,043	\$52,103	\$45,591,898	\$86,512
1993	541	514	610	\$18,863,565	\$36,700	\$30,411,069	\$59,166
1994	541	506	601	\$20,723,746	\$40,956	\$32,575,854	\$64,379
1995	542	518	544	\$22,648,223	\$43,722	\$34,619,830	\$66,834
1996	539	509	536	\$28,460,838	\$55,915	\$42,257,179	\$83,020
1997	540	520	560	\$27,462,172	\$52,812	\$39,859,846	\$76,654
1998	541	522	556	\$20,115,875	\$38,536	\$28,749,287	\$55,075
1999	541	521	560	\$28,544,014	\$54,787	\$39,913,133	\$76,609
2000	541	526	547	\$20,325,656	\$38,642	\$27,497,119	\$52,276
2001	541	522	534	\$21,236,239	\$40,682	\$27,934,108	\$53,514
2002	540	519	534	\$21,026,589	\$40,514	\$27,227,855	\$52,462
2003	540	510	520	\$20,269,755	\$39,745	\$25,662,942	\$50,319
2004	540	513	517	\$22,408,577	\$43,681	\$27,634,911	\$53,869
2005	538	502	512	\$24,066,702	\$47,942	\$28,707,152	\$57,186
2006	538	492	497	\$27,497,718	\$55,890	\$31,774,732	\$64,583
2007	537	502	508	\$34,903,708	\$69,529	\$39,215,707	\$78,119
2008	537	507	544	\$33,038,463	\$65,165	\$35,747,487	\$70,508
2009	537	511	527	\$32,395,561	\$63,396	\$35,177,022	\$68,840
2010	537	519	533	\$47,761,081	\$92,025	\$51,024,866	\$98,314
2011	537	513	528	\$50,157,831	\$97,774	\$51,945,718	\$101,259
2012	537	522	540	\$60,292,130	\$115,502	\$61,175,265	\$117,194
2013	536	525	539	\$52,020,760	\$99,087	\$52,020,760	\$99,087

\* Adjusted for inflation to 2013 dollars using U.S. Bureau of Labor Consumer Price Index.

## Prince William Sound Salmon Set Gillnet Fishery

### Limited Entry Permit Holdings in the S04E Fishery

With the advent of limited entry, Prince William Sound salmon permits were issued in the purse seine, drift, and set gillnet fisheries starting in 1975. Table 21 indicates the initial distribution and historical net changes in permit holdings for the set gillnet (S04E) fishery. CFEC has issued 30 S04E permits. Of this total, Alaska Locals received 70.0% (21) permits. Nonlocal Alaskans received 2 permits, and nonresidents received 7 permits.

Table 21. Initial Issuance and Year-end 2013 Totals of Prince William Sound Set Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

Residency	Total Initially Issued		TRANSFERS Percent Change from Initial		MIGRATIONS Percent Change from Initial		CANCELLED Percent Change from Initial		2013 YEAR-END 2013 Year-End Total and Percentage of Year-End Total	
	Issued	Percent Issued	Change	Initial	Change	from Initial	Change	Initial	Total	Percentage Total
Local	21	70.0%	-12	-57.1%	-2	-9.5%	0	0.0%	7	24.1%
Nonlocal	2	6.7%	14	700.0%	2	100.0%	-1	-50.0%	17	58.6%
Nonresident	7	23.3%	-2	-28.6%	0	0.0%	0	0.0%	5	17.2%
<b>Total</b>	<b>30</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>-1</b>	<b>-3.3%</b>	<b>29</b>	<b>100.0%</b>

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled (such as when a permit holder does not pay the renewal fee for two years in a row). Table 3 indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery. In the set gillnet fishery, transfers have had the largest impact on the changes of resident type. Note that by the end of 2013, 1 permit had been cancelled due to nonpayment of permit renewal fees.

## Permit Transfers of S04E Permits

Under the Limited Entry Act's terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer. The transfer surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 22. Transfer Acquisition Methods in the S04E Fishery, 1980-2013

Transfer Type	Prince William Sound Set Gillnet		All Prince William Sound Salmon Fisheries		All Fisheries Statewide	
Gift	44	37.3%	617	26.3%	12,150	35.6%
Sale	68	57.6%	1,616	68.8%	20,371	59.7%
Trade	1	0.8%	32	1.4%	470	1.4%
Other	5	4.2%	83	3.5%	1,152	3.4%
<b>Total</b>	<b>118</b>		<b>2,348</b>		<b>34,143</b>	

All Prince William Sound includes all three Prince William Sound salmon permit fisheries: seine, set gillnet, and drift gillnet.

Table 22 presents transfer acquisition methods for the Prince William Sound salmon set gillnet fishery between 1980 and 2013.<sup>6</sup> During the 1980 – 2013 period, more than half (57.6%) of all transfers were sales, just over one-third (37.3%) of the transfers were gifts, and the remaining transfers were either in the trade or 'other' category. The annual acquisition methods for the limited Prince William Sound salmon permits have not changed substantially throughout the time period.<sup>7</sup> When compared to the other salmon permit fisheries in Prince William Sound or all permit transfers of CFEC permits statewide, the percent of gifted transfers is higher and the rate of permit sales is lower. A higher rate of gifts is typical of set gillnet permit fisheries statewide.

Table 23. Relationships of Transferor to Transfer Recipients in the S04E Fishery, 1980-2013

Relationship	Prince William Sound Set Gillnet		All Prince William Sound Salmon Fisheries		All Fisheries Statewide	
Business Partner/Friend	24	20.3%	412	17.5%	6,309	18.5%
Member of Immediate Family	46	39.0%	657	28.0%	11,452	33.5%
Other Relative	5	4.2%	94	4.0%	1,616	4.7%
Other	43	36.4%	1,185	50.5%	14,765	43.2%
<b>Total</b>	<b>118</b>		<b>2,348</b>		<b>34,142</b>	

All Prince William Sound includes all three Prince William Sound salmon permit fisheries: seine, set gillnet, and drift gillnet.

The 1981 Yakutat salmon set gillnet permit fishery includes one survey in which the relationship was not indicated which affects the totals for 'All Fisheries Statewide'.

Table 23 shows the relationships between the transferors and transfer recipients for permits in the Prince William Sound salmon set gillnet fishery. Statistics are also provided for all Prince William Sound salmon fisheries (salmon purse seine, drift gillnet, and set gillnet), and all fisheries statewide. Permit transfers between family members, both immediate and non-immediate, vary between 32.0% and 43.2% among each of the three classes of permit holders.

<sup>6</sup> CFEC implemented the transfer survey in 1980.

<sup>7</sup> See *Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2013*, CFEC Report No. 14-2.

## S04E Permit Value

Many permit transfers are non-monetary transactions (Table 22). This section considers solely the average values of arms-length market transactions where permits are sold. Average values are expressed in both nominal and real (adjusted for inflation) terms. Estimated permit values are calculated with at least four permit sale transactions; because of the low number of sales in this fishery, the average for one year may include permit sales that span multiple years.

Table 24. CFEC Estimated S04E Permit Value

Year	S04E Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	5	\$19,400	-	\$46,833	-
1983	6	\$24,167	-	\$56,525	-
1984	4	\$31,250	-	\$70,066	-
1985	4	\$32,375	-	\$70,093	-
1986	1	-	-	-	-
1987	4	\$29,625	-	\$60,751	-
1988	2	\$49,833	-	\$98,131	-
1989	1	\$64,167	-	\$120,550	-
1990	1	\$86,667	-	\$154,473	-
1991	1	\$90,000	\$11,550	\$153,936	\$19,755
1992	1	\$95,000	\$10,000	\$157,740	\$16,604
1993	0	\$95,000	\$10,000	\$153,155	\$16,122
1994	2	\$75,000	\$33,150	\$117,893	\$52,109
1995	3	\$63,000	\$19,850	\$96,301	\$30,342
1996	2	\$59,000	\$18,850	\$87,600	\$27,988
1997	1	\$50,000	\$11,550	\$72,572	\$16,764
1998	2	\$51,000	\$10,250	\$72,888	\$14,649
1999	0	\$51,000	\$10,250	\$71,313	\$14,333
2000	4	\$60,500	\$7,450	\$81,846	\$10,079
2001	3	\$60,300	\$4,550	\$79,319	\$5,985
2002	2	\$59,200	\$6,700	\$76,660	\$8,676
2003	1	\$59,900	\$6,050	\$75,838	\$7,660
2004	3	\$62,800	\$2,050	\$77,447	\$2,528
2005	1	\$62,700	\$2,050	\$74,790	\$2,445
2006	1	\$61,500	\$1,700	\$71,066	\$1,964
2007	0	\$61,500	\$1,700	\$69,098	\$1,910
2008	1	\$59,500	\$3,250	\$64,379	\$3,516
2009	1	\$59,500	\$3,250	\$64,609	\$3,529
2010	1	\$59,800	\$3,700	\$63,886	\$3,953
2011	0	\$59,800	\$3,700	\$61,932	\$3,832
2012	1	\$61,000	\$4,550	\$61,894	\$4,617
2013	2	\$119,300	\$69,450	\$119,300	\$69,450
2014	1	\$190,800	\$285,000	\$186,733	\$278,925

1) Permit values represent averages of all arms-length sale transactions over the year. Since 1991, where insufficient data existed, additional data from recent months in the preceding year are included until at least four observations can be averaged.

2) Real permit values were calculated using the 2013 Consumer Price Index from the U.S. Bureau of Labor Statistics.

3) The Standard Deviation was not calculated prior to 1991.

4) Values for 2014 current as of October 2014.

Real permit values reached a high in 1992 before declining. In 2010, average earnings more than doubled (see Table 30), which may partly explain why permit values increased to \$119,300 in 2013. As of October 2014, the S04E real (inflation adjusted) permit value was \$186,733, which is higher than the real 1992 permit value.

## Emergency Transfers of S04E Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers.

Emergency transfers are granted if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permit holder from participating in the fishery. "Hardship" with respect to the emergency transfer does not include the results of a permit holder's own economic decisions, nor the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, permits that were emergency transferred automatically revert back to the permanent permit holder.

Table 25 shows the total number of unique individuals who recorded landings in the S04E permit fishery each year, and of that group, the number of individuals who made landings with permits held through emergency transfer. Some individuals who made landings with emergency transfer permits also made landings with permanent permits in the same year.

Table 25. Use of Emergency Transfer Permits in the Prince William Sound Set Gillnet Fishery

Year	Total Individuals With Landings	ET Permit Holders with Landings	Rate ET
1975	0	0	-
1976	1	0	0.0%
1977	14	0	0.0%
1978	2	0	0.0%
1979	7	1	14.3%
1980	11	0	0.0%
1981	3	0	0.0%
1982	5	0	0.0%
1983	19	0	0.0%
1984	19	0	0.0%
1985	20	0	0.0%
1986	17	0	0.0%
1987	21	0	0.0%
1988	28	0	0.0%
1989	0	0	-
1990	30	1	3.3%
1991	31	2	6.5%
1992	32	2	6.3%
1993	30	1	3.3%
1994	27	3	11.1%
1995	28	1	3.6%
1996	26	0	0.0%
1997	28	1	3.6%
1998	17	0	0.0%
1999	22	1	4.5%
2000	29	2	6.9%
2001	32	3	9.4%
2002	29	4	13.8%
2003	30	4	13.3%
2004	27	2	7.4%
2005	26	3	11.5%
2006	27	3	11.1%
2007	26	6	23.1%
2008	25	2	8.0%
2009	27	5	18.5%
2010	28	5	17.9%
2011	30	5	16.7%
2012	29	4	13.8%
2013	29	2	6.9%
<i>average</i>	21.3	1.6	7.6%

## DNR Shore Fishery Leases in the S04E Fishery

The Department of Natural Resources (DNR) administers a shore fishery lease program for the use of state owned and managed tidelands by CFEC set gillnet permit holders in Prince William Sound. A shore fishery lease grants permit holders the first right of priority to fish a tract of tidelands. Many permit holders obtain shore fishery leases, although a lease is not required in order to fish.

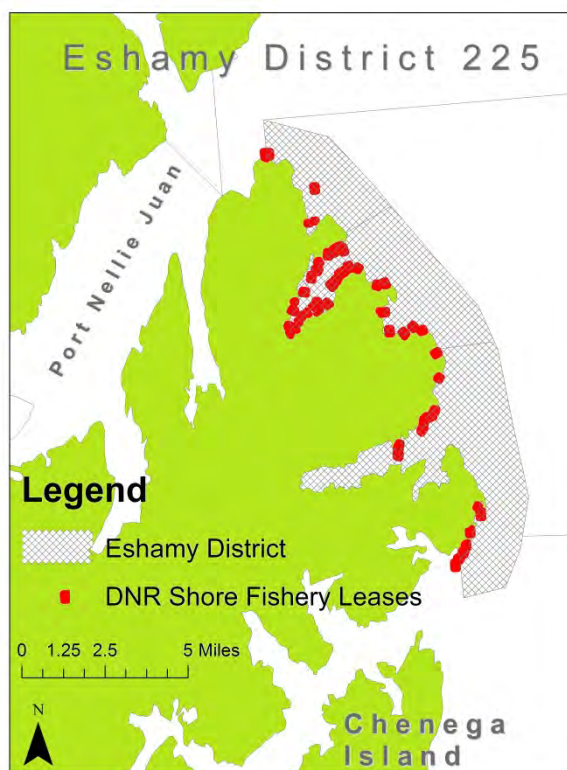
**Table 26. Year-end Count of CFEC Permits with DNR Leases**

Year	Viable Permits	CFEC Permits with DNR Leases	
		Count	Percent
1975	26	14	53.8%
1976	28	15	53.6%
1977	29	15	51.7%
1978	28	15	53.6%
1979	30	16	53.3%
1980	30	16	53.3%
1981	31	18	58.1%
1982	30	19	63.3%
1983	30	18	60.0%
1984	30	18	60.0%
1985	30	18	60.0%
1986	30	17	56.7%
1987	30	18	60.0%
1988	30	21	70.0%
1989	30	25	83.3%
1990	30	23	76.7%
1991	30	24	80.0%
1992	30	24	80.0%
1993	30	26	86.7%
1994	30	26	86.7%
1995	30	25	83.3%
1996	30	22	73.3%
1997	30	24	80.0%
1998	30	24	80.0%
1999	30	23	76.7%
2000	30	23	76.7%
2001	30	22	73.3%
2002	30	23	76.7%
2003	30	24	80.0%
2004	30	23	76.7%
2005	30	22	73.3%
2006	29	21	72.4%
2007	30	22	73.3%
2008	29	22	75.9%
2009	29	21	72.4%
2010	29	22	75.9%
2011	29	24	82.8%
2012	29	24	82.8%
2013	29	24	82.8%

In Prince William Sound, the DNR shore fishery lease program allows a permit holder to maintain up to three tracts per permit.<sup>8</sup> While some tracts are adjacent to one another, other tracts may be scattered miles apart. Additional information regarding DNR shore fishery leases can be found in CFEC publication 14-3.<sup>9</sup>

Table 26 reports the year-end count of DNR lease holdings for S04E permit holders. Each CFEC permit with a DNR shore fishery lease is counted as of December 31 of each year. Figure 6 depicts the location of DNR shore fishery leases as of October 10, 2014.

**Figure 3. S04E DNR Shore Fishery Lease Sites**



<sup>8</sup> See 11 AAC 24.0331(b)(1)(D).

<sup>9</sup> See *CFEC Salmon Set Gillnet Permits and DNR Shore Fishery Leases in Prince William Sound, Cook Inlet, Kodiak, Alaska Peninsula, and Bristol Bay 1975-2013*. CFEC Report No. 14-4.

## Latent S04E Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used to record landings are referred to herein as “latent” permits.

Table 27 indicates the total number of viable permits issued each year in the S04E fishery, and reports the number of permits with commercial landings, and the rate of permit latency. Viable permits include both interim and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted.

Several complications make it difficult to accurately count the number of latent permits. The figures should be viewed with caution. In some cases, permits might be active in the fishery but might not be used to record landings. This can occur when permit holders fish in a group, especially among family or friends, and the group records their landings on only one, or some, of the group’s permits. Although this practice is unlawful,<sup>10</sup> it allegedly occurs in the set gillnet fisheries at a rate higher than in other fisheries. The effect would be to under-count the number of permits active in the fishery, and over-estimate the latency rate.

Individuals who hold a DNR Shore Fishery Lease are required by regulation to fish at least four openings in years when they hold a lease.<sup>11</sup> The ‘Fished, DNR’ column counts permits that either held a DNR Shore Fishery Lease or made a landing. The actual rate of latent permits is likely between the ‘Fished Permits’ rate and the ‘Fished, DNR’ rate.

There are many reasons why an individual might not fish in any given year. This table does not explain any of these reasons, but estimates the rate of permit latency.

Table 27. Prince William Sound Set Gillnet Permit Latency

Year	Viable Permits	Fished Permits	Calculated Latency Rate	Fished, DNR	Calculated Latency Rate
1975	26	0	100.0%	14	46.2%
1976	28	1	96.4%	16	42.9%
1977	29	14	51.7%	21	27.6%
1978	28	2	92.9%	17	39.3%
1979	30	7	76.7%	19	36.7%
1980	30	11	63.3%	20	30.3%
1981	31	3	90.3%	20	35.5%
1982	30	5	83.3%	22	26.7%
1983	30	17	43.3%	24	20.0%
1984	30	19	36.7%	24	20.0%
1985	30	20	33.3%	26	13.3%
1986	30	17	43.3%	22	26.7%
1987	30	21	30.0%	27	10.0%
1988	30	28	6.7%	29	3.3%
1989	30	0	100.0%	25	16.7%
1990	30	29	3.3%	29	3.3%
1991	30	29	3.3%	30	0.0%
1992	30	30	0.0%	30	0.0%
1993	30	30	0.0%	30	0.0%
1994	30	26	13.3%	30	0.0%
1995	30	27	10.0%	30	0.0%
1996	30	26	13.3%	29	3.3%
1997	30	27	10.0%	29	3.3%
1998	30	17	43.3%	28	6.7%
1999	30	22	26.7%	29	3.3%
2000	30	29	3.3%	30	0.0%
2001	30	30	0.0%	30	0.0%
2002	30	28	6.7%	30	0.0%
2003	30	28	6.7%	29	3.3%
2004	30	27	10.0%	30	0.0%
2005	30	26	13.3%	29	3.3%
2006	29	26	10.3%	27	6.9%
2007	30	25	16.7%	27	10.0%
2008	29	25	13.8%	26	10.3%
2009	29	27	6.9%	28	3.4%
2010	29	28	3.4%	29	0.0%
2011	29	29	0.0%	29	0.0%
2012	29	29	0.0%	29	0.0%
2013	29	28	3.4%	28	3.4%

When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted. ‘Fished Permits’ is the number of CFEC permits that were used to record commercial landings in that year.

‘Fished, DNR’ is the number of CFEC permits that were used to record a landing, or were associated with a DNR shore fishery lease.

<sup>10</sup> See AS 16.05.680 (b) and AS 16.05.690 (b).

<sup>11</sup> See 11 AAC 64.180.



## New Entrants into the S04E Fishery

New entrants are defined herein as individuals who record a landing for the first time in the permit fishery. It is important to note that initial permit holders are not considered new entrants; individuals needed a proven fishing history prior to 1975 in order to become an initial permit holder of a limited entry permit.

This table describes individuals rather than permits. Individuals may hold up to two separate S04E permits. Most permits are transferable, so over the years an individual may hold one S04E permit, and then in subsequent years hold a different S04E permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once and only in the year in which they made their first documented landing since 1975.

Table 28. New Entrants into the Prince William Sound Set Gillnet Fishery

Year	Individuals With Landings	New Entrants	Rate of New Entrants	Difference from Mean	Year	Individuals With Landings	New Entrants	Rate of New Entrants	Difference from Mean
1975	0	0	-	-	1995	28	4	14.3%	3.8%
1976	1	1	100.0%	80.8%	1996	26	2	7.7%	-2.8%
1977	14	1	7.1%	-12.1%	1997	28	1	3.6%	-6.9%
1978	2	1	50.0%	30.8%	1998	17	3	17.6%	7.2%
1979	7	3	42.9%	23.6%	1999	22	1	4.5%	-5.9%
1980	11	3	27.3%	8.0%	2000	29	6	20.7%	10.2%
1981	3	0	0.0%	-19.2%	2001	32	5	15.6%	5.1%
1982	5	2	40.0%	20.8%	2002	29	2	6.9%	-3.6%
1983	19	10	52.6%	33.4%	2003	30	7	23.3%	12.8%
1984	19	5	26.3%	7.1%	2004	27	2	7.4%	-3.1%
1985	20	5	25.0%	5.8%	2005	26	3	11.5%	1.1%
1986	17	1	5.9%	-13.4%	2006	27	3	11.1%	0.6%
1987	21	5	23.8%	4.6%	2007	26	1	3.8%	-6.6%
1988	28	4	14.3%	-5.0%	2008	25	0	0.0%	-10.5%
1989	0	0	-	-	2009	27	4	14.8%	4.3%
1990	30	7	23.3%	4.1%	2010	28	2	7.1%	-3.3%
1991	31	4	12.9%	-6.3%	2011	30	3	10.0%	-0.5%
1992	32	4	12.5%	-6.7%	2012	29	5	17.2%	6.8%
1993	30	0	0.0%	-19.2%	2013	29	0	0.0%	-10.5%
1994	27	5	18.5%	-0.7%					

1975 - 1994 average 19.2%

1995 - 2013 average 10.5%

Compared to the salmon purse seine and drift gillnet fisheries, there is a high degree of variance for new entrants in this fishery. With fewer permits, even small changes in the count of new entrants cause large changes in the rate from year to year.

## Age of S04E Permit Holders

Table 29. Median Age of S04E and Select CFEC Permit Holders

Year	Set Gillnet	PWS Salmon	Statewide Set Gillnet	Statewide All Limited Entry Permits	AK Median Age
1975	44.9	39.9	36.2	42.9	24.3
1976	45.0	38.3	36.4	41.3	24.7
1977	44.4	38.4	36.1	40.5	25.1
1978	43.2	38.2	35.7	40.1	25.4
1979	41.1	38.1	35.8	40.1	25.8
1980	41.3	38.5	35.8	39.6	26.0
1981	41.3	38.3	36.0	39.5	26.5
1982	41.3	38.0	36.0	39.5	26.6
1983	39.9	38.0	35.7	39.6	26.8
1984	38.5	38.6	35.8	39.9	27.1
1985	40.4	38.9	36.3	40.1	27.5
1986	39.7	39.1	36.7	40.1	27.8
1987	40.2	39.4	37.0	40.4	28.3
1988	37.1	40.0	37.3	40.6	28.9
1989	39.8	40.6	38.0	41.0	29.4
1990	40.3	40.8	38.3	41.4	29.3
1991	41.7	41.1	38.9	41.9	29.7
1992	42.1	42.5	39.3	42.4	30.1
1993	43.1	42.9	39.9	43.0	30.5
1994	43.8	43.7	40.4	43.5	30.8
1995	43.8	44.0	41.0	43.9	31.1
1996	44.2	44.5	41.7	44.5	31.5
1997	43.9	45.2	42.0	45.0	31.8
1998	44.9	45.9	42.6	45.6	32.1
1999	45.9	46.1	43.1	46.1	32.3
2000	44.3	45.9	43.4	46.6	32.4
2001	45.1	46.9	44.1	47.0	32.7
2002	44.6	47.6	44.8	47.7	33.0
2003	45.0	48.2	45.5	48.4	33.2
2004	45.9	49.0	45.9	48.8	33.4
2005	45.7	49.6	46.0	49.3	33.6
2006	47.7	50.2	46.3	49.7	33.8
2007	48.1	50.4	46.8	50.1	33.9
2008	46.7	50.5	46.8	50.5	33.9
2009	47.9	51.2	47.3	51.1	33.9
2010	46.6	50.9	47.7	51.4	33.8
2011	46.5	50.9	48.2	51.8	33.9
2012	45.1	51.2	48.8	52.1	34.1
2013	42.6	51.4	49.0	52.4	34.3

Table 29 shows the annual median age of five different cohorts for each of the years between 1975 and 2013: 1) Prince William Sound set gillnet (S04E) permit holders; 2) all Prince William Sound salmon permit holders (combined set gillnet, drift gillnet, and salmon purse seine); 3) all salmon set gillnet permit holders statewide; 4) all CFEC limited entry permit holders; and 5) the median age of all Alaskans.

Note that these figures include ages of permit holders for both transferable and nontransferable permits. There was only one nontransferable S04E permit issued. Only permanent permits are included. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The median age of Alaskans has increased 10.0 years between 1975 and 2013, which represents a 41.2% increase. Over the same period, the age of Prince William Sound set gillnet permit holders age decreased by 2.3 years, which is a 5.1% change. Changes in median age among these permit holders have shifted with a high variance; the largest changes occurred in 1988 and 2013. The percent change in ages over the same period for all Prince William Sound salmon permit holders, statewide set gillnet permit holders, and all CFEC permit holders increased between 22.0% and 28.6%.

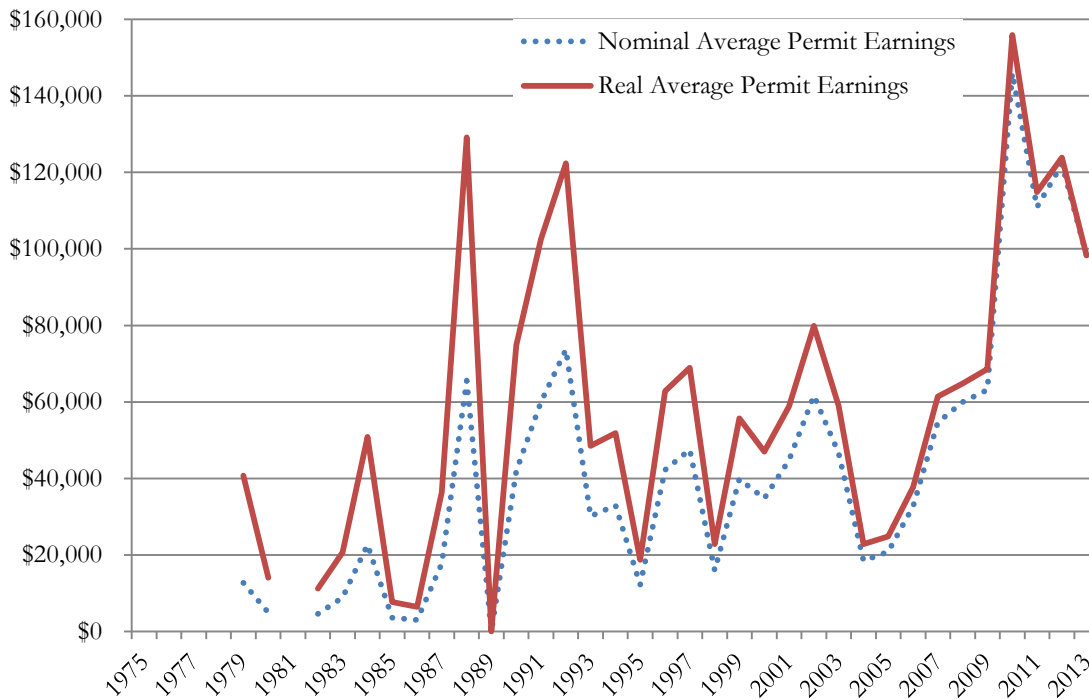
## S04E Permits, Participation, and Estimated Gross Earnings

Table 30 reports the number of permits, permits with landings, and estimated gross earnings in the Prince William Sound set gillnet fishery. Ex-vessel prices used in this table come from the CFEC Gross Earnings file. The table contains figures for 1975 through 2013. Note that the figures by permit in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, largely stem from the Commercial Operators Annual Report and fish ticket values. Earnings are shown in both nominal and real (inflation-adjusted) dollars using the 2013 consumer price index from the U.S. Bureau of Labor.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last interim-entry permit issued in the Prince William Sound set gillnet fishery was in 1982. Some individuals made landings on both interim-entry permits and subsequently on their adjudicated permanent permit in these same year, only the permanent permit is counted.

Figure 4. Nominal and Real S04E Average Estimated Ex-vessel Earnings Per Permit



Real dollars are adjusted for inflation using the 2013 U.S. Bureau of labor CPI.

Table 30. Prince William Sound Set Gillnet Permits, Vessels, and Estimated Total Gross Earnings (Real and Nominal) by Permit

Year	Viable Permits	Permits With Landings	Nominal Total Value	Average Nominal Earnings	Real* Total Earnings	Average Real* Earnings
1975	26	0	\$0	\$0	\$0	\$0
1976	28	1	**	**	**	**
1977	29	14	\$147,679	\$10,549	\$567,705	\$40,550
1978	28	2	**	**	**	**
1979	30	7	\$88,898	\$12,700	\$285,253	\$40,750
1980	30	11	\$54,760	\$4,978	\$154,815	\$14,074
1981	31	3	**	**	**	**
1982	30	5	\$23,195	\$4,639	\$55,994	\$11,199
1983	30	17	\$150,309	\$8,842	\$351,561	\$20,680
1984	30	19	\$430,643	\$22,665	\$965,557	\$50,819
1985	30	20	\$71,439	\$3,572	\$154,667	\$7,733
1986	30	17	\$51,502	\$3,030	\$109,469	\$6,439
1987	30	21	\$372,486	\$17,737	\$763,848	\$36,374
1988	30	28	\$1,835,877	\$65,567	\$3,615,219	\$129,115
1989	30	0	\$0	\$0	\$0	\$0
1990	30	29	\$1,217,979	\$41,999	\$2,170,901	\$74,859
1991	30	29	\$1,738,039	\$59,932	\$2,972,749	\$102,509
1992	30	30	\$2,210,370	\$73,679	\$3,670,143	\$122,338
1993	30	30	\$902,332	\$30,078	\$1,454,703	\$48,490
1994	30	26	\$857,692	\$32,988	\$1,348,214	\$51,854
1995	30	27	\$330,874	\$12,255	\$505,770	\$18,732
1996	30	26	\$1,099,263	\$42,279	\$1,632,129	\$62,774
1997	30	27	\$1,282,756	\$47,509	\$1,861,851	\$68,957
1998	30	17	\$271,304	\$15,959	\$387,743	\$22,808
1999	30	22	\$876,414	\$39,837	\$1,225,491	\$55,704
2000	30	29	\$1,008,002	\$34,759	\$1,363,654	\$47,023
2001	30	30	\$1,341,957	\$44,732	\$1,765,208	\$58,840
2002	30	28	\$1,726,484	\$61,660	\$2,235,667	\$79,845
2003	30	28	\$1,305,689	\$46,632	\$1,653,094	\$59,039
2004	30	27	\$499,698	\$18,507	\$616,242	\$22,824
2005	30	26	\$540,779	\$20,799	\$645,050	\$24,810
2006	29	26	\$849,458	\$32,671	\$981,584	\$37,753
2007	30	25	\$1,365,898	\$54,636	\$1,534,641	\$61,386
2008	29	25	\$1,498,602	\$59,944	\$1,621,481	\$64,859
2009	29	27	\$1,704,971	\$63,147	\$1,851,359	\$68,569
2010	29	28	\$4,085,598	\$145,914	\$4,364,790	\$155,885
2011	29	29	\$3,215,004	\$110,862	\$3,329,603	\$114,814
2012	29	29	\$3,541,396	\$122,117	\$3,593,269	\$123,906
2013	29	28	\$2,751,731	\$98,276	\$2,751,731	\$98,276

\* Adjusted for inflation to 2013 dollars using U.S. Bureau of Labor Consumer Price Index.

\*\* Ex-vessel earnings are masked due to confidentiality when fewer than four people participate in the fishery.