



## ***MEMORANDUM***

To: Glenn Haight, Executive Director  
Alaska Board of Fisheries  
Alaska Department of Fish and Game

Date: January 15, 2014

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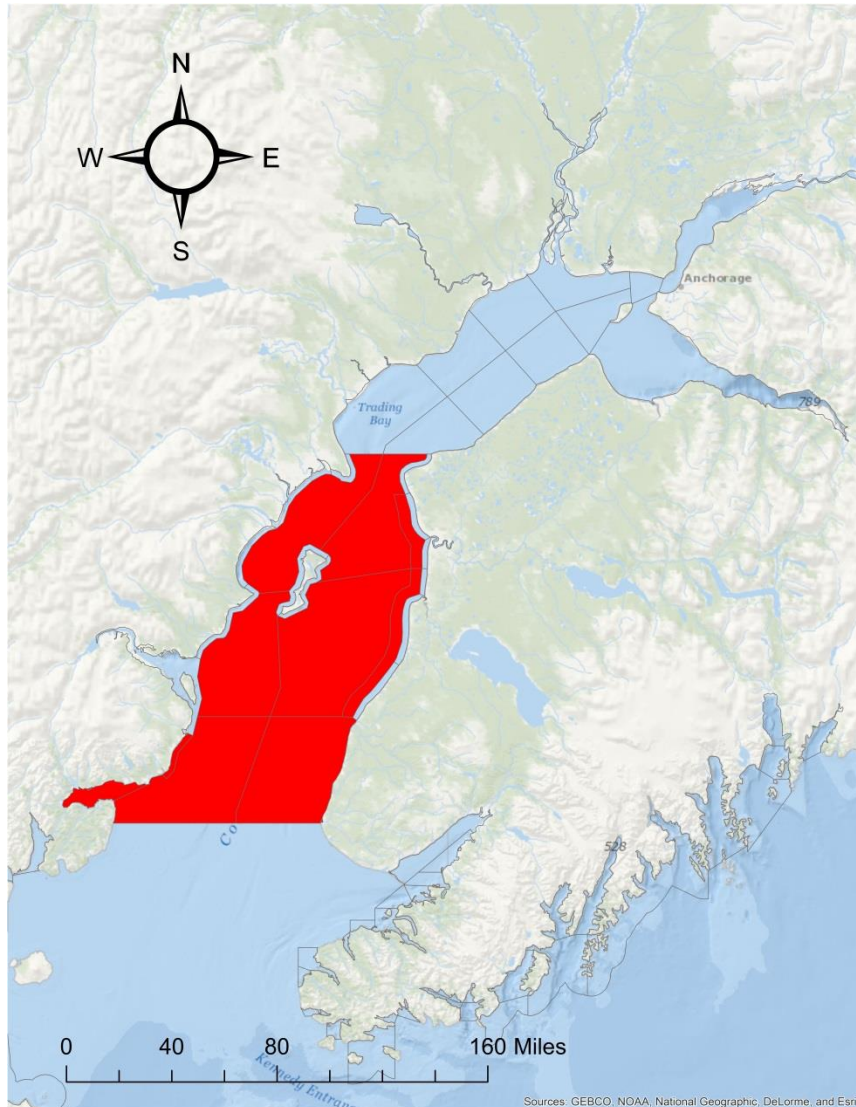
Subject: CFEC Report 14-1N

CFEC is submitting a report that we hope will help the Alaska Board of Fisheries in their deliberations. The report is:

*Overview of Permit Holdings, Harvests, and Estimates of Gross Earnings in the Cook Inlet Salmon Drift Gillnet Fishery, 1975-2012.* A report on limited entry permit holdings, fishery harvests, and estimated gross earnings by resident type for the Cook Inlet salmon drift gillnet (S03H) fishery. This report includes data on limited entry permits, transfers of permits, permit latency, dual drift gillnet permit operations, permit values, and estimated gross earnings. This report also contains a description of the computer files and methods used to generate the statistics.

We are always interested to hear different perspectives on proposals, especially those that address restructuring options. We appreciate hearing about both the problems and benefits of regulations, and on how they might enhance efficiency, quality, fishery management, and resource conservation.

# Overview of Permit Holdings, Harvests, and Estimates of Gross Earnings in the Cook Inlet Salmon Drift Gillnet Fishery, 1975-2012



CFEC Report Number 14-01N  
January 24, 2014 Revision

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## **Abstract**

Limited entry permit holdings, fishery harvests, and estimated gross earnings are provided out by resident type for the Cook Inlet salmon drift gillnet (S03H) fishery. This report includes data on limited entry permits, transfers of permits, permit latency, dual drift gillnet permit operations, permit values, and estimated gross earnings. This report also contains a description of the computer files and methods used to generate the statistics.

*This report includes revisions to page 9. Updated information on dual permit operations is included in this version.*

The map on the cover depicts salmon statistical areas from which harvests have been documented in the Cook Inlet salmon drift gillnet fishery between 1975 and 2012.

Prepared by Marcus Gho, Kurt Iverson, and Craig Farrington

## **Acknowledgements**

Special thanks to Jennifer Shriver for her insights and contributions to this document.

## Contents

Abstract .....	i
Acknowledgements.....	i
Contents .....	ii
Introduction.....	1
Description of the Files .....	2
CFEC Permit File .....	2
CFEC Gross Earnings File .....	2
CFEC Census File .....	3
Selection Criteria Used in This Report.....	3
Limited Entry Permits in Cook Inlet.....	4
Permit Transfers.....	5
Emergency Transfers of Cook Inlet Salmon Drift Gillnet Permits.....	6
Permit Value .....	7
Dual Permit Operations.....	9
Latent Permits .....	10
New Entrants .....	12
Permit Holders, Harvests, and Estimated Gross Earnings.....	13

## List of Tables

Table 1. Percent of Total Value of Drift Gillnet Fishery by Species, 1975-2012.....	1
Table 2. Communities Local to the Cook Inlet Salmon Fisheries in the CFEC Census File.....	3
Table 3. Initial Issuance of Cook Inlet Salmon Drift Gillnet Permits and Year-end 2012 Totals, With Net Changes Due to Permit Transfers, Migrations, and Cancellations .....	4
Table 4. Transfer Acquisition Methods, 1980-2012.....	5
Table 5. Relationships of Transferor to Transfer Recipients, 1980-2012.....	5
Table 6. Use of Emergency Transfer Permits in the Cook Inlet Salmon Drift Gillnet Salmon Fishery.....	6
Table 7. Cook Inlet Salmon Drift Gillnet Permit Sales, 1980 to 2012.....	7
Table 8. Cook Inlet drift gillnet fishery number of vessels and estimates of dual permit operations, 2008-2012.....	9
Table 9. Cook Inlet Salmon Drift Gillnet Permit Latency .....	10
Table 10. New Entrants into the Cook Inlet Salmon Drift Gillnet Fishery.....	12
Table 11. Cook Inlet Salmon Drift Gillnet Permit Holders, Harvests, and Estimated Gross Total Earnings (Real and Nominal) per Individual, by Resident Type.....	14

## List of Figures

Figure 1. Initial S03H Permit Holders.....	4
Figure 2. 2012 Year-end S03H Permit Holders .....	4
Figure 3. Relationships of Transferor to Transfer Recipients, 1980-2012 .....	5
Figure 4. Individuals with Landings.....	6
Figure 5. Cook Inlet Salmon Drift Gillnet Permit Sales Adjusted for Inflation, 1980 to 2012 .....	8
Figure 6. Rate of Permit Latency in the S03H Fishery .....	11

## Introduction

This report was prepared to provide an overview of limited entry permit holdings, fishery harvests, and estimated gross earnings of limited entry permit holders in the Cook Inlet salmon drift gillnet fishery.

Commercial fishing in Cook Inlet has been documented as far back as 1893.<sup>1</sup> 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 for 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 responsibility of administering the program.<sup>2</sup> Permit fisheries are defined by CFEC as a specific gear type for a targeted species within a defined geographic area.

The Cook Inlet salmon fisheries were part of the original group of 19 salmon fisheries that were limited in 1974. Under the authority of AS 16.43.230, CFEC identified both the Cook Inlet drift and set net salmon fisheries as "distressed fisheries".<sup>3</sup> Cook Inlet salmon limited entry permits in the purse seine, drift gillnet, and set gillnet fisheries were first issued in 1975 and the fisheries continue today.

In Upper Cook Inlet the majority of the fishing is prosecuted by both the set and drift gillnet fisheries. The use of seine gear in Upper Cook Inlet is only employed sporadically in the Chinitna Bay sub district.<sup>4</sup> The Lower Cook Inlet salmon fisheries are comprised mostly of the Cook Inlet seine fleet and by a few of the set gillnet permit holders.

The majority of ex-vessel value for the Cook Inlet salmon drift gillnet fishery comes from sockeye salmon, as illustrated below in Table 1.

**Table 1. Percent of Total Value of Drift Gillnet Fishery by Species, 1975-2012**

Species	Percent
<i>Chinook</i>	0.2%
<i>sockeye</i>	84.3%
<i>coho</i>	4.2%
<i>pink</i>	1.4%
<i>chum</i>	9.9%

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

<sup>2</sup> See *Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2012*. CFEC Report No. 13-1.

<sup>3</sup> See AS 16.43.230 and 20 AAC 05.300. The two Cook Inlet gillnet fisheries were among eight salmon fisheries designated as distressed under the regulation.

<sup>4</sup> See *Upper Cook Inlet Commercial Fisheries Annual Management Report, 2012*, FMR No. 13-21.

## Description of the Files

Three CFEC data files were used to generate the statistics in this report: the CFEC permit file, the CFEC gross earnings file, and the Census file. The following is a description of each file, with notes that correspond to the analysis done for the report.

### 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. A CFEC permit may be held by more than one person in a year, but only one person at a time. Permits may be transferred between individuals on a permanent or temporary (emergency) basis.

The permit data file contains a field indicating the declared residency of permit holders. When a permit holder renews an existing permit, or receives a permit through permanent transfer, they must declare whether or not they are a resident of Alaska. Permit renewal fees are based upon Alaska resident or nonresident status. CFEC permit forms first asked for a declared residency in 1978. Residency on the permit file for the years 1975 through 1977 is based solely upon the listed mailing address of the permit holder. On occasion, individuals will change their residency status within a year. Because of these changes, residency status is based on the last declared residency status on file for the year for the individual.

In this report, resident status is divided into three classes: 1) **Alaska Locals** – permits held by persons residing locally to Cook Inlet; 2) **Alaska Nonlocals** – permits held by persons from other parts of Alaska; and 3) **Nonresidents** – permits held by nonresidents of Alaska.

Persons who receive a permit through an emergency transfer do not have to declare their residency. In these cases, the transfer recipient's residency is assigned based upon their most recent residency declaration in the CFEC system for that year. Sometimes, the person will be new to the CFEC files, and a declaration of residency is not available. In the absence of a declared residency status, residency is selected by how fees were paid – either as a resident or nonresident. For the instances when the fees were paid by somebody other than then the emergency transfer recipient, the mailing address on record with CFEC is used to determine residency.

### CFEC Gross Earnings File

The CFEC gross earnings file is based upon Alaska Department of Fish and Game (ADF&G) fish tickets and is enhanced with CFEC data from permit holders. Earnings data is derived primarily through CFEC analysis of fish tickets and fish processor reports.<sup>5</sup> Average price per pound estimates are computed for each area (which corresponds with the ADF&G fishery management area), species, gear, and delivery type (e.g. gutted, in the round, etc.) on fish tickets. These average prices are then applied to fish ticket data to estimate gross earnings for each year.

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<sup>5</sup> The Commercial Operator's Annual Report (COAR) is a report required by the Alaska Department of Fish and Game for all operations that buy, process, and/or sell fishery resources in Alaska. One section of the report is devoted to ex-vessel purchases, where processors provide information on average prices paid to permit holders.

## CFEC Census File

CFEC maintains a computer file of places within Alaska where permit holders or vessel owners reside. Each place is annotated with information on its rural or urban status, using United States Census Bureau criteria. CFEC also provides codes that indicate which fisheries are local to each of these communities.

Table 2 shows the places that are currently designated as local to the Cook Inlet salmon fisheries in the CFEC Census File. The list reflects a combination of places from the Census Bureau, or places of residence given by CFEC permit holders during the 1975 – 2012 period. It is possible more Cook Inlet communities could be added in the future, provided someone from a new local place renews or temporarily holds a Cook Inlet salmon permit.

**Table 2. Communities Local to the Cook Inlet Salmon Fisheries in the CFEC Census File**

Alexander	Eklutna	Kasilof	Port Graham
Alexander Creek	Elmendorf Air Force Base	Kasitsna Bay	Portage
Anchor Point	English Bay	Kenai	Portlock
Anchorage	Fire Island	Kern	Potter
Bear Cove	Fire Lake	Knik	Primrose
Bear Creek	Fort Richardson	Knik River	Rainbow
Beluga	Fox River	Knik-Fairview	Red Mountain
Beluga River	Fritz Creek	Kustatan	Ridgeway
Big Lake	Funny River	Lakes	Salamatof
Birchwood	Gateway	Lowell Point	Seldovia
Bird Creek	Girdwood	Miller Landing	Seldovia Village
Bodenburg Butte	Grouse Creek Group	Moose Pass	Seward
Butte	Halibut Cove	Nanwalek	Soldotna
Chenik	Happy Valley	Nikishka	Spenard
Chugiak	Homer	Nikiski	Sterling
Clam Gulch	Hope	Nikolaevsk	Sunrise
Cohoe	Indian	Ninilchik	Susitna
Cooper Landing	Jakolof Bay	Palmer	Tyonek
Crown Point	Kachemak	Peters Creek	Wasilla
Diamond Ridge	Kalifornsky	Point Mackenzie	
Eagle River	Kalifornsky	Point Possession	

## Selection Criteria Used in This Report

Statistics in this report may vary from other sources. Databases change over time as corrections are made, and the methods used to select the data can impact the results. There is also a difference between point-in-time statistics and totals within a year. For example, if two different people held a permit in a given year, then a point-in-time statistic will reflect a count of one, while a year total will count both people for the single permit.

Harvest and permit counts in this report are limited to landings of ‘commercial’ harvests on valid permits. Commercial harvests generally correspond to the competitive fisheries where product is sold. Other harvests, such as test fishing or landings made on educational permits are excluded in this report. Also excluded are illegal landings, discards, personal use, and other harvests taken but not sold.

The estimates of gross earnings are presented in both nominal and real (inflation-adjusted) figures. The real earnings are adjusted for inflation using the U.S. Consumer Price Index data with base 2012 index as the base time period.<sup>6</sup>

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<sup>6</sup> See [www.bls.gov/cpi](http://www.bls.gov/cpi).



## Limited Entry Permits in Cook Inlet

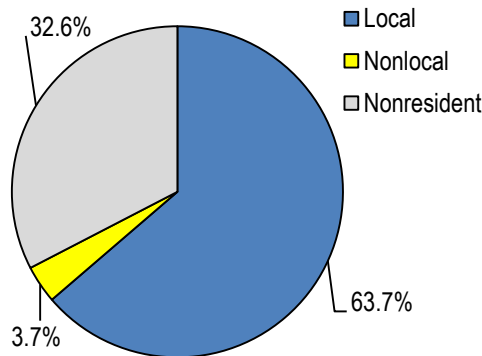
With the advent of limited entry, Cook Inlet salmon permits were issued in the seine, drift, and set gillnet fisheries starting in 1975. Table 3 indicates an overall picture of the number of salmon permits in the salmon drift gillnet (S03H) fishery. Between 1975 and 2012, CFEC issued 573 S03H permits. Of this total, Alaska Locals received 63.7% (365) permits. Nonlocal Alaskans received 21 permits, and Nonresidents received 187 permits.

**Table 3. Initial Issuance of Cook Inlet Salmon Drift Gillnet Permits and Year-end 2012 Totals, With Net Changes Due to Permit Transfers, Migrations, and Cancellations**

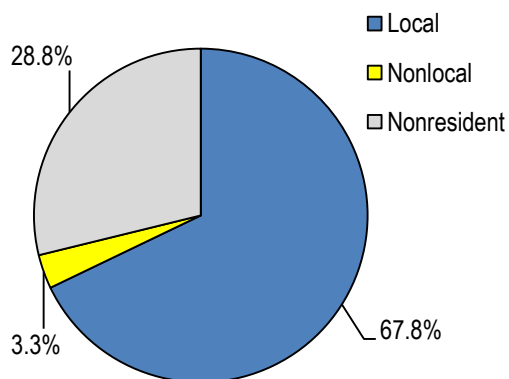
Fishery	Residency	Total Initially Issued		TRANSFERS		MIGRATIONS		CANCELLED		2012 YEAR-END	
		Percent Issued	Percent Issued	Net Changes	Percent Change from Initial	Net Changes	Percent Change from Initial	Net Changes	Percent Change from Initial	2012 Year-End Total	Percentage of Year-End Total
Drift Gillnet	Local	365	63.7%	61	16.7%	-39	-10.7%	-1	-0.3%	386	67.8%
	Nonlocal	21	3.7%	0	0.0%	-2	-9.5%	0	0.0%	19	3.3%
	Nonresident	187	32.6%	-61	-32.6%	41	21.9%	-3	-1.6%	164	28.8%
<b>Total</b>		<b>573</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>0</b>	<b>0.0%</b>	<b>-4</b>	<b>-0.7%</b>	<b>569</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. Table 3 indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery. Transfers have had the largest impact on the changes of resident class permit holdings. Note that by the end of 2012, 4 permits have been cancelled.

**Figure 1. Initial S03H Permit Holders**



**Figure 2. 2012 Year-end S03H Permit Holders**



## Permit Transfers

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 permit value for instances when the permit is sold.

**Table 4. Transfer Acquisition Methods, 1980-2012**

Transfer Type	Cook Inlet Salmon Drift Gillnet		Combined Cook Inlet Salmon Fisheries		All Fisheries Statewide	
Gift	554	32.8%	1,721	40.4%	11,688	35.4%
Sale	1,042	61.8%	2,306	54.2%	19,758	59.8%
Trade	29	1.7%	53	1.2%	466	1.4%
Other	62	3.7%	175	4.1%	1,126	3.4%
<b>Total Transfers</b>	<b>1,687</b>		<b>4,255</b>		<b>33,038</b>	

Combined Cook Inlet includes all three Cook Inlet salmon permit types: seine, set gillnet, and drift gillnet.

Table 4 presents transfer acquisition methods for the Cook Inlet drift gillnet fishery between 1980 and 2012. During the 1980 – 2012 period, almost two thirds of all transfers were sales (61.8%), and the majority of the rest of the transfers were gifts (32.8%). The acquisition methods for the limited Cook Inlet salmon permits have not changed substantially throughout the time period.<sup>7</sup> When compared to the other salmon permit fisheries in Cook Inlet or all permit transfers of CFEC permits statewide, the percent of gifted transfers is lower and the rate of permit sales is higher.

**Table 5. Relationships of Transferor to Transfer Recipients, 1980-2012**

Relationship	Cook Inlet Salmon Drift Gillnet		Combined Cook Inlet Salmon Fisheries		All Fisheries Statewide	
Business Partner/Friend	263	15.6%	885	20.8%	6,096	18.5%
Member of Immediate Family	571	33.8%	1,427	33.5%	11,073	33.5%
Other Relative	85	5.0%	291	6.8%	1,574	4.8%
Other	768	45.5%	1,652	38.8%	14,294	43.3%
<b>Total Transfers</b>	<b>1,687</b>		<b>4,255</b>		<b>33,038</b>	

**Figure 3. Relationships of Transferor to Transfer Recipients, 1980-2012**

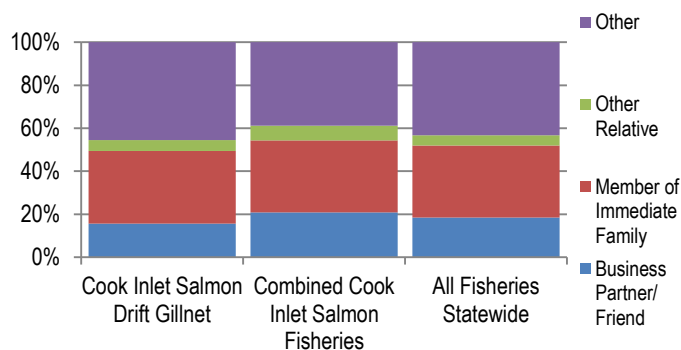


Table 5 and Figure 3 describe the relationships between the transferors and transfer recipients for the Cook Inlet drift gillnet permit transfers. The figures are very similar for all three Cook Inlet salmon fisheries, and for all CFEC permits statewide. The majority of S03H permit transfer relationships are in the 'other' (45.5%) category which means the buyer and seller did not have a relationship in the categories of friend, partner, or family.

<sup>7</sup> See *Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2012*, CFEC Report No. 13-1.

## Emergency Transfers of Cook Inlet Salmon Drift Gillnet Permits

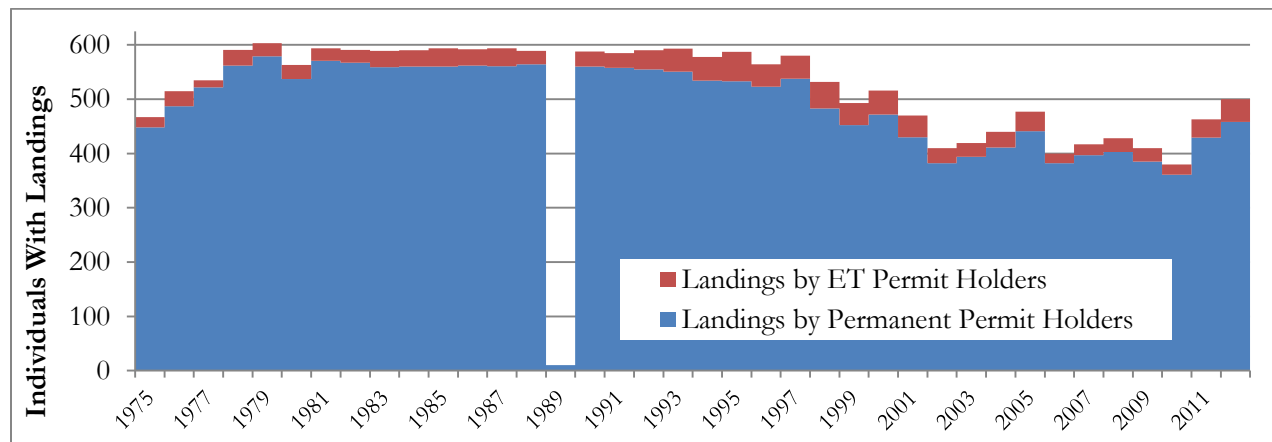
Commercial landings can be made with either permanently held permits or with permits held temporarily through emergency transfers. Emergency transfers are granted if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen 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 6 shows the total number of individuals who have landings recorded on fish tickets each year, and the number of these individuals who made landings with permits held through emergency transfer. Note that since 2008 dual permit regulations have been in place. Some individuals who operate under dual permit regulations may have documented their landings on their partner’s permit and would thereby not be counted as having made a landing. Fewer than 10% of individuals make landings with emergency transfer permits in this fishery in any year. Some individuals who made landings with emergency transfer permits also made landings with permanent permits in the same year.

**Table 6. Use of Emergency Transfer Permits in the Cook Inlet Salmon Drift Gillnet Salmon Fishery**

Year	Individuals With Landings	Landings by ET Permit Holders	Rate ET	Year	Individuals With Landings	Landings by ET Permit Holders	Rate ET	Year	Individuals With Landings	Landings by ET Permit Holders	Rate ET
1975	467	19	4.1%	1988	589	25	4.2%	2001	470	40	8.5%
1976	515	28	5.4%	1989	10	0	0.0%	2002	410	28	6.8%
1977	535	13	2.4%	1990	588	28	4.8%	2003	419	25	6.0%
1978	591	29	4.9%	1991	585	27	4.6%	2004	440	29	6.6%
1979	603	24	4.0%	1992	590	35	5.9%	2005	477	36	7.5%
1980	563	26	4.6%	1993	593	42	7.1%	2006	400	18	4.5%
1981	594	23	3.9%	1994	578	44	7.6%	2007	417	20	4.8%
1982	591	24	4.1%	1995	587	54	9.2%	2008	428	25	5.8%
1983	589	30	5.1%	1996	564	41	7.3%	2009	410	25	6.1%
1984	590	30	5.1%	1997	580	42	7.2%	2010	380	19	5.0%
1985	594	34	5.7%	1998	532	49	9.2%	2011	463	34	7.3%
1986	592	30	5.1%	1999	493	41	8.3%	2012	500	42	8.4%
1987	594	33	5.6%	2000	516	44	8.5%				

**Figure 4. Individuals with Landings**



## Permit Value

At market equilibrium, permit prices reflect the value placed on permits by those most willing to sell and those most willing to buy. Individuals who value their permit at or less than the fair market value of the permit will be more likely to sell, while those who value their permit more than fair market value will tend to retain their permits. The fair market value of permits tends to increase when the number of buyers willing to purchase permits exceeds the number of permits available at the current price. If the permit price is higher than what a potential purchaser is willing to pay, then the potential buyer will hold out until the price is lowered to their willing bid price, or they will not buy at all.

Inherent in the permit price is the expectation of the stream of discounted future benefits derived from holding onto the permit. Future benefits may be mitigated by the presence of other market influences, such as the production of substitutes (e.g., farmed salmon) or other influences such as fishery allocations, operating expenses, etc.

**Table 7. Cook Inlet Salmon Drift Gillnet Permit Sales, 1980 to 2012**

Year	Permit Sales	Real Values					Nominal Values				
		90 Percentile	75 Percentile	Median	25 Percentile	10 Percentile	90 Percentile	75 Percentile	Median	25 Percentile	10 Percentile
1980	34	\$231,196	\$208,975	\$188,078	\$167,180	\$139,317	\$82,975	\$75,000	\$67,500	\$60,000	\$50,000
1981	49	\$196,203	\$189,434	\$176,805	\$164,176	\$142,960	\$77,680	\$75,000	\$70,000	\$65,000	\$56,600
1982	41	\$166,545	\$161,786	\$142,753	\$126,098	\$95,169	\$70,000	\$68,000	\$60,000	\$53,000	\$40,000
1983	53	\$172,887	\$172,887	\$165,972	\$149,835	\$138,310	\$75,000	\$75,000	\$72,000	\$65,000	\$60,000
1984	35	\$164,848	\$160,208	\$154,683	\$145,513	\$121,537	\$74,600	\$72,500	\$70,000	\$65,850	\$55,000
1985	39	\$150,474	\$138,695	\$134,428	\$128,026	\$122,905	\$70,520	\$65,000	\$63,000	\$60,000	\$57,600
1986	50	\$158,377	\$146,639	\$136,164	\$125,690	\$104,742	\$75,604	\$70,000	\$65,000	\$60,000	\$50,000
1987	25	\$214,234	\$185,939	\$171,791	\$161,686	\$145,517	\$106,000	\$92,000	\$85,000	\$80,000	\$72,000
1988	27	\$329,932	\$320,228	\$291,117	\$213,486	\$174,670	\$170,000	\$165,000	\$150,000	\$110,000	\$90,000
1989	32	\$342,539	\$342,539	\$333,282	\$321,709	\$314,766	\$185,000	\$185,000	\$180,000	\$173,750	\$170,000
1990	26	\$392,611	\$385,584	\$355,721	\$337,496	\$307,414	\$223,500	\$219,500	\$202,500	\$192,125	\$175,000
1991	29	\$337,142	\$320,285	\$311,857	\$299,214	\$267,691	\$200,000	\$190,000	\$185,000	\$177,500	\$158,800
1992	32	\$148,917	\$147,281	\$147,281	\$142,167	\$139,098	\$91,000	\$90,000	\$90,000	\$86,875	\$85,000
1993	22	\$158,571	\$151,540	\$143,794	\$143,000	\$127,111	\$99,800	\$95,375	\$90,500	\$90,000	\$80,000
1994	25	\$108,445	\$103,798	\$100,699	\$96,051	\$92,953	\$70,000	\$67,000	\$65,000	\$62,000	\$60,000
1995	30	\$158,486	\$150,652	\$125,041	\$109,600	\$97,924	\$105,200	\$100,000	\$83,000	\$72,750	\$65,000
1996	29	\$118,909	\$117,065	\$109,749	\$109,749	\$94,439	\$81,260	\$80,000	\$75,000	\$75,000	\$64,538
1997	33	\$124,453	\$121,592	\$114,439	\$100,134	\$81,824	\$87,000	\$85,000	\$80,000	\$70,000	\$57,200
1998	25	\$70,428	\$66,202	\$63,385	\$56,342	\$36,622	\$50,000	\$47,000	\$45,000	\$40,000	\$26,000
1999	22	\$37,829	\$36,038	\$34,453	\$34,453	\$33,213	\$27,450	\$26,150	\$25,000	\$25,000	\$24,100
2000	28	\$49,665	\$45,332	\$42,666	\$39,999	\$39,599	\$37,250	\$34,000	\$32,000	\$30,000	\$29,700
2001	12	\$34,744	\$32,410	\$30,466	\$27,225	\$19,835	\$26,800	\$25,000	\$23,500	\$21,000	\$15,300
2002	11	\$20,420	\$17,867	\$12,762	\$12,762	\$10,848	\$16,000	\$14,000	\$10,000	\$10,000	\$8,500
2003	20	\$23,770	\$22,616	\$18,717	\$15,597	\$14,849	\$19,050	\$18,125	\$15,000	\$12,500	\$11,900
2004	45	\$32,817	\$25,524	\$24,309	\$23,093	\$19,301	\$27,000	\$21,000	\$20,000	\$19,000	\$15,880
2005	28	\$58,780	\$49,963	\$46,730	\$42,909	\$35,679	\$50,000	\$42,500	\$39,750	\$36,500	\$30,350
2006	21	\$38,721	\$34,166	\$31,888	\$29,610	\$28,471	\$34,000	\$30,000	\$28,000	\$26,000	\$25,000
2007	22	\$35,434	\$33,220	\$32,057	\$31,005	\$28,956	\$32,000	\$30,000	\$28,950	\$28,000	\$26,150
2008	22	\$42,655	\$39,509	\$37,323	\$35,724	\$32,311	\$40,000	\$37,050	\$35,000	\$33,500	\$30,300
2009	23	\$30,500	\$29,965	\$29,965	\$28,895	\$28,895	\$28,500	\$28,000	\$28,000	\$27,000	\$27,000
2010	35	\$47,381	\$39,484	\$28,955	\$26,323	\$26,007	\$45,000	\$37,500	\$27,500	\$25,000	\$24,700
2011	38	\$61,242	\$56,904	\$51,035	\$50,269	\$45,931	\$60,000	\$55,750	\$50,000	\$49,250	\$45,000
2012	36	\$80,000	\$80,000	\$77,750	\$75,000	\$67,750	\$80,000	\$80,000	\$77,750	\$75,000	\$67,750

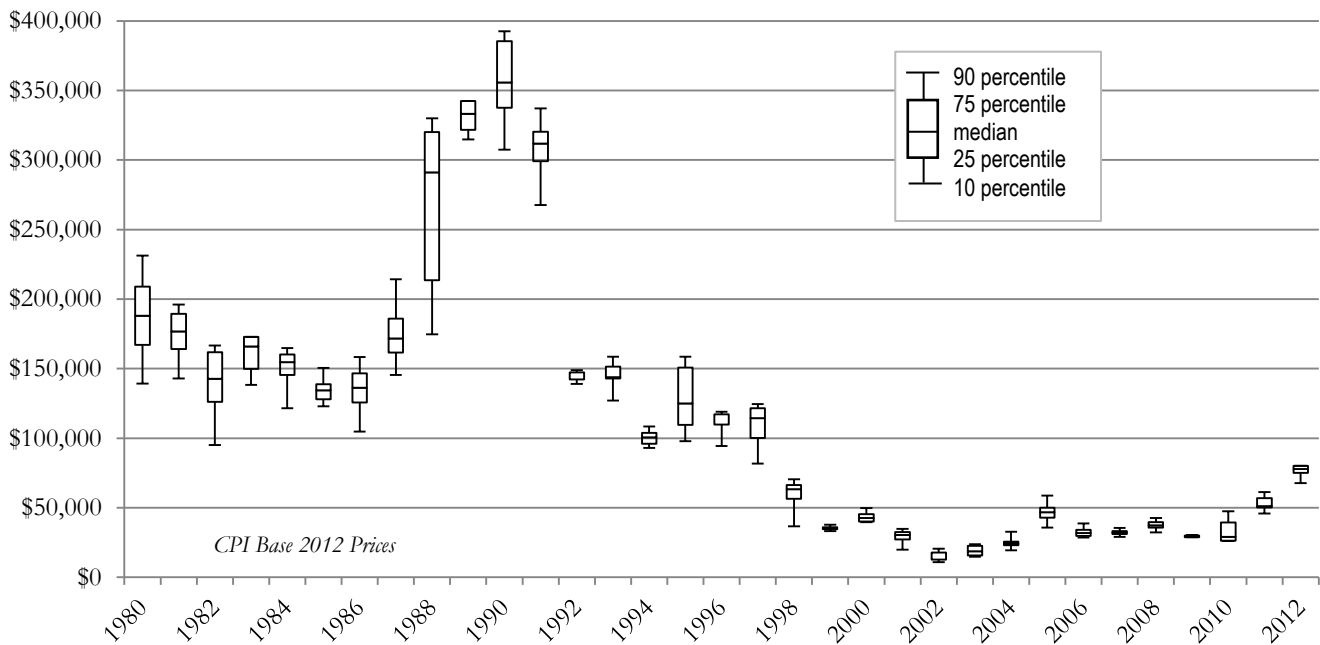
Real prices were calculated using the 2012 CPI from the U.S. Bureau of Labor Statistics.

Table 7 includes both nominal and real permit values for permit sales of Cook Inlet salmon drift gillnet permit sales. Included in the table are measures of central tendency and dispersion of permit sales as seen in Figure 5.

Many permit transfers are non-monetary transactions (Table 4). Several reasons may explain how an individual chooses to value a permit and who they would be willing to transfer their permit to. This section deals solely with arms-length market transactions where permits are sold.

The Cook Inlet drift gillnet salmon permit value peaked in 1990 before facing a precipitous decline. Permit values bottomed out in the early 2000's. Many other limited entry permits around the state have experienced similar trajectories.

**Figure 5. Cook Inlet Salmon Drift Gillnet Permit Sales Adjusted for Inflation, 1980 to 2012**



## Dual Permit Operations

In 2008, the Alaska Board of Fisheries passed regulations<sup>8</sup> allowing dual permit operations. Dual permit operations occur when two CFEC permit holders fish concurrently from the same vessel and jointly operate up to 200 fathoms of drift gillnet gear.

The areas open to dual permit operations have changed over time. From 2008 to 2010, the only areas open to dual permit operations were the so-called ‘inlet wide’ ADF&G statistical areas<sup>9</sup> in the Central District. Neither the Kenai Section nor the Kasilof Section was open to dual-permit operations. In those years, the realities of the area open to duals at any given point in time in the fishery may have necessitated some dual permit operations to move out of the ‘D’ boat configuration and participate as single permit holders instead. This may have changed somewhat in 2011 when the Kenai and Kasilof Sections became available to dual permit operations. Then, in 2012 regulations were altered again, and the ‘Expanded’ Kenai and Kasilof Sections became available to drift gillnet dual permit operations.

Table 8 describes vessel participation in the Cook Inlet drift gillnet fleet, and includes estimates of the number of dual permit operations. Two estimates are presented. The first is the number of vessels that registered with ADF&G as a dual permit operation prior to fishing. The second estimate is the sum of all vessels from the ADF&G registration list, *plus any other vessels not on the registration list but noted on fish tickets with two permit holders fishing concurrently from the same vessel.*

The second estimate in the table, which comes from the combination of ADF&G registrations and fish tickets, may represent the maximum number of dual permit operations participating in a year. Note that merely registering a boat as a dual permit operation does not guarantee that the permit holders actually follow through with their initial strategy. Also note that some vessels might function as a dual operation for the entire season, while others might fish intermittently as both a dual and single permit operation within the same year.

It is important to note that this table is different from other tables in this report as it counts vessels rather than individual persons or CFEC permits.

**Table 8. Cook Inlet drift gillnet fishery  
Number of vessels and estimates of dual permit operations, 2008-2012**

Year	Total vessels	Estimates of dual permit operations	
		ADF&G registration lists	Combined ADF&G registrations and ADF&G Fish Tickets
2008	415	37	37
2009	388	35	36
2010	353	56	69
2011	427	66	80
2012	460	66	76

The figures in Table 8 are preliminary and revised from the first version of this paper. A more complete review of Cook Inlet dual permit operations in the salmon drift gillnet permit fishery is forthcoming.

<sup>8</sup> See 5 AAC 21.333.

<sup>9</sup> The six statistical areas are: 244-50, 244-60, 244-70, 245-70, 245-80, and 245-90.

## Latent Permits

Each year, the number of permits renewed is greater than the number used to record landings. CFEC regulations require persons to renew their limited entry permits annually, irrespective of whether the person actually fishes.

Table 9 compares the total number of permits in the S03H fishery to the number of permits fished. Several complications make it difficult to accurately count the number of latent permits. The figures should be viewed with caution. Note that in this table, when individuals received an adjudicated permanent permit the same year they held an interim-entry permit, then both permits are only counted as one. If any landings were recorded on either of these two permits held by the same individual then it is counted as a permit with a landing.

In some cases, permits might be active in the fishery but might not be used to record landings. For example, this may have occurred when individuals fished in dual permit operations and all the landings were recorded only on their partners permit. The effect would be to under-count the number of permits with landings, and over-estimate the latency rate. Recall that regulations allowing for dual permit operations have been in effect since 2008.

There are many reasons why an individual may choose to not fish in any given year. This table does not explain any of the reasons, but rather simply estimates the rate of permit latency.

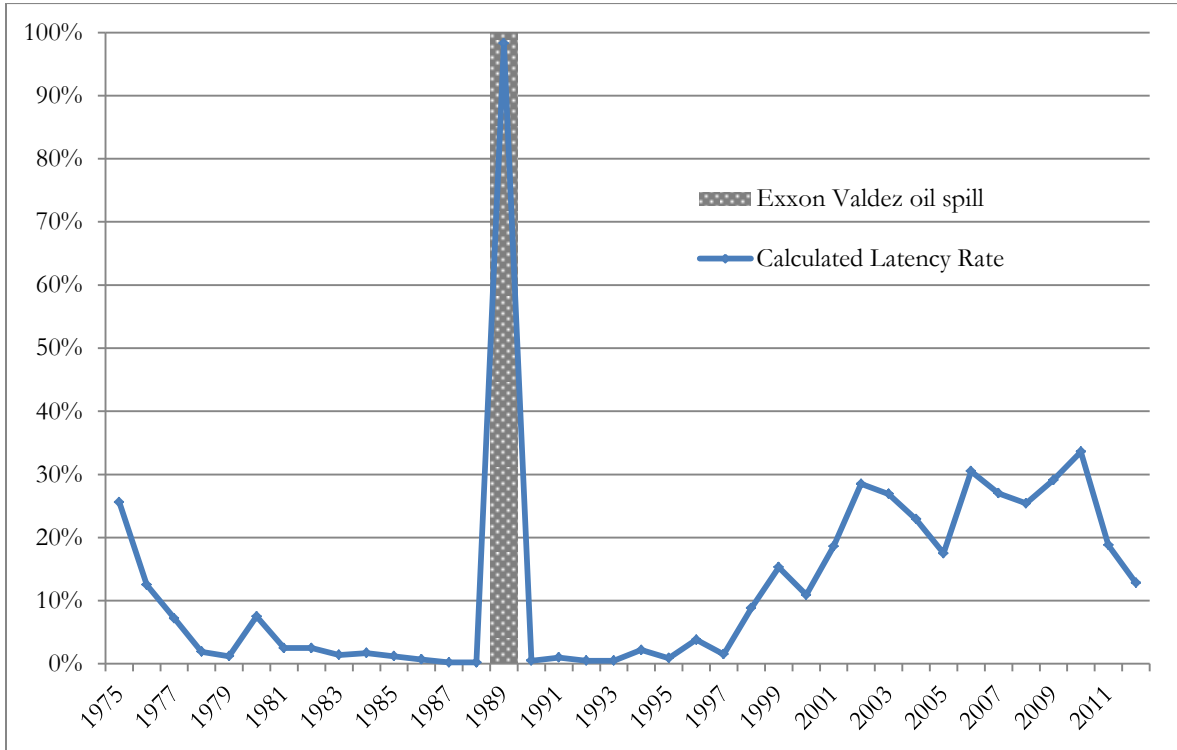
**Table 9. Cook Inlet Salmon Drift Gillnet Permit Latency**

Year	Total Permits	Permits With Landings	Calculated Latency Rate
1975	624	464	25.60%
1976	583	510	12.50%
1977	569	528	7.20%
1978	588	577	1.90%
1979	599	592	1.20%
1980	598	553	7.50%
1981	599	584	2.50%
1982	592	577	2.50%
1983	588	580	1.40%
1984	587	577	1.70%
1985	591	584	1.20%
1986	588	584	0.70%
1987	586	585	0.20%
1988	585	584	0.20%
1989	585	10	98.30%
1990	585	582	0.50%
1991	584	578	1.00%
1992	583	580	0.50%
1993	583	580	0.50%
1994	582	569	2.20%
1995	582	577	0.90%
1996	582	560	3.80%
1997	581	572	1.50%
1998	579	528	8.80%
1999	575	487	15.30%
2000	576	513	10.90%
2001	574	467	18.60%
2002	572	409	28.50%
2003	572	418	26.90%
2004	571	440	22.90%
2005	571	471	17.50%
2006	570	396	30.50%
2007	571	417	27.00%
2008	571	426	25.40%
2009	570	404	29.10%
2010	569	378	33.60%
2011	569	462	18.80%
2012	569	496	12.80%

*'Total Fishery Permits' is the number of S03H permits issued in the year.*

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

Figure 6. Rate of Permit Latency in the S03H Fishery





## New Entrants

New entrants are defined herein as individuals who record a landing for the first time in the S03H permit fishery. It is important to note that all initial permit holders are considered new entrants. In 2008 regulations were passed allowing for dual permit operations. If the two permit holders in a dual operation recorded all their combined landings on only one permit, the number of new entrants could be slightly under-estimated. 2011 and 2012 indicates a period where the rate of new entrants was higher than average.

**Table 10. New Entrants into the Cook Inlet Salmon Drift Gillnet Fishery**

Year	People With Landings	New Entrants	Rate of New Entrants	Difference from Mean
1991	585	55	9.4%	1.7%
1992	590	48	8.1%	0.4%
1993	593	39	6.6%	-1.2%
1994	578	49	8.5%	0.7%
1995	587	52	8.9%	1.1%
1996	564	38	6.7%	-1.0%
1997	580	45	7.8%	0.0%
1998	532	41	7.7%	0.0%
1999	493	31	6.3%	-1.5%
2000	516	31	6.0%	-1.7%
2001	470	25	5.3%	-2.4%
2002	410	21	5.1%	-2.6%
2003	419	23	5.5%	-2.3%
2004	440	37	8.4%	0.7%
2005	477	56	11.7%	4.0%
2006	400	25	6.3%	-1.5%
2007	417	25	6.0%	-1.8%
2008	428	30	7.0%	-0.7%
2009	410	24	5.9%	-1.9%
2010	380	28	7.4%	-0.4%
2011	463	64	13.8%	6.1%
2012	500	52	10.4%	2.7%

1991 - 2012 average 7.7%

*Note that dual permit regulations went into effect in 2008.*

## **Permit Holders, Harvests, and Estimated Gross Earnings**

Table 11 reports the number of individuals who recorded landings in the Cook Inlet salmon drift gillnet fishery, along with total harvests and estimated gross earnings by residency from 1975 to 2012.

Earnings are shown in both nominal and real (inflation-adjusted) dollars. Note that the tables count individuals and span the entire year. This differs from tables that report on permits, or tables that are for a specific point in time.

Counts for permit holders include individuals who held interim-entry permits, emergency transfer permits, and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are being adjudicated.

In 2008 dual permit regulations (2 permit holders fishing on one vessel) went into effect. There may be some instances where dual permit operations recorded all their landings on only one of the operation's two permits. This would have the effect of under-estimation the number of individuals who actually participated in the fishery.

**Table 11. Cook Inlet Salmon Drift Gillnet Permit Holders, Harvests, and Estimated Gross Total Earnings (Real and Nominal) per Individual, by Resident Type**

Year	Alaska Local				Alaska Nonlocal				Nonresident				All Permits			
	Permit Holders	With Landings	Nominal Total Earnings	Real* Total Earnings	Permit Holders	With Landings	Nominal Total Earnings	Real* Total Earnings	Permit Holders	With Landings	Nominal Total Earnings	Real* Total Earnings	Permit Holders	With Landings	Nominal Total Earnings	Real* Total Earnings
1975	437	306	\$2,427,474	\$10,277,337	24	8	\$88,639	\$375,270	212	153	\$1,945,011	\$8,236,031	673	467	\$4,461,123	\$18,888,638
1976	449	333	\$4,695,351	\$18,872,702	17	8	\$136,561	\$548,876	214	174	\$3,737,694	\$15,027,247	680	515	\$8,569,607	\$34,448,826
1977	440	347	\$8,621,020	\$32,427,672	16	11	\$247,414	\$930,751	200	177	\$4,985,375	\$18,756,815	656	535	\$13,853,810	\$52,115,238
1978	463	392	\$13,976,568	\$48,844,194	18	12	\$431,584	\$1,508,278	215	187	\$7,625,405	\$26,650,643	696	591	\$22,033,557	\$77,003,114
1979	468	401	\$5,630,543	\$17,666,490	17	12	\$180,131	\$565,121	218	190	\$3,143,441	\$9,865,715	703	603	\$8,954,115	\$28,097,326
1980	468	367	\$4,230,438	\$11,739,301	15	11	\$126,495	\$351,044	214	185	\$2,537,832	\$7,043,517	697	563	\$6,894,765	\$19,133,863
1981	474	398	\$6,733,538	\$16,872,957	15	13	\$210,988	\$528,818	205	183	\$3,282,836	\$8,226,974	694	594	\$10,227,361	\$25,628,749
1982	460	402	\$16,244,712	\$38,247,116	16	11	\$451,982	\$1,064,252	204	178	\$7,817,978	\$18,408,282	680	591	\$24,514,672	\$57,719,650
1983	463	403	\$13,215,746	\$30,368,634	18	14	\$442,678	\$1,017,265	204	172	\$5,933,592	\$13,635,209	685	589	\$19,592,016	\$45,021,108
1984	461	410	\$7,361,151	\$16,230,753	18	17	\$283,128	\$624,314	184	163	\$2,737,297	\$6,035,763	663	590	\$10,381,576	\$22,890,830
1985	468	417	\$13,318,312	\$28,359,472	17	12	\$360,959	\$768,664	196	165	\$5,296,075	\$11,277,928	681	594	\$18,975,346	\$40,406,063
1986	464	403	\$20,666,330	\$43,327,302	23	18	\$894,073	\$1,874,553	200	171	\$8,388,502	\$17,587,397	687	592	\$29,948,905	\$62,789,253
1987	446	410	\$42,041,921	\$84,813,526	20	17	\$1,682,698	\$3,394,679	198	167	\$18,060,170	\$36,435,575	664	594	\$61,784,789	\$124,643,780
1988	438	408	\$53,980,599	\$104,583,522	24	20	\$2,763,906	\$5,355,012	181	161	\$21,384,377	\$41,432,173	643	589	\$78,128,882	\$151,370,707
1989	447	8	**	**	23	1	**	**	188	1	**	**	658	10	\$33,363	\$61,388
1990	448	390	\$18,856,155	\$33,186,898	23	19	\$887,099	\$1,561,747	194	179	\$8,641,642	\$15,212,941	665	588	\$28,384,895	\$49,961,586
1991	440	397	\$5,770,942	\$9,723,915	22	16	\$207,639	\$349,963	191	172	\$2,120,552	\$3,573,802	653	585	\$8,099,133	\$13,647,679
1992	434	387	\$44,246,559	\$72,296,033	23	19	\$2,100,534	\$3,432,335	203	184	\$20,014,966	\$32,705,057	660	590	\$66,362,059	\$108,433,425
1993	425	384	\$10,768,781	\$17,121,142	26	21	\$536,612	\$853,186	208	188	\$5,231,740	\$8,318,098	659	593	\$16,537,133	\$26,292,426
1994	414	371	\$12,534,666	\$19,382,767	27	21	\$640,020	\$989,781	218	186	\$5,591,450	\$8,647,606	659	578	\$18,766,136	\$29,020,154
1995	439	375	\$9,185,902	\$13,828,032	26	18	\$394,621	\$594,081	222	194	\$4,331,560	\$6,520,984	687	587	\$13,912,083	\$20,943,097
1996	418	364	\$11,584,017	\$16,940,784	31	21	\$587,852	\$859,677	220	179	\$5,564,505	\$8,137,633	669	564	\$17,736,374	\$25,938,094
1997	420	372	\$11,285,653	\$16,143,344	30	22	\$493,965	\$706,597	222	186	\$5,668,576	\$8,108,817	672	580	\$17,448,194	\$24,958,759
1998	426	354	\$2,968,110	\$4,175,146	23	14	\$78,350	\$110,229	216	164	\$1,256,918	\$1,768,226	665	532	\$4,303,378	\$6,053,601
1999	414	334	\$8,498,176	\$11,702,117	25	11	\$205,634	\$283,196	205	148	\$3,430,999	\$4,724,872	644	493	\$12,134,809	\$16,710,185
2000	425	341	\$2,957,605	\$3,930,124	22	13	\$86,669	\$115,165	212	162	\$1,394,318	\$1,852,754	659	516	\$4,438,593	\$5,898,044
2001	424	317	\$2,461,369	\$3,183,408	24	11	\$64,288	\$83,145	200	142	\$1,185,613	\$1,533,459	648	470	\$3,711,269	\$4,800,012
2002	408	275	\$3,925,982	\$5,004,563	22	12	\$140,517	\$179,124	192	123	\$1,619,549	\$2,064,606	622	410	\$5,686,049	\$7,248,293
2003	405	287	\$4,411,714	\$5,507,962	24	11	\$148,116	\$184,926	194	121	\$1,769,331	\$2,208,962	623	419	\$6,329,162	\$7,901,850
2004	434	299	\$8,401,356	\$10,183,489	22	13	\$327,914	\$397,486	195	128	\$3,068,908	\$3,720,065	651	440	\$11,798,178	\$14,301,040
2005	433	319	\$10,535,587	\$12,374,962	32	24	\$816,035	\$958,597	189	134	\$3,900,080	\$4,581,516	654	477	\$15,251,702	\$17,915,076
2006	408	281	\$3,887,687	\$4,384,261	26	17	\$330,602	\$372,911	186	102	\$940,871	\$1,060,941	620	400	\$5,159,160	\$5,818,112
2007	406	282	\$8,829,179	\$9,732,929	28	15	\$490,801	\$541,035	186	120	\$3,439,654	\$3,791,541	620	417	\$12,759,634	\$14,065,505
2008	435	293	\$5,620,318	\$5,868,625	28	12	\$200,158	\$209,017	185	123	\$2,002,531	\$2,090,481	648	428	\$7,823,008	\$8,168,123
2009	421	283	\$5,907,636	\$6,296,773	28	14	\$273,353	\$291,314	181	113	\$2,021,193	\$2,154,525	630	410	\$8,202,181	\$8,742,612
2010	439	265	\$13,816,976	\$14,550,216	29	12	\$619,813	\$652,723	181	103	\$4,863,741	\$5,121,993	649	380	\$19,300,530	\$20,324,931
2011	449	323	\$21,029,696	\$21,370,857	25	12	\$893,632	\$908,118	192	128	\$8,454,716	\$8,591,977	666	463	\$30,378,044	\$30,870,953
2012	453	341	\$20,963,581	\$21,007,671	27	19	\$1,229,194	\$1,231,780	191	140	\$8,353,703	\$8,371,521	671	500	\$30,546,478	\$30,610,972

\* Adjusted for inflation using the 2012 CPI from the U.S. Bureau of Labor Statistics.

\*\* Ex-vessel earnings are masked due to confidentiality.