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# Prince William Sound Area Commercial Salmon Fisheries, 2014: a Report to the Alaska Board of Fisheries

**by**

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**and**

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

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**Weights and measures (metric)**

| | |
|---|---|
| centimeter | cm |
| deciliter | dL |
| gram | g |
| hectare | ha |
| kilogram | kg |
| kilometer | km |
| liter | L |
| meter | m |
| milliliter | mL |
| millimeter | mm |

**Weights and measures (English)**

| | |
|---|---|
| cubic feet per second | $ft^3/s$ |
| foot | ft |
| gallon | gal |
| inch | in |
| mile | mi |
| nautical mile | nmi |
| ounce | oz |
| pound | lb |
| quart | qt |
| yard | yd |

**Time and temperature**

| | |
|---|---|
| day | d |
| degrees Celsius | °C |
| degrees Fahrenheit | °F |
| degrees kelvin | K |
| hour | h |
| minute | min |
| second | s |

**Physics and chemistry**

| | |
|---|---|
| all atomic symbols | |
| alternating current | AC |
| ampere | A |
| calorie | cal |
| direct current | DC |
| hertz | Hz |
| horsepower | hp |
| hydrogen ion activity (negative log of) | pH |
| parts per million | ppm |
| parts per thousand | ppt, ‰ |
| volts | V |
| watts | W |

**General**

| | |
|---|---|
| Alaska Administrative Code | AAC |
| all commonly accepted abbreviations | e.g., Mr., Mrs., AM, PM, etc. |
| all commonly accepted professional titles | e.g., Dr., Ph.D., R.N., etc. |
| at | @ |
| compass directions: | |
| east | E |
| north | N |
| south | S |
| west | W |
| copyright | © |
| corporate suffixes: | |
| Company | Co. |
| Corporation | Corp. |
| Incorporated | Inc. |
| Limited | Ltd. |
| District of Columbia | D.C. |
| et alii (and others) | et al. |
| et cetera (and so forth) | etc. |
| exempli gratia (for example) | e.g. |
| Federal Information Code | FIC |
| id est (that is) | i.e. |
| latitude or longitude | lat or long |
| monetary symbols (U.S.) | $, ¢ |
| months (tables and figures): first three letters | Jan,...,Dec |
| registered trademark | ® |
| trademark | ™ |
| United States (adjective) | U.S. |
| United States of America (noun) | USA |
| U.S.C. | United States Code |
| U.S. state | use two-letter abbreviations (e.g., AK, WA) |

**Mathematics, statistics**

| | |
|---|---|
| *all standard mathematical signs, symbols and abbreviations* | |
| alternate hypothesis | $H_A$ |
| base of natural logarithm | $e$ |
| catch per unit effort | CPUE |
| coefficient of variation | CV |
| common test statistics | (F, t, $\chi^2$, etc.) |
| confidence interval | CI |
| correlation coefficient (multiple) | R |
| correlation coefficient (simple) | r |
| covariance | cov |
| degree (angular ) | ° |
| degrees of freedom | df |
| expected value | $E$ |
| greater than | > |
| greater than or equal to | ≥ |
| harvest per unit effort | HPUE |
| less than | < |
| less than or equal to | ≤ |
| logarithm (natural) | ln |
| logarithm (base 10) | log |
| logarithm (specify base) | $\log_2$, etc. |
| minute (angular) | ' |
| not significant | NS |
| null hypothesis | $H_O$ |
| percent | % |
| probability | P |
| probability of a type I error (rejection of the null hypothesis when true) | α |
| probability of a type II error (acceptance of the null hypothesis when false) | β |
| second (angular) | " |
| standard deviation | SD |
| standard error | SE |
| variance | |
| population | Var |
| sample | var |

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# PRINCE WILLIAM SOUND AREA COMMERCIAL SALMON FISHERIES, 2014: A REPORT TO THE ALASKA BOARD OF FISHERIES

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# TABLE OF CONTENTS

# LIST OF TABLES



# LIST OF FIGURES

# ABSTRACT

The 2012–2014 Prince William Sound Area commercial salmon total (all species) harvest average of 61.4 million fish is above the 10 year (2002–2011) harvest average of 46.8 million fish for this area. The 2012–2014 total harvest average was made up of 54.7 million pink (*Oncorhynchus gorbuscha*), 3.1 million sockeye (*O. nerka*), 1.9 million chum (*O. keta*), 347,000 coho (*O. kisutch*), and 19,000 Chinook salmon (*O. tshawytscha*). Approximately 8.0% (4.9 million fish) of the total harvest average was composed of hatchery cost recovery and broodstock fish. The majority, 92.0% (56.5 million fish), were harvested in the common property fishery. The most significant events that have occurred since the 2011 Alaska Board of Fisheries meeting include 1) the largest pink salmon harvest on record in 2013, 2) improved salmon prices and record exvessel values for all gear groups, 3) PWS allocation came back into parity and then returned to favor the purse seine gear group due to record pink salmon harvests and high pink salmon values, and 4) participation in all commercial salmon fisheries is at historically high levels.

Key words: Prince William Sound, Pacific salmon *Oncorhynchus* spp., harvest, drift gillnet, set gillnet, purse seine, common property fishery, hatchery, cost recovery.

# INTRODUCTION

## PRINCE WILLIAM SOUND SALMON FISHERIES

This report summarizes Prince William Sound (PWS) commercial fishery performance (including the Copper and Bering districts) for the years 2012, 2013 and 2014, and highlights significant events that have occurred since the 2011 PWS Alaska Board of Fisheries (BOF) meeting. At the time of writing this report, 2014 commercial fisheries were ongoing and complete harvest data were not available. Because the season has not concluded, an abbreviated 2014 season summary with preliminary harvest data is provided. Detailed annual summaries are available for 2012 and 2013 in the *Prince William Sound area finfish management report* for each year that also provide historical data for comparisons and examination of trends.

Salmon returns and harvests have been consistently strong over the past 3 years. Wild pink *Oncorhynchus gorbuscha* and chum *O. keta* salmon stocks in PWS have met the majority of district-specific escapement goals since 2011, and there are no stocks of concern. PWS wild pink salmon escapements were within or above escapement goals from 2012 to 2014 and were near record levels in 2013. Wild chum salmon escapements were within escapement goal ranges for the years 2012–2104. Adequate wild stock escapements have allowed for liberal time and area management of purse seine fisheries. Broad area fisheries allow for a wide distribution of fishing effort, which relieves congestion and alleviates gear conflict issues to some extent.

The most significant events that occurred since the 2011 BOF meeting include 1) the largest pink salmon harvest on record in 2013, 2) increased salmon prices and record exvessel values for all gear groups, 3) PWS allocation came back into parity and then returned to a higher purse seine gear group proportion due to record pink salmon harvests (2010 and 2013) and high pink salmon values, and 4) participation in all salmon fisheries is at historically high levels (Tables 1 and 2).

## MANAGEMENT AREA

The PWS management area encompasses all coastal waters and inland drainages entering the north central Gulf of Alaska between Cape Suckling and Cape Fairfield. This area includes the Bering River, Copper River, and all of PWS with a total adjacent land area of approximately 38,000 square miles (Figure 1). While the Copper River lies within the PWS management area, Copper River salmon fisheries will be described in a separate report.

The salmon management area is divided into 11 districts that correspond to the local geography and distribution of the 5 species of salmon harvested by the commercial fishery. The management objective for all districts is achievement of escapement goals for the major salmon species while allowing for the orderly harvest of all fish surplus to spawning requirements and inriver goals. In addition, the Alaska Department of Fish and Game (ADF&G) follows regulatory plans to manage fisheries and assist private nonprofit (PNP) hatcheries in achieving cost recovery and broodstock objectives.

There are 6 hatcheries that contribute to the area's fisheries and 5 are operated by the regional aquaculture association, Prince William Sound Aquaculture Corporation (PWSAC). Gulkana Hatchery in Paxson augments production of sockeye salmon *O. nerka* to the Copper River. Cannery Creek Hatchery (CCH), located on the north shore of the sound, and Armin F. Koernig (AFK) Hatchery in the southwestern sound produce pink salmon *O. gorbuscha*. Wally H. Noerenberg (WNH) Hatchery in the northwestern sound produces pink, chum *O. keta*, and coho *O. kisutch* salmon, and Main Bay Hatchery (MBH) in the western sound produces sockeye salmon. Valdez Fisheries Development Association (VFDA) operates Solomon Gulch Hatchery (SGH) in Port Valdez and produces pink and coho salmon. Hatchery production, especially pink salmon production, has increased since inception of the hatcheries (Figure 2).

Gear for the salmon fishery includes purse seine, drift gillnet, and set gillnet. Drift gillnet permits are the most numerous (536) and are allowed in the Bering River, Copper River, Coghill, Unakwik, and Eshamy districts. Set gillnet gear (29 permits) is allowed only in the Eshamy District. Purse seine gear (258 permits) is allowed in the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague, and Southeastern districts.

## SALMON HARVEST OVERVIEW 2012–2014

The 2012–2014 Prince William Sound Area (including the Copper and Bering districts) commercial salmon harvest average of 59.5 million fish is 22% above the 10-year harvest average (48.6 million fish) for this area (Table 3).

The 2012 harvest of 35.4 million salmon was made up of 27.6 million pink, 3.7 million sockeye, 3.8 million chum, 210,000 coho, and 13,100 Chinook salmon (Table 4). Approximately 11.3% (3.9 million fish) of the harvest was composed of hatchery cost recovery and broodstock fish. The majority, 88.7% (31.4 million fish), were harvested in the common property fishery (CPF). During the 2012 season, 522 drift gillnet permit holders, 29 set gillnet permit holders, and 224 purse seine permit holders reported deliveries. The estimated value of the combined 2012 commercial salmon harvest is $115 million, including hatchery sales (Table 5).

The 2013 harvest of 99.7 million salmon was made up of 92.6 million pink, 2.3 million sockeye, 4.1 million chum, 619,000 coho, and 10,800 Chinook salmon (Table 6). Approximately 4.9% (4.9 million fish) of the harvest was composed of hatchery cost recovery and broodstock fish. The majority, 95.1% (94.8 million fish), were harvested in the CPF. During the 2013 season, 526 drift gillnet permit holders, 29 set gillnet permit holders, and 211 purse seine permit holders reported deliveries. The estimated value of the combined 2013 commercial salmon harvest, including hatchery sales, was $168.3 million (Table 7).

The 2014 harvest of 49.3 million salmon was made up of 43.9 million pink, 3.3 million sockeye, 1.5 million chum, 600,000 coho, and 10,100 Chinook salmon (Table 8). Approximately 12% (5.90 million fish) of the harvest was composed of hatchery cost recovery and broodstock fish.

The majority, 88% (43.5 million fish), were harvested in the CPF. During the 2014 season, 525 drift gillnet permit holders, 29 set gillnet permit holders, and 222 purse seine permit holders reported deliveries. The preliminary estimated value of the combined 2014 commercial salmon harvest is $107 million, including hatchery sales (Table 9).

There are 6 proposals currently before the BOF that concern allocation in the general PWS area.

- Proposal 10 – Seeks to change set gillnet component of *Prince William Sound Management and Salmon Enhancement Allocation Plan*.
- Proposal 11 – Seeks to include Valdez Fisheries Development Association (VFDA) enhanced salmon harvest value in the *Prince William Sound Management and Salmon Enhancement Allocation Plan*.
- Proposal 13 – Seeks to designate an area in the Coghill District north of Point Pakenham to a point on the east side of College Fiord near Golden Lagoon that would be opened to both drift gillnet and purse seine gear by emergency order.
- Proposal 14 – Seeks to allow the purse seine gear group to target sockeye salmon at the Coghill River.
- Proposal 15 – This proposal is a place holder and does not suggest any specific changes to regulation.
- Proposal 16 – Seeks to designate area and establish alternating periods of time for drift gillnet and purse seine gear in portions of the Coghill District after July 21.

There is 1 proposal currently before the BOF that concerns drift gillnet in the general PWS area.

- Proposal 17 – Allow use of monofilament mesh in Prince William Sound drift gillnet fishery.

There are 3 proposals currently before the BOF that concern the use of aircraft in the general PWS area.

- Proposals 19, 20 and 21 – Addresses spotter plane use for purse seine fishery.

## GILLNET FISHERIES

### Coghill District

There are 5 proposals currently before the BOF that deal with issues specific to the Coghill District.

- Proposal 13 – Open certain waters of College Fjord to purse seine fishery before July 21.
- Proposal 14 – Reestablish historic purse seine gear access to Coghill Lake sockeye salmon in Coghill River terminal area.
- Proposal 15 – Establish standards to alleviate gear conflicts in Esther Subdistrict during the commercial pink salmon fishery.
- Proposal 16 – Establish alternating purse seine and drift gillnet fishing periods in certain areas to alleviate gear conflicts in Esther Subdistrict during the commercial pink salmon fishery.

- Proposal 22 – Identify certain landmarks in description of the Wally Noerenberg Hatchery terminal harvest area using latitude and longitude coordinates.

The Coghill District is located in northwestern PWS and is approximately 45 miles in length. The majority of commercial fisheries in the Coghill District target hatchery salmon from the Wally Noerenberg Hatchery (WNH) and wild sockeye salmon. The hatchery is located on Lake Bay at the southern end of Esther Island (Figure 1) and annually produces chum (~3 million), pink (~9.5 million), and coho (~250,000) salmon. Early-season management of the Coghill District is largely based on Coghill Lake sockeye salmon escapement and WNH chum salmon run strength.

The Coghill District is open for the harvest of chum, sockeye, pink, and coho salmon to drift gillnet permit holders; it opens to purse seine permit holders beginning on July 21 and ends when the harvestable surplus is no longer pink salmon.

PWSAC, in consultation with ADF&G, generally elects to complete a high percentage (80–90%) pink and chum salmon cost recovery harvest before recommending CPF openings. CPF openings in hatchery subdistricts and terminal areas during cost recovery occur as cost recovery progress warrants.

## Eshamy District

The Eshamy District is located in western PWS and is 15 miles in length. This is the only district in PWS where set gillnet gear is allowed to operate. The Main Bay Subdistrict was established to allow permit holders to harvest enhanced sockeye salmon while minimizing the harvest of wild sockeye returning to Eshamy Lake.

The Eshamy District is open to all drift and set gillnet permits in Area E.

During years in which the set gillnet gear group catches 5% or more of the previous 5-year average exvessel value of the total CPF for enhanced salmon, beginning on July 10, the set gillnet gear group will be limited to no more than 36 hours per week. In the past 3 years the set gillnet gear group remained within the 5% allocation, and no restrictions were triggered.

## Port Chalmers Subdistrict (Montague District)

The Port Chalmers Subdistrict is located in the northern end of the Montague District. Since 1994, PWSAC has released chum salmon at this remote location.

Based on the allocation plan, the drift gillnet gear group maintained exclusive access to Port Chalmers from 2009 through 2013. In 2014 the Port Chalmers area returned to the purse seine gear group when allocation came back into balance. However, the area will return to the drift gillnet gear group because of the record 2013 pink salmon harvest, which will be included in the allocation calculation for the next 5 years. Following a regulatory change at the 2011 PWS BOF meeting, gillnets greater than 60 meshes in depth were no longer permitted in the Port Chalmers Subdistrict to maintain consistency with gear standards in other fishing districts. Chum salmon runs to the Port Chalmers remote release have been below forecast since 2010 and have had minimal impact in bringing allocation between purse seine and drift gillnet back into parity.

## Gillnet Season Summary 2012

The 5 year rolling average allocation calculation used to guide 2012 fisheries management was 61% purse seine, 39% drift gillnet, and 4% set gillnet. As a result, the drift gillnet fleet had

exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2012, and the set gillnet fleet was not limited to 36 hours per week after July 10, 2012.

The 2012 PWS commercial drift gillnet salmon harvest was 7.5 million fish. The harvest was composed of 1.2 million pink, 2.9 million chum, 3.2 million sockeye, 184,000 coho, and 12,000 Chinook salmon (Table 4). The 2012 PWS commercial set gillnet salmon harvest was 336,000 fish. The harvest was composed of 17,000 pink, 24,000 chum, 295,000 sockeye, 97 coho, and 14 Chinook salmon (Table 4).

The 2012 wild stock sockeye salmon run to Coghill Lake was forecast at 321,000 fish. During the 2011 BOF meeting, the Coghill Lake sockeye salmon sustainable escapement goal (SEG) range was changed from 20,000–40,000 fish to 20,000–60,000. Achieving a midpoint escapement of 40,000 sockeye salmon will leave approximately 281,000 fish for the CPF.

PWSAC forecasted a harvest of 1.2 million chum salmon to hatchery release sites in 2012 (Table 10). Approximately 380,000 chum salmon were designated for corporate cost recovery and broodstock. The Coghill District enhanced chum salmon and wild sockeye salmon runs were strong compared to the forecast. As a result, fishing area in the district was liberalized throughout the season. The CPF harvest of chum salmon in the Coghill District was 2.5 million fish (92% drift gillnet) and 250% greater than forecast. PWSAC harvested 438,000 chum salmon for corporate cost recovery and broodstock (Table 4). The proportion of wild chum salmon in the Coghill District CPF was 3%.

Coghill Lake sockeye escapement was larger than expected, and weir passage in just 2 days (July 3 and 4) totaled 23,300, exceeding the lower end of the SEG range. The continued strength of the return provided extended fishing time and expanded area. Nonetheless 72,000 sockeye salmon passed the Coghill River weir, which exceeded the SEG range of 20,000–60,000 fish. The total CPF harvest of sockeye salmon in the Coghill District was 436,000 fish (88% drift gillnet) (Table 4). The proportion of wild sockeye salmon in the Coghill District CPF harvest was 81%.

Pink salmon CPF harvest in the Coghill District was 3.4 million fish (33% drift gillnet). The proportion of wild pink salmon in the Coghill District CPF harvest was 19%. The total CPF harvest of coho salmon in the Coghill District was 11,000 fish, the majority of which were likely enhanced from WNH.

Gillnets greater than 60 meshes in depth were not permitted in the Port Chalmers Subdistrict in 2012 due to regulatory changes at the 2011 BOF meeting. These regulatory changes applied the same regulatory start date (the first Monday in July) for deep gear that existed in Coghill, Unakwik, and Eshamy districts. Even with the potential for reduced harvest efficiency, drift gillnet fishing effort appeared to keep up with chum salmon run entry, and no buildups or foregone harvest were observed.

PWSAC forecasted a run of 504,000 chum salmon to the Port Chalmers remote release site in 2012. CPF drift gillnet harvest of 325,000 chum salmon in the Montague District was 36% below that forecast and 46% below the 5 year (2007–2011) CPF average of 599,000 chum salmon. The proportion of wild chum salmon in the Port Chalmers Subdistrict CPF harvest was 3%.

ADF&G's preseason harvest forecast for Eshamy Lake was 33,000 wild sockeye salmon, and PWSAC forecasted a run of 1.2 million MBH enhanced sockeye salmon (Table 10). Overall, 988,000 sockeye, 255,000 chum, and 89,000 pink salmon were harvested in the Eshamy District

by 355 drift gillnet permit holders during the 2012 season. A total of 29 set gillnet permit holders harvested 295,000 sockeye, 24,400 chum, and 17,300 pink salmon (Table 4). Contribution estimates show that wild sockeye salmon comprised 11% of the 1.3 million harvested, wild chum salmon comprised 4% of the 279,000 harvest, and wild pink salmon comprised 74% of the 106,000 harvest in Eshamy District.

The Eshamy River weir did not operate in 2012. Escapement was monitored through a pilot video monitoring project at the outlet of Eshamy Lake. Escapement counts for the season were incomplete because of new project deployment problems, and no escapement estimate is available. The sockeye salmon biological escapement goal (BEG) range for Eshamy Lake is 13,000 to 28,000 fish. Due to uncertainty in escapement at Eshamy River, openings in Eshamy Bay were restricted to one 14-hour period per week starting August 14. Low sockeye salmon harvest in the Eshamy Bay fishery did not support expanded fishing opportunity on the Eshamy Lake sockeye salmon stock.

## Gillnet Season Summary 2013

The 5-year rolling average allocation calculation used to guide 2013 fisheries management was 58% purse seine, 42% drift gillnet, and 4% set gillnet. As a result, the drift gillnet fleet had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2013, and the set gillnet fleet was not limited to 36 hours per week after July 10, 2013.

The 2013 PWS commercial drift gillnet salmon harvest was 7.8 million fish. The harvest was composed of 2.6 million pink, 2.8 million chum, 2.0 million sockeye, 357,000 coho, and 9,000 Chinook salmon (Table 6). The 2013 PWS commercial set gillnet salmon harvest was 265,000 fish. The harvest was composed of 19,000 pink, 43,000 chum, 203,000 sockeye, 360 coho, and 59 Chinook salmon (Table 6).

The enhanced chum salmon CPF harvest was forecast to be 2.5 million fish. PWSAC's projection for cost recovery and broodstock requirements was approximately 663,000 fish. The Coghill District drift gillnet fishery was largely concentrated in hatchery subdistricts and terminal areas in 2013, focusing fishing effort on a WNH chum salmon run that was stronger than anticipated throughout the season. The CPF harvest of chum salmon in the Coghill District was 2.2 million fish (97% drift gillnet). PWSAC harvested 761,000 chum salmon for corporate cost recovery and broodstock (Table 6). The proportion of wild chum salmon in the Coghill District CPF was 2%.

The 2013 forecast of the sockeye salmon run to Coghill Lake was 156,000 fish. Meeting the midpoint of the SEG range of 20,000–60,000 sockeye salmon would leave 116,000 fish for the CPF (Table 11). Total sockeye salmon escapement past the Coghill River weir was 17,200 fish, which was below the lower SEG bound of 20,000 fish. Also, 360,000 pink salmon passed the Coghill River weir. District pink and chum salmon escapement goals were met.

The total CPF harvest of sockeye salmon in the Coghill District was 96,000 fish (98% drift gillnet), composed of approximately 35,100 wild and 60,600 enhanced sockeye salmon (Table 6). The proportion of wild sockeye salmon in the Coghill District CPF harvest was 37%.

Pink salmon CPF harvest in the Coghill District was 9.1 million fish (27% drift gillnet). The proportion of wild pink salmon in the Coghill District CPF harvest was 12%. The total CPF harvest of coho salmon in the Coghill District was 71,000 fish, the majority of which are assumed to be from WNH (Table 6). Of the 2,290 coho salmon collected for broodstock at

WNH, only 319 were viable. WNH coho survival has been highly variable, ranging from nearly 12% for return year 2007 to less than 1% for return year 2012, and broodstock goals have been rarely met.

PWSAC forecasted a run of 634,000 chum salmon to the Port Chalmers remote release site in 2013. The CPF drift gillnet harvest of chum salmon in the Montague District of 484,000 fish was 24% below forecast (Table 6) and 7% below the 5-year average of 516,000 fish. The proportion of wild chum salmon in the Port Chalmers Subdistrict CPF harvest was 5%.

ADF&G's preseason CPF harvest forecast for Eshamy Lake was 32,000 wild sockeye salmon, and PWSAC forecasted a CPF harvest of 1.1 million MBH enhanced sockeye salmon (Table 11). Overall, 326 drift gillnet permit holders harvested 336,000 sockeye, 184,000 chum, and 62,200 pink salmon. A total of 29 set gillnet permit holders harvested 203,000 sockeye, 42,600 chum, and 19,100 pink salmon (Table 6). Contribution estimates show that wild sockeye salmon comprised 8% of the 539,000 harvested, wild chum salmon comprised 14% of the 227,000 harvest, and wild pink salmon comprised 54% of the 81,000 harvest in Eshamy District. The enhanced sockeye salmon run to MBH fell 483,000 fish (57%) short of the forecast of 1.12 million fish.

The Eshamy River weir did not operate in 2013. Escapement was monitored through a video monitoring project at the outlet of Eshamy Lake. The counts from that project are incomplete and there is no escapement estimate for 2013. The sockeye salmon BEG range for Eshamy Lake is 13,000–28,000 fish. Due to uncertainty in escapement at Eshamy River, openings in Eshamy Bay were restricted to one 14-hour period per week starting August 15. Low sockeye salmon harvest in the Eshamy Bay fishery did not support expanded fishing opportunity on the Eshamy Lake sockeye salmon stock.

## Gillnet Season Summary 2014

The 5-year rolling average allocation calculation used to allocate 2014 fisheries came back into balance such that no triggers and set net restrictions were activated. As a result, the purse seine fleet had exclusive access to the Port Chalmers Subdistrict for the first time since 2008.

The 2014 PWS commercial drift gillnet salmon harvest was 5.8 million fish. The harvest was composed of 1.4 million pink, 791,000 chum, 3.0 million sockeye, 556,000 coho, and 9,700 Chinook salmon (Table 8). The 2014 PWS commercial set gillnet salmon harvest was 316,000 fish. The harvest was composed of 36,000 pink, 21,000 chum, 259,000 sockeye, 65 coho, and 22 Chinook salmon (Table 8).

The enhanced chum salmon run to WNH was forecast to be 1.6 million fish. PWSAC's projection for cost recovery and broodstock requirements was approximately 512,000 fish. The 2014 WNH chum salmon run was weaker than PWSAC's 1.6 million fish forecast. The CPF harvest of chum salmon in the Coghill District was 671,000 fish. PWSAC harvested 370,000 chum salmon for corporate cost recovery and broodstock (Table 8). Due to higher than anticipated mortality in their broodstock, PWSAC did not make their chum salmon egg take goal. PWSAC's WNH chum salmon egg take goal was 18% below their goal in 2014, with 136 million green eggs collected towards a final goal of 165 million. The proportion of wild chum salmon in the Coghill District CPF was 11% and escapement (8,000 fish) was met.

The 2014 forecast of the sockeye salmon run to Coghill Lake was 168,000 fish with 138,000 fish available for CPF (Table 12). Total sockeye salmon escapement past the Coghill River weir was

21,200 fish, just above the lower SEG bound of 20,000 fish. The total CPF harvest of sockeye salmon in the Coghill District was 166,000 fish (Table 8). Otolith contribution estimates indicate that approximately 42,000 wild and 124,000 enhanced MBH sockeye salmon were harvested. The proportion of wild sockeye salmon in the Coghill District CPF harvest was 25%.

CPF (combined gillnet and purse seine) pink salmon harvest is summarized in the purse seine fisheries section. Gillnet pink salmon harvest has remained small compared to purse seine harvest; however, with higher prices for pink in the past 3 years there has been a steady increase in drift gillnet harvest of pink salmon. WNH also produces coho salmon, and in 2014 the Coghill District coho harvest was 147,000 fish. PWSAC harvested 14,000 coho salmon as part of broodstock collection (Table 8).

ADF&G's 2014 preseason forecast for Eshamy Lake was 53,000 wild sockeye salmon, and PWSAC forecasted a run of 1.0 million MBH enhanced sockeye salmon (Table 12). Overall, 311 drift gillnet permit holders harvested 761,000 sockeye, 78,000 chum, and 190,000 pink salmon in the Eshamy District (Table 8). This is above the 10-year harvest averages of 515,000 sockeye and 81,000 pink salmon and below the 10-year average of 167,000 chum salmon harvested. A total of 29 set gillnet permit holders harvested 259,000 sockeye, 21,000 chum, and 36,000 pink salmon (Table 8). This sockeye and pink salmon harvest total is higher than the previous 10-year averages of 183,000 sockeye salmon and 32,000 pink salmon, and this year's chum salmon harvest is lower than the 10-year average of 31,000 chum salmon. Preliminary contribution estimates show that wild sockeye salmon comprised 6% of the 1.0 million harvested, wild chum salmon comprised 26% of the 101,000 harvested, and wild pink salmon comprised 52% of the 228,000 harvested in Eshamy District. The enhanced sockeye salmon run to MBH, 1.2 million fish, was 14% larger than the preseason harvest forecast of 1.0 million fish.

The Eshamy River weir did not operate in 2014. Escapement was monitored through a video monitoring project at the outlet of Eshamy Lake, but those counts are incomplete, and no estimate of escapement is available. The sockeye salmon BEG range for Eshamy Lake is 13,000 to 28,000 fish. Due to uncertainty in escapement at Eshamy River, openings in Eshamy District were restricted to waters north of Eshamy Bay, and duration was limited to 36 hours from July 24 through August 19. During this time period, over 35% of the pink salmon harvested were of wild origin. Further limiting area to the Main Bay Subdistrict during this time reduced harvest of wild pink and chum salmon returning to other districts and protected sockeye salmon returning to Eshamy River. Eshamy Lake sockeye salmon run timing and limited fishing effort allowed for expanding fishing area to the entire district after August 21.

## PURSE SEINE FISHERIES

Purse seine districts include the Eastern, Coghill, Montague, Northern, Northwestern, Southeastern, Southwestern, and Unakwik districts. These districts are managed to achieve wild pink and chum salmon escapement goals by district and to allow for the orderly harvest of surplus wild and enhanced salmon stocks. Hatchery subdistricts are managed cooperatively with PWS hatchery operators to achieve hatchery escapement goals. Escapement of pink and chum salmon is monitored throughout the season by weekly aerial surveys of 215 index streams. Pink and chum salmon escapement trends determine the area and duration of fishing periods within districts. PWS purse seine fisheries primarily target VFDA and PWSAC enhanced salmon.

## Purse Seine Season Summary 2012

The 2012 pink salmon total run forecast for PWS was 37.5 million fish, of which 30.2 million were anticipated to be available for the CPF. This pink salmon total run forecast included 4.4 million wild stock fish, 13.5 million VFDA fish, and 19.6 million PWSAC hatchery fish. Approximately 2.7 million (20.1%) of the projected 13.5 million pink salmon run to SGH were to be needed for cost recovery and broodstock, leaving 10.8 million for CPF harvest. Approximately 3.44 million (17.6%) of the projected 19.6 million pink salmon run to the PWSAC hatcheries were to be needed for cost recovery and broodstock. The remaining 16.2 million PWSAC pink salmon were to be available for CPF harvest.

The 2012 PWS commercial purse seine salmon harvest was 23.5 million fish. The harvest was composed of 22.8 million pink, 504,000 chum, 155,000 sockeye, 22,300 coho, and 186 Chinook salmon (Table 4).

The most important events of the 2012 PWS pink salmon fishery include: 1) the VFDA pink salmon run was 21.8% (2.83 million) below the preseason forecast of 13.5 million fish; 2) the PWSAC pink salmon run was 31.1% (5.92 million) below the preseason forecast of 19.6 million fish; 3) fewer aerial surveys were flown than any year since 1976 due to poor weather conditions; 4) more permits were fished (224) than any year since 1991; and 5) PWSAC's Cannery Creek Hatchery pink salmon egg take goal was missed by 46% in 2012, with 102 million green eggs collected towards a final goal of 187 million. Total pink salmon harvest was 27.6 million fish, including 3.53 million (2.16 million for PWSAC and 1.37 million for VFDA) fish for hatchery cost recovery and broodstock (Table 4). The 10-year average total pink salmon harvest (2002–2011) in PWS is 40.4 million fish (Table 3).

The 2012 PWS pink salmon escapement estimate of 1.13 million fish was within the SEG range of 793,000 to 1.70 million fish, and supported a harvest of 4.43 million wild stock pink salmon.

The most significant events of the 2012 PWS purse seine chum salmon fishery include: 1) the use of seine gear in the Esther Subdistrict for the purpose of preventing the deterioration of fish quality of the harvestable surplus of chum salmon that was not being adequately harvested by the drift gillnet fleet, as permitted under 5 AAC 24.368 (f), resulting in the purse seine harvest of 186,000 chum salmon; and 2) the AFK chum salmon run was 54.3% (114,000) greater than the preseason forecast of 210,000 fish. Chum salmon CPF harvest in PWS was 3.39 million fish, which was 1.6 million fish greater than the CPF preseason forecast. The purse seine fleet harvested 504,000 chum salmon in 2012.

The 2012 PWS chum salmon escapement was greater than the PWS lower bound SEG and supported a harvest of 246,000 wild stock chum salmon.

Despite liberal fishing time and area, as well as higher than anticipated drift gillnet fishing effort, sockeye salmon escapement at the Coghill River weir was above the upper end of the river's anticipated cumulative escapement count by July 3. To further slow sockeye salmon escapement, purse seine gear was permitted to fish in the vicinity of the Coghill River prior to the Coghill District's July 21 regulatory start date. The purse seine fleet harvested 47,400 sockeye salmon during 2 fishing periods on July 5 and 12.

The VFDA enhanced coho salmon forecast was 129,000 fish with an anticipated commercial harvest of 62,000 fish. Due to a weak return, fishing opportunity targeting VFDA coho salmon in

Port Valdez was limited in 2012. Total commercial purse seine harvest of coho salmon in PWS was 22,300 fish.

## Purse Seine Season Summary 2013

The 2013 pink salmon total run forecast for PWS was 40.7 million fish, of which 34.0 million were anticipated to be available for the CPF. This pink salmon total run forecast included 6.23 million wild stock fish, 13.8 million VFDA fish, and 20.7 million PWSAC hatchery fish. Approximately 2.93 million (21.3%) of the projected 13.8 million pink salmon run to SGH were to be needed for cost recovery and broodstock leaving 10.8 million for CPF harvest. Approximately 2.35 million (11.4%) of the projected 20.7 million pink salmon run to the PWSAC hatcheries were to be needed for cost recovery and broodstock. The remaining 18.3 million PWSAC pink salmon were to be available for CPF harvest.

The 2013 PWS commercial purse seine salmon harvest was 86.7 million fish. The harvest was composed of 85.9 million pink, 487,000 chum, 76,700 sockeye, 222,000 coho, and 775 Chinook salmon (Table 6).

The most important events of the 2013 PWS pink salmon fishery include: 1) the PWS pink salmon total run set the new area record (97.3 million fish) and was more than double the preseason forecast; 2) the PWS wild stock pink salmon total run was more than triple the preseason forecast and also set the new area record (22.3 million fish); 3) industry processing capacity was reached and the majority of the purse seine fleet was placed on harvest limits for 2 weeks in August; 4) the VFDA coho salmon return was nearly double the preseason forecast; and 5) a record exvessel value of salmon was harvested by the purse seine group. Participation in the 2013 PWS purse seine fishery was 211 unique permits fished. This participation is 13 permits less than were fished in 2012, but greater than the 10-year average participation from 2002—2011 of 132 permits. Pink salmon CPF harvest in PWS was 88.6 million fish, which was 54.6 million fish greater than the CPF preseason forecast (Table 6). Total pink salmon harvest was 92.6 million fish, including 4.09 million (1.82 million for PWSAC and 2.27 million for VFDA) fish for hatchery cost recovery and broodstock. The 10-year average total pink salmon harvest (2003–2012) in PWS is 41.3 million fish (Table 3).

The 2013 PWS pink salmon escapement estimate was 4.68 million fish, or more than twice the upper bound of the odd-year SEG range for all districts, and supported a record harvest of 17.6 million wild stock pink salmon.

The most significant event of the 2013 PWS purse seine chum salmon fishery was the use of seine gear in the Esther Subdistrict between July 11 and 21 for the purpose of preventing the deterioration of fish quality of the harvestable surplus of chum salmon that was not being adequately harvested by the drift gillnet fleet, as permitted under 5 AAC 24.368 (f)**,** resulting in the purse seine harvest of 69,200 chum salmon. Chum salmon CPF harvest in PWS was 3.31 million fish, which was 178,000 fish greater than the CPF preseason forecast. The purse seine fleet harvested 487,000 chum salmon in 2013. Otolith contribution estimates indicate that 319,000 AFK chum salmon were harvested in the PWS CPF, which was greater than the preseason forecast of 306,000 fish.

The 2013 PWS chum salmon escapement estimate was greater than the SEG lower bound, near the 1976–2013 mean escapement index, and supported a harvest of 247,000 wild stock chum salmon in PWS commercial fisheries.

The VFDA enhanced coho salmon forecast was 127,000 fish with an anticipated commercial harvest of 67,000 fish. Port Valdez was opened to daily commercial purse seine fishing periods to target surplus VFDA coho salmon on September 3, resulting in the harvest of 138,000 coho salmon. Total commercial purse seine harvest of coho salmon in PWS was 222,000 fish.

## Purse Seine Season Summary 2014

The 2014 pink salmon total run forecast for PWS was 38.4 million fish, of which 31.5 million were anticipated to be available for the CPF. This pink salmon total run forecast included 4.30 million wild stock fish, 12.9 million VFDA fish, and 21.2 million PWSAC hatchery fish. Approximately 2.76 million (21.4%) of the projected 12.9 million pink salmon run to SGH were to be needed for cost recovery and broodstock leaving 10.2 million for CPF harvest. Approximately 3.07 million (14.5%) of the projected 21.2 million pink salmon run to the PWSAC hatcheries were to be needed for cost recovery and broodstock. The remaining 18.1 million PWSAC pink salmon were to be available for CPF harvest.

The 2014 PWS commercial purse seine salmon harvest was 37.4 million fish. The harvest was composed of 36.9 million pink, 347,000 chum, 53,100 sockeye, 31,100 coho, and 355 Chinook salmon (Table 8).

The most important events of the 2014 PWS pink salmon fishery were: 1) the VFDA run was twice the preseason forecast and set a new record return for SGH (24.5 million fish); 2) the PWSAC pink salmon run was 17.8% (3.78 million) below the preseason forecast of 21.2 million fish; 3) the number of active permits fished (222 unique permits fished) was the second highest since 1991; and 4) PWSAC's Cannery Creek Hatchery pink salmon egg take goal was missed by 3% in 2014, with 181 million green eggs collected towards a final goal of 187 million. Pink salmon CPF harvest in PWS was 38.4 million fish, 6.9 million fish greater than the preseason forecast (Table 8). Total pink salmon harvest was 43.9 million fish, including 5.51 million (3.58 million for PWSAC and 1.93 million for VFDA) fish for hatchery cost recovery and broodstock. The 10-year average total pink salmon harvest (2004–2013) in PWS is 45.4 million fish (Table 3).

The 2014 PWS pink salmon escapement estimate was not available at the time of writing this report. However, inseason pink salmon escapement indices were above minimum anticipated aerial survey counts. Overall escapement was likely within the even-year SEG range for all districts and supported a harvest of 1.95 million wild stock pink salmon.

The most significant events of the 2014 PWS purse seine chum salmon fishery include: 1) exclusive access to the Port Chalmers Subdistrict remote release chum salmon fishery for the purse seine gear group, as stipulated in 5 AAC 24.370 (h) (1); and 2) weaker than forecast runs of enhanced chum salmon to PWSAC's release locations. Chum salmon CPF harvest in PWS was 1.16 million fish, which was 1.20 million fish below the CPF preseason forecast. Preliminary otolith contribution estimates indicate that 86,300 AFK chum salmon and 174,000 Port Chalmers chum salmon were harvested in the PWS CPF, which are both well below (63.3%) preseason expectations of 987,000 fish. The purse seine fleet harvested 347,000 chum salmon in 2014.

The 2014 PWS chum salmon escapement estimate was not available at the time of writing this report. However, inseason chum salmon escapement indices were above minimum anticipated aerial survey counts. Overall escapement was likely greater than the PWS lower bound SEG and supported a harvest of 406,000 wild stock chum salmon.

The VFDA enhanced coho salmon forecast was 106,000 fish, with an anticipated commercial harvest of 57,000 fish. Due to a weak run, Port Valdez was not opened to commercial purse seine fishing to target surplus VFDA coho salmon in 2014. Total commercial purse seine harvest of coho salmon in PWS was 31,100 fish.

## PRINCE WILLIAM SOUND MANAGEMENT AND SALMON ENHANCEMENT ALLOCATION PLAN

In December 2005, the BOF modified the *Prince William Sound Management and Salmon Enhancement Allocation Plan* (5 AAC 24.370). The modifications removed wild stocks and Valdez Fisheries Development Association enhanced fish from the plan and allocated only PWSAC enhanced fish. Additionally, a 5-year average exvessel value is now used rather than annual value percentages (see Figure 3 for exvessel value from 2004 through 2014). The set gillnet gear group allocation is now 4% of the 5-year average value of PWSAC enhanced salmon stocks. The drift gillnet and purse seine gear groups each receive 50% of the remaining value of PWSAC enhanced salmon stocks. If the set gillnet gear group exceeds 5% of the of the 5-year average value of PWSAC enhanced stocks, they will be limited to no more than 36 hours of fishing time per week beginning July 10 in the year following this calculation. If the drift gillnet gear group harvest value is 45% or less, then in the year following the current calculations, the drift gillnet gear group shall have exclusive access to the Port Chalmers Subdistrict to harvest enhanced salmon returns from June 1 through July 30, during fishing periods established by emergency order. If the purse seine gear group harvest value is 45% or less, then in the year following the current calculations, the purse seine gear group shall have exclusive access to the Esther Subdistrict to harvest enhanced salmon returns from June 1 through July 20, during fishing periods established by emergency order.

The most significant events of relevance to PWS allocation since the 2011 PWS BOF meeting include: 1) a record harvest of PWSAC pink salmon in 2013; 2) large harvests of GH sockeye salmon in 2012 and 2013; 3) large harvests of MBH sockeye salmon in 2012 and 2014; 4) large harvests of WNH chum salmon in 2012 and 2013; and 5) high salmon prices for all species. Large drift gillnet harvests in recent years (Table 13), combined with high salmon prices brought allocation back into parity for the 2014 season (Table 14). However, the record 2013 pink salmon harvest will likely lead to larger purse seine gear group allocation percentages for the next several years, as this value will remain in the allocation calculation through the 2019 Allocation Plan calculation.

In 2011–2014, ADF&G calculated the exvessel value percentages for each gear group using the Commercial Operators Annual Report (COAR) area-specific prices and weights, as well as department harvest estimates of PWSAC enhanced fish by species and gear type.

### 2012 Allocation

The 5-year (2006–2010) average value percentages for each gear type are 39.1% drift gillnet, 60.9% purse seine, and 3.7% set gillnet. As a result, the drift gillnet gear group had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2012, and the set gillnet gear group was not limited to 36 hours per week beginning July 10, 2012.

### 2013 Allocation

The 5-year (2007–2011) average value percentages for each gear type are 42.4% drift gillnet, 57.6% purse seine, and 4.1% set gillnet. As a result, the drift gillnet gear group had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2013, and the set gillnet gear group was not limited to 36 hours per week beginning July 10, 2013.

### 2014 Allocation

The 5-year (2008–2012) average value percentages for each gear type are 46.3% drift gillnet, 53.7% purse seine, and 4.3% set gillnet. As a result, the purse seine gear group had exclusive access to the Port Chalmers Subdistrict for the entire 2014 fishing season, and the set gillnet gear group was not limited to 36 hours per week beginning July 10, 2014.

### 2015 Allocation

The 5-year (2009–2013) average value percentages for each gear type are 44.6% drift gillnet, 55.4% purse seine, and 4.3% set gillnet. As a result, the drift gillnet gear group will have exclusive access to the Port Chalmers Subdistrict for the entire 2015 fishing season, and the set gillnet gear group will not be limited to 36 hours per week beginning July 10, 2015.

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# TABLES AND FIGURES

Table 1.–Average price paid to permit holders for salmon, Prince William Sound, 1988–2014.

| | Chinook salmon | | | Sockeye salmon | | | Coho salmon | | | Pink salmon | | | Chum salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gillnet | | | Gillnet | | | Gillnet | | | Gillnet | | | Gillnet | | |
| Year | Copper and Bering | PWS | Purse seine | Copper and Bering | PWS | Purse seine | Copper and Bering | PWS | Purse seine | Copper and Bering | PWS | Purse seine | Copper and Bering | PWS | Purse seine |
| 1988 | $2.23 | $2.43 | $2.68 | $3.20 | $2.74 | $2.68 | $2.35 | $1.19 | $1.85 | ND | $0.60 | $0.79 | ND | $0.92 | $0.72 |
| 1989 | $2.25 | $0.00 | $2.68 | $2.30 | $0.00 | $2.68 | $0.60 | $0.00 | $1.58 | ND | $0.00 | $0.48 | ND | $0.00 | $0.43 |
| 1990 | $2.24 | $1.45 | $1.50 | $2.13 | $1.59 | $1.50 | $0.97 | $0.69 | $0.50 | ND | $0.30 | $0.30 | ND | $0.70 | $0.70 |
| 1991 | $1.65 | $1.00 | $1.00 | $1.28 | $1.28 | $1.00 | $0.65 | $0.44 | $0.45 | ND | $0.12 | $0.12 | ND | $0.40 | $0.40 |
| 1992 | $2.50 | $1.55 | $1.55 | $2.50 | $1.55 | $1.55 | $0.90 | $0.90 | $0.90 | ND | $0.18 | $0.18 | ND | $0.55 | $0.55 |
| 1993 | $1.82 | $0.97 | $0.83 | $1.32 | $0.87 | $0.83 | $0.80 | $0.66 | $0.54 | ND | $0.17 | $0.16 | ND | $0.71 | $0.36 |
| 1994 | $1.43 | $0.84 | $0.89 | $1.27 | $1.16 | $0.89 | $0.74 | $0.67 | $0.54 | ND | $0.11 | $0.16 | ND | $0.32 | $0.24 |
| 1995 | $2.19 | $0.79 | $0.86 | $1.67 | $1.07 | $0.86 | $0.52 | $0.37 | $0.39 | ND | $0.18 | $0.18 | ND | $0.39 | $0.28 |
| 1996 | $1.96 | $0.68 | $0.73 | $1.38 | $0.85 | $0.73 | $0.53 | $0.24 | $0.36 | ND | $0.04 | $0.07 | ND | $0.14 | $0.13 |
| 1997 | $2.00 | $1.00 | $0.85 | $0.88 | $0.85 | $0.85 | $0.30 | $0.25 | $0.30 | ND | $0.07 | $0.12 | ND | $0.25 | $0.30 |
| 1998 | $2.07 | $1.25 | $1.01 | $1.49 | $1.11 | $1.01 | $0.46 | $0.41 | $0.31 | ND | $0.14 | $0.12 | ND | $0.21 | $0.27 |
| 1999 | $3.44 | $0.50 | $0.98 | $1.84 | $0.89 | $0.98 | $0.58 | $0.23 | $0.49 | ND | $0.06 | $0.10 | ND | $0.15 | $0.27 |
| 2000 | $4.02 | $4.04 | $0.90 | $1.72 | $1.38 | $0.90 | $0.57 | $0.56 | $0.42 | ND | $0.11 | $0.15 | ND | $0.26 | $0.28 |
| 2001 | $3.30 | $1.94 | $0.74 | $1.35 | $0.77 | $0.74 | $0.32 | $0.20 | $0.26 | ND | $0.05 | $0.13 | ND | $0.38 | $0.37 |
| 2002 | $3.34 | $1.26 | $0.57 | $1.29 | $1.14 | $0.57 | $0.35 | $0.09 | $0.25 | ND | $0.05 | $0.09 | ND | $0.15 | $0.15 |
| 2003 | $3.48 | $0.00 | $0.71 | $1.16 | $0.80 | $0.71 | $0.48 | $0.48 | $0.42 | ND | $0.06 | $0.07 | ND | $0.17 | $0.17 |
| 2004 | $4.69 | $1.38 | $0.55 | $1.81 | $0.85 | $0.55 | $0.69 | $0.28 | $0.42 | ND | $0.04 | $0.10 | ND | $0.23 | $0.18 |
| 2005 | $4.70 | $0.00 | $0.54 | $1.79 | $0.92 | $0.54 | $0.83 | $0.69 | $0.10 | ND | $0.05 | $0.08 | ND | $0.28 | $0.18 |
| 2006 | $5.03 | $1.20 | $1.05 | $1.83 | $1.15 | $1.05 | $0.92 | $0.67 | $0.60 | ND | $0.11 | $0.16 | ND | $0.37 | $0.33 |
| 2007 | $4.50 | $2.70 | $0.82 | $1.81 | $1.04 | $0.82 | $0.90 | $0.30 | $0.59 | ND | $0.11 | $0.17 | ND | $0.33 | $0.37 |
| 2008 | $5.96 | $1.04 | $1.17 | $3.12 | $1.24 | $1.17 | $1.23 | $1.24 | $1.12 | $0.27 | $0.33 | $0.34 | $0.21 | $0.55 | $0.57 |
| 2009 | $5.29 | $2.06 | $1.32 | $2.09 | $1.42 | $1.32 | $1.30 | $1.13 | $0.42 | $0.22 | $0.27 | $0.24 | $0.28 | $0.52 | $0.53 |
| 2010 | $5.50 | $2.13 | $1.79 | $2.58 | $1.72 | $1.79 | $1.27 | $0.58 | $0.70 | $0.29 | $0.34 | $0.35 | $0.36 | $0.80 | $0.78 |
| 2011 | $5.66 | $3.97 | $1.43 | $2.08 | $1.56 | $1.43 | $1.24 | $1.09 | $1.04 | $0.31 | $0.40 | $0.45 | $0.38 | $0.90 | $0.86 |
| 2012 | $5.39 | $1.44 | $1.42 | $1.94 | $1.40 | $1.42 | $1.10 | $1.04 | $0.69 | $0.29 | $0.38 | $0.42 | $0.28 | $0.66 | $0.68 |
| 2013 | $5.79 | $2.83 | $1.69 | $2.47 | $1.86 | $1.69 | $1.39 | $1.29 | $0.95 | $0.27 | $0.35 | $0.42 | $0.11 | $0.57 | $0.59 |
| 10-year average | $5.02 | $1.59 | $1.08 | $2.02 | $1.21 | $1.08 | $1.00 | $0.75 | $0.61 | $0.28 | $0.21 | $0.24 | $0.30 | $0.48 | $0.47 |
| 2014 | $6.43 | $2.87 | $1.90 | $2.44 | $1.97 | $1.90 | $1.17 | $1.00 | $0.81 | $0.13 | $0.30 | $0.29 | $0.22 | $0.68 | $0.65 |

*Note*: ND indicates no data.

Table 2.–Estimated exvessel value of the total commercial salmon harvest by gear type with previous 10-year average, Prince William Sound, 2004–2014.

| Purse seine Species | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Previous 10 year avg. | 2014 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chinook | 1,270 | 1,787 | 4,940 | 9,330 | 2,487 | 985 | 634 | 6,120 | 3,279 | 15,444 | 4,628 | $7,913 |
| Sockeye | 46,573 | 207,022 | 219,984 | 338,262 | 540,113 | 584,595 | 705,231 | 560,497 | 1,449,007 | 796,220 | 544,750 | $547,367 |
| Coho | 121,688 | 103,312 | 1,426,736 | 546,805 | 2,056,932 | 22,522 | 48,476 | 633,076 | 117,259 | 1,608,923 | 668,573 | $185,624 |
| Pink | 4,293,551 | 13,104,242 | 6,688,126 | 28,839,799 | 39,059,344 | 7,890,237 | 78,063,374 | 35,834,331 | 37,732,043 | 100,334,069 | 35,183,912 | $35,542,741 |
| Chum | 1,228,965 | 773,620 | 3,007,947 | 3,499,189 | 8,002,952 | 1,123,335 | 1,019,498 | 691,520 | 2,450,017 | 2,157,525 | 2,395,457 | $1,770,780 |
| | $5,692,047 | $14,189,982 | $11,347,734 | $33,233,386 | $49,661,828 | $9,621,674 | $79,837,212 | $37,725,543 | $41,751,606 | $104,912,182 | $38,797,319 | $38,054,424 |
| Drift gillnet Species | | | | | | | | | | | | |
| Chinook | 4,050,947 | 3,575,253 | 3,145,401 | 3,886,795 | 1,511,402 | 956,053 | 1,025,380 | 2,148,066 | 1,352,540 | 973,720 | 2,262,556 | $1,116,059 |
| Sockeye | 13,436,808 | 15,849,204 | 19,375,916 | 26,169,047 | 11,533,354 | 17,386,798 | 18,486,735 | 36,356,087 | 37,444,516 | 29,389,403 | 22,542,787 | $41,307,876 |
| Coho | 3,561,659 | 2,374,703 | 3,972,107 | 1,391,204 | 3,937,198 | 3,197,336 | 3,523,008 | 2,031,963 | 1,646,222 | 3,986,567 | 2,962,197 | $5,126,103 |
| Pink | 12,134 | 84,308 | 54,070 | 82,356 | 1,195,812 | 363,373 | 3,446,356 | 1,025,474 | 1,659,983 | 2,465,469 | 1,038,933 | $1,510,359 |
| Chum | 976,553 | 1,965,383 | 845,703 | 2,542,327 | 10,853,908 | 9,227,837 | 11,973,968 | 8,669,206 | 13,170,829 | 11,654,134 | 7,187,985 | $3,869,082 |
| | $22,038,101 | $23,848,851 | $27,393,197 | $34,071,729 | $29,031,674 | $31,131,396 | $38,455,447 | $50,230,797 | $55,274,091 | $48,469,293 | $35,994,458 | $52,929,479 |
| Set gillnet Species | | | | | | | | | | | | |
| Chinook | 189 | 0 | 143 | 1,267 | 533 | 1,302 | 756 | 1,832 | 230 | 3,015 | 927 | $769 |
| Sockeye | 454,709 | 608,528 | 822,232 | 1,318,799 | 1,238,739 | 1,451,897 | 3,103,081 | 2,993,318 | 2,454,505 | 2,278,575 | 1,672,438 | $2,881,576 |
| Coho | 1,635 | 4,737 | 1,869 | 873 | 1,414 | 241 | 250 | 2,297 | 509 | 2,556 | 1,638 | $451 |
| Pink | 7,439 | 23,542 | 8,325 | 5,416 | 20,966 | 3,419 | 20,573 | 21,931 | 28,480 | 17,062 | 15,715 | $35,588 |
| Chum | 17,261 | 6,880 | 29,925 | 53,380 | 231,785 | 197,332 | 450,989 | 163,884 | 121,995 | 188,004 | 146,143 | $106,524 |
| | $481,233 | $643,687 | $862,493 | $1,379,735 | $1,493,437 | $1,654,191 | $3,575,649 | $3,183,261 | $2,605,720 | $2,489,211 | $1,836,862 | $3,024,908 |
| Hatchery sales Species | | | | | | | | | | | | |
| Chinook | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 6 | $0 |
| Sockeye | 997,020 | 2,383,400 | 2,173,808 | 1,790,819 | 0 | 1,088,363 | 0 | 0 | 7,749 | 110 | 844,127 | $0 |
| Coho | 35,733 | 0 | 102,792 | 161,995 | 67,879 | 145,267 | 44,808 | 280,215 | 217 | 214,752 | 105,366 | $20,128 |
| Pink | 5,718,678 | 7,288,894 | 7,300,390 | 6,809,392 | 7,574,535 | 5,208,870 | 8,911,203 | 11,867,472 | 12,381,620 | 8,765,309 | 8,182,636 | $11,504,489 |
| Chum | 779,268 | 1,704,693 | 2,893,174 | 2,105,903 | 2,465,426 | 1,816,012 | 2,894,835 | 2,802,681 | 2,952,252 | 3,424,927 | 2,383,917 | $1,514,775 |
| | $7,530,699 | $11,376,987 | $12,470,164 | $10,868,110 | $10,107,840 | $8,258,512 | $11,850,846 | $14,950,368 | $15,341,896 | $12,405,098 | $11,516,052 | $13,039,393 |

-continued-

Table 2.–Page 2 of 2.

| Other gear Species | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 [a] | 2012[a] | 2013[a] | Previous 10 year avg. | 2014[a] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chinook | 493 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | ND |
| Sockeye | 614 | 289 | 0 | 0 | 0 | 0 | 0 | 16 | 159 | 0 | 108 | ND |
| Coho | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ND |
| Pink | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,123 | 27 | 0 | 1,115 | ND |
| Chum | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,169 | 1,090 | 243 | 250 | ND |
| | $1,107 | $370 | $0 | $0 | $0 | $0 | $0 | $12,308 | $1,275 | $243 | $1,530 | ND |
| Average earnings | | | | | | | | | | | | |
| Purse seine | $54,210 | $137,767 | $299,400 | $447,404 | $352,212 | $518,423 | $216,813 | $206,151 | $186,391 | $497,214 | $291,598 | $171,416 |
| Drift gillnet | $42,219 | $46,807 | $68,971 | $57,375 | $57,262 | $75,255 | $96,784 | $97,916 | $105,889 | $92,853 | $74,133 | $100,818 |
| Set gillnet | $17,823 | $23,840 | $53,067 | $57,440 | $59,737 | $132,431 | $109,768 | $109,768 | $89,852 | $88,900 | $74,263 | $104,307 |
| Number of permits fished | | | | | | | | | | | | |
| Purse seine | 105 | 103 | 111 | 111 | 141 | 154 | 174 | 183 | 224 | 211 | 152 | 222 |
| Drift gillnet | 522 | 508 | 494 | 506 | 507 | 511 | 519 | 513 | 522 | 522 | 512 | 525 |
| Set gillnet | 27 | 27 | 26 | 26 | 25 | 27 | 29 | 29 | 29 | 28 | 27 | 29 |

*Note*: ND – No data

[a] Confiscated fish.

Table 3.–Commercial salmon harvest by species for all gear types, Prince William Sound, Copper, and Bering districts 1980–2014.

| | Harvest | | | | | |
|---|---|---|---|---|---|---|
| Year [a] | Chinook | Sockeye | Coho | Pink | Chum | Total |
| 1980 | 8,643 | 208,724 | 337,123 | 14,161,023 | 482,214 | 15,197,727 |
| 1981 | 20,782 | 784,469 | 396,163 | 20,558,304 | 1,888,822 | 23,648,540 |
| 1982 | 47,871 | 2,362,328 | 623,877 | 20,403,423 | 1,336,878 | 24,774,377 |
| 1983 | 53,879 | 908,469 | 365,469 | 13,977,116 | 1,048,737 | 16,353,670 |
| 1984 | 39,774 | 1,303,515 | 609,484 | 22,119,309 | 1,229,185 | 25,301,267 |
| 1985 | 43,735 | 1,464,563 | 1,025,046 | 25,252,924 | 1,321,538 | 29,107,806 |
| 1986 | 42,128 | 1,288,712 | 426,240 | 11,410,302 | 1,700,906 | 14,868,288 |
| 1987 | 41,909 | 1,737,989 | 175,214 | 29,230,303 | 1,919,415 | 33,104,830 |
| 1988 | 31,797 | 767,674 | 477,816 | 11,820,121 | 1,843,317 | 14,940,725 |
| 1989 | 32,006 | 1,175,238 | 424,980 | 21,886,466 | 1,001,809 | 24,520,499 |
| 1990 | 22,163 | 911,607 | 524,274 | 44,165,077 | 967,384 | 46,590,505 |
| 1991 | 35,355 | 1,734,544 | 641,854 | 37,135,561 | 352,321 | 39,899,635 |
| 1992 | 41,306 | 1,771,612 | 619,460 | 8,637,116 | 334,376 | 11,403,870 |
| 1993 | 32,005 | 1,851,133 | 445,612 | 5,761,097 | 1,186,365 | 9,276,212 |
| 1994 | 48,558 | 1,514,329 | 1,058,154 | 36,886,301 | 1,058,213 | 40,565,555 |
| 1995 | 67,083 | 1,523,464 | 992,798 | 16,221,493 | 864,245 | 19,669,083 |
| 1996 | 56,457 | 3,000,602 | 459,253 | 26,042,942 | 2,103,559 | 31,662,813 |
| 1997 | 52,482 | 4,163,074 | 83,113 | 25,836,563 | 2,227,190 | 32,362,422 |
| 1998 | 70,910 | 1,715,778 | 194,621 | 28,685,115 | 1,271,911 | 31,938,335 |
| 1999 | 63,434 | 2,035,293 | 244,754 | 45,003,656 | 2,989,255 | 50,336,392 |
| 2000 | 32,411 | 1,430,838 | 714,286 | 38,885,528 | 5,163,760 | 46,226,823 |
| 2001 | 40,461 | 2,261,097 | 494,135 | 35,246,524 | 3,099,794 | 41,142,011 |
| 2002 | 39,706 | 2,262,134 | 650,331 | 18,950,931 | 6,373,491 | 28,276,593 |
| 2003 | 49,227 | 2,838,679 | 502,135 | 51,136,305 | 3,779,657 | 58,306,003 |
| 2004 | 39,142 | 1,892,525 | 619,884 | 23,531,483 | 2,001,918 | 28,084,952 |
| 2005 | 36,118 | 1,988,771 | 536,675 | 59,896,419 | 1,996,956 | 64,446,609 |
| 2006 | 31,634 | 2,524,496 | 761,044 | 21,673,378 | 2,181,482 | 27,172,034 |
| 2007 | 41,149 | 3,231,202 | 328,980 | 63,464,830 | 3,579,068 | 70,645,229 |
| 2008 | 12,454 | 1,301,067 | 550,629 | 42,353,653 | 5,075,195 | 49,292,998 |
| 2009 | 10,802 | 1,919,240 | 300,615 | 18,581,891 | 3,220,841 | 24,033,389 |
| 2010 | 10,996 | 2,045,135 | 334,789 | 71,309,596 | 4,323,156 | 78,023,672 |
| 2011 | 20,462 | 3,542,007 | 371,482 | 33,404,190 | 1,914,525 | 39,252,666 |
| 2012 | 13,159 | 3,700,792 | 210,466 | 27,591,840 | 3,834,761 | 35,351,018 |
| 2013 | 10,807 | 2,334,491 | 619,494 | 92,640,123 | 4,070,104 | 99,675,019 |
| 10-year average (2004-2013) | 22,672 | 2,447,973 | 463,406 | 45,444,740 | 3,219,801 | 51,597,759 |
| 2014 | 10,117 | 3,307,398 | 600,303 | 43,902,238 | 1,529,730 | 49,336,286 |

[a] Includes commercial common property, hatchery sales, and test fisheries harvest, personal use, educational special use permit harvest, and donated fish, 1980–2013. This includes commercial common property and hatchery sales harvest in 2014.

Table 4.–Prince William Sound (PWS) Management Area commercial salmon harvest by district and gear type, 2012.

| District | Permits | Chinook | Sockeye | Coho | Pink | Chum | Total |
|---|---|---|---|---|---|---|---|
| Eastern | 216 | 41 | 11,907 | 8,210 | 10,601,626 | 102,046 | 10,723,830 |
| Northern | 171 | 1 | 534 | 502 | 3,677,080 | 2,149 | 3,680,266 |
| Coghill | 136 | 15 | 52,893 | 3,269 | 2,304,364 | 199,010 | 2,559,551 |
| Northwestern | 11 | 0 | 58 | 28 | 87,010 | 37 | 87,133 |
| Southwestern | 190 | 94 | 84,521 | 9,950 | 5,722,240 | 164,913 | 5,981,718 |
| Montague | 10 | 0 | 20 | 148 | 187,075 | 280 | 187,523 |
| Southeastern | 67 | 35 | 4,599 | 219 | 225,255 | 35,560 | 265,668 |
| Unakwik | 3 | 0 | 353 | 0 | 0 | 1 | 354 |
| Purse seine | 224 | 186 | 154,885 | 22,326 | 22,804,650 | 503,996 | 23,486,043 |
| Bering River | 48 | 1 | 0 | 46,169 | 1 | 0 | 46,171 |
| Copper River | 510 | 11,764 | 1,866,541 | 130,261 | 6,011 | 27,333 | 2,041,910 |
| Coghill | 359 | 147 | 383,289 | 7,724 | 1,125,888 | 2,256,915 | 3,773,963 |
| Eshamy | 355 | 52 | 987,619 | 192 | 88,951 | 254,774 | 1,331,588 |
| Montague | 54 | 46 | 486 | 27 | 13,525 | 325,137 | 339,221 |
| Unakwik | 5 | 0 | 1,337 | 0 | 16 | 2 | 1,355 |
| Drift gillnet | 522 | 12,010 | 3,239,272 | 184,373 | 1,234,392 | 2,864,161 | 7,534,208 |
| Eshamy | 29 | 14 | 294,632 | 97 | 17,311 | 24,368 | 336,422 |
| Set gillnet | 29 | 14 | 294,632 | 97 | 17,311 | 24,368 | 336,422 |
| Solomon Gulch | 1 | 9 | 1,198 | 2,372 | 1,373,104 | 2,675 | 1,379,358 |
| Cannery Creek | 1 | 0 | 0 | 0 | 106,625 | 0 | 106,625 |
| Wally Noerenberg | 1 | 0 | 0 | 0 | 1,378,093 | 438,266 | 1,816,359 |
| Main Bay | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Armin F. Koernig | 1 | 0 | 0 | 0 | 674,036 | 0 | 674,036 |
| Hatchery [a] | | 9 | 1,198 | 2,372 | 3,531,858 | 440,941 | 3,976,378 |
| Misc total | | 940 | 10,805 | 1,298 | 3,629 | 1,295 | 17,967 |
| PWS total | | 13,159 | 3,700,792 | 210,466 | 27,591,840 | 3,834,761 | 35,351,018 |

[a] Hatchery sales for hatchery operating costs.

Table 5.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2012.

Purse seine [a]

| Species | Number | Pounds | Average weight | Price | Value |
|---|---|---|---|---|---|
| Chinook | 186 | 2,182 | 11.73 | $1.50 | $3,279 |
| Sockeye | 154,902 | 1,021,904 | 6.60 | $1.42 | $1,449,007 |
| Coho | 22,326 | 170,191 | 7.62 | $0.69 | $117,259 |
| Pink | 22,804,668 | 90,674,500 | 3.98 | $0.42 | $37,732,043 |
| Chum | 504,143 | 3,583,369 | 7.11 | $0.68 | $2,450,017 |
| | 23,486,225 | 95,452,146 | | | $41,751,606 |

Drift gillnet [a]

| Species | Number | Pounds | Average weight | Price | Value |
|---|---|---|---|---|---|
| Chinook | 12,010 | 252,740 | 21.04 | $5.35 | $1,352,540 |
| Sockeye | 3,239,272 | 21,657,844 | 6.69 | $1.73 | $37,444,516 |
| Coho | 184,373 | 1,501,620 | 8.14 | $1.10 | $1,646,222 |
| Pink | 1,234,392 | 4,355,409 | 3.53 | $0.38 | $1,659,983 |
| Chum | 2,864,229 | 20,194,461 | 7.05 | $0.65 | $13,170,829 |
| | 7,534,276 | 47,962,074 | | | $55,274,091 |

Set gillnet [a]

| Species | Number | Pounds | Average Weight | Price | Value |
|---|---|---|---|---|---|
| Chinook | 14 | 151 | 10.79 | $1.52 | $230 |
| Sockeye | 294,632 | 2,095,745 | 7.11 | $1.17 | $2,454,505 |
| Coho | 97 | 660 | 6.80 | $0.77 | $509 |
| Pink | 17,311 | 69,832 | 4.03 | $0.41 | $28,480 |
| Chum | 24,368 | 175,423 | 7.20 | $0.70 | $121,995 |
| | 336,422 | 2,341,811 | | | $2,605,720 |

Hatchery sales [a]

| Species | Number | Pounds | Average weight | Price | Value |
|---|---|---|---|---|---|
| Chinook | 9 | 74 | 8.22 | $0.79 | $59 |
| Sockeye | 1,198 | 9,764 | 8.15 | $0.79 | $7,749 |
| Coho | 2,372 | 10,416 | 4.39 | $0.02 | $217 |
| Pink | 3,521,887 | 13,418,116 | 3.81 | $0.92 | $12,381,620 |
| Chum | 440,941 | 3,351,491 | 7.60 | $0.88 | $2,952,252 |
| | 3,966,407 | 16,789,861 | | | $15,341,896 |

| Gear type | Value of catch | No. of permits | Average earnings |
|---|---|---|---|
| Purse seine | $41,751,606 | 224 | $186,391 |
| Drift gillnet | $55,274,091 | 522 | $105,889 |
| Set gillnet | $2,605,720 | 29 | $89,852 |
| Subtotal Value of CPF | $99,631,416 | | |
| Hatchery | $15,341,896 | | |
| Confiscated | $1,275 | | |
| Grand total | $114,974,587 | | |

*Note*: CPF means common property fishery.

[a] Mean prices are based on weighted average prices given voluntarily by processors and hatchery operators. Pounds of fish are based on fish ticket reporting and do not represent pounds reported in Commercial Operator Annual Reports (COAR).

Table 6.–Prince William Sound (PWS) Management Area commercial salmon harvest by district and gear type, 2013.

| District | Permits | Chinook | Sockeye | Coho | Pink | Chum | Total |
|---|---|---|---|---|---|---|---|
| Eastern | 208 | 217 | 13,024 | 159,236 | 25,566,365 | 94,277 | 25,833,119 |
| Northern | 178 | 18 | 3,462 | 3,261 | 17,062,533 | 6,326 | 17,075,600 |
| Coghill | 130 | 32 | 1,978 | 7,573 | 6,690,850 | 70,271 | 6,770,704 |
| Northwestern | 10 | 0 | 471 | 97 | 110,432 | 171 | 111,171 |
| Southwestern | 188 | 238 | 46,574 | 48,276 | 33,510,249 | 275,290 | 33,880,627 |
| Montague | 10 | 0 | 11 | 2,085 | 413,816 | 41 | 415,953 |
| Southeastern | 71 | 270 | 8,392 | 1,455 | 2,570,809 | 40,929 | 2,621,855 |
| Unakwik | - | 0 | 2,815 | 1 | 81 | 159 | 3,056 |
| Purse seine | 211 | 775 | 76,727 | 221,984 | 85,925,135 | 487,464 | 86,712,085 |
| Bering River | 56 | 16 | 3,286 | 46,959 | 2 | 16 | 50,279 |
| Copper River | 515 | 8,826 | 1,607,992 | 244,985 | 65,366 | 10,169 | 1,937,338 |
| Coghill | 388 | 259 | 93,734 | 62,968 | 2,450,108 | 2,100,341 | 4,707,410 |
| Eshamy | 326 | 74 | 336,061 | 1,724 | 62,176 | 184,334 | 584,369 |
| Montague | 151 | 140 | 2,077 | 255 | 28,097 | 483,686 | 514,255 |
| Unakwik | - | 1 | 776 | 0 | 203 | 28 | 1,008 |
| Drift gillnet | 526 | 9,316 | 2,043,926 | 356,891 | 2,605,952 | 2,778,574 | 7,794,659 |
| Eshamy | 29 | 59 | 203,019 | 360 | 19,114 | 42,630 | 265,182 |
| Set gillnet | 29 | 59 | 203,019 | 360 | 19,114 | 42,630 | 265,182 |
| Solomon Gulch | 1 | 0 | 9 | 39,946 | 2,274,237 | 75 | 2,314,267 |
| Cannery Creek | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wally Noerenberg | 1 | 0 | 0 | 0 | 1,318,914 | 761,280 | 2,080,194 |
| Main Bay | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Armin F. Koernig | 1 | 0 | 0 | 0 | 496,523 | 0 | 496,523 |
| Hatchery [a] | | 0 | 9 | 39,946 | 4,089,674 | 761,355 | 4,890,984 |
| Misc total | | 657 | 10,810 | 313 | 248 | 81 | 12,109 |
| PWS total | | 10,807 | 2,334,491 | 619,494 | 92,640,123 | 4,070,104 | 99,675,019 |

[a] Hatchery sales for hatchery operating costs.

Table 7.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2013.

| Purse seine [a] Species | Number | Pounds | Average weight | Price | Value |
|---|---|---|---|---|---|
| Chinook | 775 | 8,201 | 10.58 | $1.88 | $15,444 |
| Sockeye | 76,727 | 470,891 | 6.14 | $1.69 | $796,220 |
| Coho | 221,984 | 1,697,940 | 7.65 | $0.95 | $1,608,923 |
| Pink | 85,925,135 | 238,018,132 | 2.77 | $0.42 | $100,334,069 |
| Chum | 487,464 | 3,683,581 | 7.56 | $0.59 | $2,157,525 |
| | 86,712,085 | 243,878,745 | | | $104,912,182 |
| Drift gillnet [a] Species | Number | Pounds | Average Weight | Price | Value |
| Chinook | 9,316 | 172,845 | 18.55 | $5.63 | $973,720 |
| Sockeye | 2,043,926 | 12,493,882 | 6.11 | $2.35 | $29,389,403 |
| Coho | 356,891 | 2,892,610 | 8.11 | $1.38 | $3,986,567 |
| Pink | 2,605,952 | 7,179,124 | 2.75 | $0.34 | $2,465,469 |
| Chum | 2,778,574 | 20,609,389 | 7.42 | $0.57 | $11,654,134 |
| | 7,794,659 | 43,347,850 | | | $48,469,293 |
| Set gillnet [a] Species | Number | Pounds | Average Weight | Price | Value |
| Chinook | 59 | 1,005 | 17.03 | $3.00 | $3,015 |
| Sockeye | 203,019 | 1,200,938 | 5.92 | $1.90 | $2,278,575 |
| Coho | 360 | 2,501 | 6.95 | $1.02 | $2,556 |
| Pink | 19,114 | 52,786 | 2.76 | $0.32 | $17,062 |
| Chum | 42,630 | 318,383 | 7.47 | $0.59 | $188,004 |
| | 265,182 | 1,575,613 | | | $2,489,211 |
| Hatchery sales [a] Species | Number | Pounds | Average weight | Price | Value |
| Chinook | 0 | 0 | 0.00 | $0.00 | $0 |
| Sockeye | 9 | 65 | 7.22 | $1.69 | $110 |
| Coho | 39,946 | 307,494 | 7.70 | $0.70 | $214,752 |
| Pink | 4,089,674 | 11,226,239 | 2.75 | $0.78 | $8,765,309 |
| Chum | 761,355 | 5,638,467 | 7.41 | $0.61 | $3,424,927 |
| | 4,890,984 | 17,172,265 | | | $12,405,098 |

| Gear type | Value of catch | No. of permits | Average earnings |
|---|---|---|---|
| Purse seine | $104,912,182 | 211 | $497,214 |
| Drift gillnet | $48,469,293 | 522 | $92,853 |
| Set gillnet | $2,489,211 | 28 | $88,900 |
| Subtotal Value of CPF catch | $155,870,686 | | |
| Hatchery | $12,405,098 | | |
| Confiscated | $243 | | |
| Grand total | $168,276,028 | | |

*Note*: CPF means common property fishery.

[a] Mean prices are based on weighted average prices given voluntarily by processors and hatchery operators. Pounds of fish are based on fish ticket reporting and do not represent pounds reported in Commercial Operator Annual Reports (COAR).

Table 8.–Prince William Sound (PWS) Management Area commercial salmon harvest by district and gear type, 2014.

| District | Permits | Chinook | Sockeye | Coho | Pink | Chum | Total |
|---|---|---|---|---|---|---|---|
| Eastern | 217 | 27 | 9,474 | 1,998 | 19,288,176 | 87,740 | 19,387,415 |
| Northern | 164 | 4 | 3,343 | 2,020 | 4,989,618 | 2,862 | 4,997,847 |
| Coghill | 65 | 0 | 332 | 7,683 | 918,143 | 299 | 926,457 |
| Northwestern | 10 | 0 | 418 | 139 | 70,684 | 5,884 | 77,125 |
| Southwestern | 191 | 114 | 28,360 | 18,386 | 8,779,636 | 58,245 | 8,884,741 |
| Montague | 113 | 210 | 10,850 | 873 | 2,881,396 | 179,413 | 3,072,742 |
| Southeastern | 4 | 0 | 4 | 0 | 10,144 | 12,747 | 22,895 |
| Unakwik | 9 | 0 | 346 | 0 | 0 | 112 | 458 |
| Purse seine | 222 | 355 | 53,127 | 31,099 | 36,937,797 | 347,302 | 37,369,680 |
| Bering River | 83 | 0 | 50 | 98,041 | 4 | 0 | 98,095 |
| Copper River | 518 | 9,626 | 2,068,418 | 317,259 | 11,614 | 42,610 | 2,449,527 |
| Coghill | 284 | 79 | 165,596 | 139,732 | 1,214,725 | 670,790 | 2,190,922 |
| Eshamy | 311 | 35 | 760,706 | 607 | 189,940 | 77,647 | 1,028,935 |
| Unakwik | 4 | 0 | 275 | 0 | 3 | 23 | 301 |
| Drift gillnet | 525 | 9,740 | 2,995,045 | 555,639 | 1,416,286 | 791,070 | 5,767,780 |
| Eshamy | 29 | 22 | 259,226 | 65 | 35,681 | 20,882 | 315,876 |
| Set gillnet | 29 | 22 | 259,226 | 65 | 35,681 | 20,882 | 315,876 |
| Solomon Gulch | 1 | 0 | 0 | 0 | 1,928,557 | 0 | 1,928,557 |
| Cannery Creek | 1 | 0 | 0 | 0 | 303,099 | 0 | 303,099 |
| Wally Noerenberg | 1 | 0 | 0 | 13,500 | 2,180,361 | 370,476 | 2,550,837 |
| Main Bay | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Armin F. Koernig | 1 | 0 | 0 | 0 | 1,100,457 | 0 | 1,100,457 |
| Hatchery [a] | | 0 | 0 | 13,500 | 5,512,474 | 370,476 | 5,882,950 |
| PWS total | | 10,117 | 3,307,398 | 600,303 | 43,902,238 | 1,529,730 | 49,335,828 |

[a] Hatchery sales for hatchery operating costs.

Table 9.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2014.

| Purse seine Species | Number | Pounds [a] | Average weight | Price [a] | Value |
|---|---|---|---|---|---|
| Chinook | 355 | 4,541 | 12.79 | $1.74 | $7,913 |
| Sockeye | 53,127 | 288,719 | 5.43 | $1.90 | $547,367 |
| Coho | 31,099 | 229,212 | 7.37 | $0.81 | $185,624 |
| Pink | 36,937,797 | 124,318,479 | 3.37 | $0.29 | $35,542,741 |
| Chum | 347,302 | 2,714,550 | 7.82 | $0.65 | $1,770,780 |
| | 37,369,680 | 127,555,501 | | | $38,054,424 |
| Drift gillnet [a] Species | Number | Pounds | Average weight | Price | Value |
| Chinook | 9,740 | 174,104 | 17.88 | $6.41 | $1,116,059 |
| Sockeye | 2,995,045 | 17,868,696 | 5.97 | 2.31 | $41,307,876 |
| Coho | 555,639 | 4,538,873 | 8.17 | $1.13 | $5,126,103 |
| Pink | 1,416,286 | 5,022,652 | 3.55 | 0.30 | $1,510,359 |
| Chum | 791,070 | 5,973,743 | 7.55 | $0.65 | $3,869,082 |
| | 5,767,780 | 33,578,068 | | | $52,929,479 |
| Set gillnet [a] Species | Number | Pounds | Average weight | Price | Value |
| Chinook | 22 | 328 | 14.91 | $2.35 | $769 |
| Sockeye | 259,226 | 1,457,775 | 5.62 | $1.98 | $2,881,576 |
| Coho | 65 | 511 | 7.86 | $0.88 | $451 |
| Pink | 35,681 | 119,268 | 3.34 | $0.30 | $35,588 |
| Chum | 20,882 | 159,036 | 7.62 | $0.67 | $106,524 |
| | 315,876 | 1,736,918 | | | $3,024,908 |
| Hatchery sales [a] Species | Number | Pounds | Average weight | Price | Value |
| Chinook | 0 | 0 | 0.00 | $0.00 | $0 |
| Sockeye | 0 | 0 | 0.00 | $0.00 | $0 |
| Coho | 13,500 | 84,510 | 6.26 | $0.24 | $20,128 |
| Pink | 5,512,474 | 18,632,162 | 3.38 | $0.62 | $11,504,489 |
| Chum | 370,476 | 2,811,913 | 7.59 | $0.54 | $1,514,775 |
| | 5,896,450 | 21,528,585 | | | $13,039,393 |

| Gear type | Value of catch | No. of permits | Average earnings |
|---|---|---|---|
| Purse seine | $38,054,424 | 222 | $171,416 |
| Drift gillnet | $52,929,479 | 525 | $100,818 |
| Set gillnet | $3,024,908 | 29 | $104,307 |
| Subtotal- | | | |
| Value of CPF catch | $94,008,811 | | |
| Hatchery | $13,039,393 | | |
| Grand total | $107,048,205 | | |

*Note*: CPF means common property fishery.

[a] Mean prices are based on weighted average prices given voluntarily by processors and hatchery operators. Pounds of fish are based on fish ticket reporting and do not represent pounds reported in Commercial Operator Annual Reports (COAR).

Table 10.–Preseason harvest projections for the 2012 commercial salmon fishery by district and species (thousands of fish), Prince William Sound Area.

| | | Chinook | | Sockeye | | Coho [a] | | Pink | | Chum | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| District/facility [b] | Forecast type [c] | Point estimate | Range | Point estimate | Range | Point estimate | Range | Point estimate | Range | Point estimate | Range |
| Copper River [d] | CPF harvest | 27 | 6–60 | 1,190 | 520–1,860 | 281 | 7–555 | | | | |
| Bering River [e] | CPF harvest | | | 17 | 0–52 | 53 | 0–117 | | | | |
| Coghill [f] | CPF harvest | | | 291 | 154–428 | | | | | | |
| Eshamy [f] | CPF harvest | | | 33 | 9–57 | | | | | | |
| Unakwik [g] | CPF harvest | | | 7 | 2–11 | | | | | | |
| General districts | CPF harvest | | | | | | | 3,240 | 1,610–6,710 | 36 | 0–182 |
| Total wild stock | | 27 | 6–60 | 1,538 | 853–2,223 | 334 | 55–615 | 3,240 | 1,610–6,710 | 36 | 0–182 |
| SGH | CPF harvest | | | | | 118 | | 10,832 | | | |
| AFK | CPF harvest | | | | | | | 6,327 | | 210 | |
| WNH [h] | CPF harvest | | | | | 261 | | 5,218 | | 1,164 | |
| CCH | CPF harvest | | | | | | | 4,620 | | | |
| MBH [i] | CPF harvest | | | 1,191 | | | | | | | |
| GH | CPF harvest | | | 230 | 100–370 | | | | | | |
| Total hatchery | | | | 1,421 | | 379 | | 26,997 | | 1,374 | |
| Total hatchery and wild | | 27 | | 2,959 | | 713 | | 30,237 | | 1,410 | |

*Note*: Prince William Sound (PWS) Area hatchery facility abbreviations include SGH (Solomon Gulch Hatchery), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] ADF&G provides commercial common property (CCPF) harvest forecasts for Copper River and Bering River coho salmon.

[b] ADF&G provides common property fishery (CPF) harvest forecasts for all wild stocks and Gulkana Hatchery sockeye salmon. Hatchery operators provide CPF forecasts for PWS hatchery returns and Gulkana Hatchery sockeye salmon. Harvest projections do not include salmon harvested by hatcheries for cost recovery.

[c] Formal forecast procedures are used for estimating wild stock runs of pink and chum salmon in PWS. Hatchery contributions are based on known fry releases and average marine survival rates. Harvest estimates are made only for species that constitute a significant portion of the catch.

[d] Formalized sibling model forecast procedures are used for Copper River sockeye salmon runs. Copper River Chinook and coho salmon harvest estimates are based on the mean annual harvest (5-year for Chinook and 10-year for coho salmon).

[e] Bering River coho and sockeye salmon harvest estimates are based on 10-year mean annual harvest.

[f] Formalized sibling model forecast procedures are used for Coghill and Eshamy District sockeye salmon runs. The Coghill District's wild pink and chum salmon harvest is included in the "General (PWS) districts" projection.

[g] The Unakwik District sockeye salmon harvest estimate is based on the 10-year mean annual harvest.

[h] Wally Noerenberg Hatchery chum and coho salmon harvest estimates include all on-site and remote release runs of chum and coho salmon.

[i] Main Bay Hatchery sockeye salmon harvest estimate includes all on-site and remote release runs of sockeye salmon.

Table 11.–Preseason harvest projections for the 2013 commercial salmon fishery by district and species (thousands of fish), Prince William Sound Area.

| | | Chinook | | Sockeye | | Coho [a] | | Pink | | Chum | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| District/facility [b] | Forecast type [c] | Point estimate | Range | Point estimate | Range | Point estimate | Range | Point estimate | Range | Point estimate | Range |
| Copper River [d] | CPF harvest | 20 | 1–48 | 1,220 | 550–1,890 | 240 | 18–463 | | | | |
| Bering River [e] | CPF harvest | | | 17 | 0–52 | 47 | 0–98 | | | | |
| Coghill [f] | CPF harvest | | | 126 | 58–300 | | | | | | |
| Eshamy [f] | CPF harvest | | | 32 | 9–57 | | | | | | |
| Unakwik [g] | CPF harvest | | | 6 | 1–10 | | | | | | |
| General districts | CPF harvest | | | | | | | 4,751 | 0–22,151 | 312 | 18–631 |
| Total wild stock | | 20 | 1–48 | 1,401 | 727–2,100 | 287 | 60–516 | 4,751 | 0–22,151 | 312 | 18–631 |
| SGH | CPF harvest | | | | | 106 | | 10,872 | | | |
| AFK | CPF harvest | | | | | | | 6,123 | | 306 | |
| WNH [h] | CPF harvest | | | | | 72 | | 5,497 | | 2,513 | |
| CCH | CPF harvest | | | | | | | 6,728 | | | |
| MBH [i] | CPF harvest | | | 1,128 | | | | | | | |
| GH | CPF harvest | | | 280 | 130–440 | | | | | | |
| Total hatchery | | | | 1,408 | | 178 | | 29,220 | | 2,819 | |
| Total hatchery and wild | | 20 | | 2,809 | | 465 | | 33,971 | | 3,131 | |

*Note*: Prince William Sound (PWS) Area hatchery facility abbreviations include SGH (Solomon Gulch Hatchery), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] ADF&G provides commercial common property (CCPF) harvest forecasts for Copper River and Bering River coho salmon.

[b] ADF&G provides common property fishery (CPF) harvest forecasts for all wild stocks and Gulkana Hatchery sockeye salmon. Hatchery operators provide CPF forecasts for PWS hatchery returns and Gulkana Hatchery sockeye salmon. Harvest projections do not include salmon harvested by hatcheries for cost recovery.

[c] Formal forecast procedures are used for estimating wild stock runs of pink and chum salmon in PWS. Hatchery contributions are based on known fry releases and average marine survival rates. Harvest estimates are made only for species that constitute a significant portion of the catch.

[d] Formalized sibling model forecast procedures are used for Copper River sockeye salmon runs. Copper River Chinook and coho salmon harvest estimates are based on the mean annual harvest (5-year for Chinook and 10-year for coho salmon).

[e] Bering River coho and sockeye salmon harvest estimates are based on 10-year mean annual harvest.

[f] Formalized sibling model forecast procedures are used for Coghill and Eshamy District sockeye salmon runs. The Coghill District's wild pink and chum salmon harvest is included in the "General (PWS) districts" projection.

[g] The Unakwik District sockeye salmon harvest estimate is based on the 10-year mean annual harvest.

[h] Wally Noerenberg Hatchery chum and coho salmon harvest estimates include all on-site and remote release runs of chum and coho salmon.

[i] Main Bay Hatchery sockeye salmon harvest estimate includes all on-site and remote release runs of sockeye salmon.

Table 12.–Preseason harvest projections for the 2014 commercial salmon fishery by district and species (thousands of fish), Prince William Sound Area.

| | | Chinook | | Sockeye | | Coho [a] | | Pink | | Chum | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| District/facility [b] | Forecast type [c] | Point estimate | Range | Point estimate | Range | Point estimate | Range | Point estimate | Range | Point estimate | Range |
| Copper River [d] | CPF harvest | 22 | 10–40 | 1,340 | 768–1,905 | 229 | 23–434 | | | | |
| Bering River [e] | CPF harvest | | | 15 | 0–52 | 46 | 0–96 | | | | |
| Coghill [f] | CPF harvest | | | 168 | 92–363 | | | | | | |
| Eshamy [f] | CPF harvest | | | 32 | 9–57 | | | | | | |
| Unakwik [g] | CPF harvest | | | 6 | 1–11 | | | | | | |
| General districts | CPF harvest | | | | | | | 3,140 | 0–17,840 | 245 | 0–522 |
| Total wild stock | | 22 | 10–40 | 1,561 | 983–2,160 | 275 | 64–486 | 3,140 | 0–17,840 | 245 | 0–522 |
| SGH | CPF harvest | | | | | 57 | | 10,182 | | | |
| AFK | CPF harvest | | | | | | | 5,919 | | 492 | |
| WNH [h] | CPF harvest | | | | | 214 | | 8,003 | | 1,233 | |
| CCH | CPF harvest | | | | | | | 4,009 | | | |
| MBH [i] | CPF harvest | | | 1,029 | | | | | | | |
| GH | CPF harvest | | | 265 | 152–378 | | | | | | |
| Total hatchery | | | | 1,294 | 152–378 | 271 | | 28,113 | | 1,725 | |
| Total hatchery and wild | | 22 | | 2,855 | | 546 | | 31,253 | | 1,970 | |

*Note*: Prince William Sound (PWS) Area hatchery facility abbreviations include SGH (Solomon Gulch Hatchery), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] ADF&G provides commercial common property (CCPF) harvest forecasts for Copper River and Bering River coho salmon.

[b] Formal forecast procedures are used for estimating wild stock runs of pink and chum salmon in PWS. Hatchery contributions are based on known fry releases and average marine survival rates. Harvest estimates are made only for species that constitute a significant portion of the catch.

[c] ADF&G provides common property fishery (CPF) harvest forecasts for all wild stocks and Gulkana Hatchery sockeye salmon. Hatchery operators provide CPF forecasts for PWS hatchery returns and Gulkana Hatchery sockeye salmon. Harvest projections do not include salmon harvested by hatcheries for cost recovery.

[d] Formalized sibling model forecast procedures are used for Copper River sockeye salmon runs. Copper River Chinook and coho salmon harvest estimates are based on the mean annual harvest (5-year for Chinook and 10-year for coho salmon).

[e] Bering River coho and sockeye salmon harvest estimates are based on 10-year mean annual harvest.

[f] Formalized sibling model forecast procedures are used for Coghill and Eshamy District sockeye salmon runs. The Coghill District's wild pink and chum salmon harvest is included in the "General (PWS) districts" projection.

[g] The Unakwik District sockeye salmon harvest estimate is based on the 10-year mean annual harvest.

[h] Wally Noerenberg Hatchery chum and coho salmon harvest estimates include all on-site and remote release runs of chum and coho salmon.

[i] Main Bay Hatchery sockeye salmon harvest estimate includes all on-site and remote release runs of sockeye salmon.

Table 13.–Harvest values (millions) and allocation percentages by gear type for Area E, 2000–2013.

| Year | DGN | %DGN | PS | %PS | SGN | %SGN | Annual Total |
|---|---|---|---|---|---|---|---|
| 2000 | $8.96 | 47.8% | $9.79 | 52.2% | $0.51 | 2.7% | $19.26 |
| 2001 | $8.29 | 68.3% | $3.85 | 31.7% | $0.95 | 7.3% | $13.09 |
| 2002 | $8.83 | 65.0% | $4.76 | 35.0% | $1.17 | 7.9% | $14.76 |
| 2003 | $6.94 | 44.3% | $8.72 | 55.7% | $1.07 | 6.4% | $16.73 |
| 2004 | $4.03 | 71.0% | $1.65 | 30.0% | $0.42 | 6.9% | $6.10 |
| 2005 | $4.37 | 34.5% | $8.31 | 65.6% | $0.43 | 3.3% | $13.11 |
| 2006 | $7.01 | 54.5% | $5.85 | 45.5% | $0.78 | 5.7% | $13.64 |
| 2007 | $8.37 | 33.8% | $16.39 | 66.2% | $1.29 | 4.9% | $26.05 |
| 2008 | $18.06 | 33.2% | $36.41 | 66.9% | $1.30 | 2.3% | $55.77 |
| 2009 | $15.55 | 61.5% | $9.72 | 38.5% | $1.58 | 5.9% | $26.85 |
| 2010 | $36.55 | 36.0% | $64.98 | 64.0% | $3.41 | 3.2% | $104.93 |
| 2011 | $25.24 | 65.2% | $13.46 | 34.8% | $2.87 | 6.9% | $41.57 |
| 2012 | $30.38 | 58.7% | $21.36 | 41.3% | $3.13 | 5.7% | $54.86 |
| 2013 | $25.05 | 31.2% | $55.19 | 68.8% | $2.41 | 2.9% | $82.65 |

*Note*: Drift gillnet (DGN), purse seine (PS), set gillnet (SGN).



Table 14.–Five year rolling average allocation percentages by gear type for Area E, 2006–2015.

| Year | DGN | PS | SGN |
|---|---|---|---|
| 2006 | 56.3% | 43.7% | 5.9% |
| 2007 | 54.3% | 45.7% | 6.3% |
| 2008 | 51.6% | 48.4% | 6.0% |
| 2009 | 42.9% | 57.1% | 5.3% |
| 2010 | 37.9% | 62.1% | 3.7% |
| 2011 | 41.0% | 59.0% | 4.0% |
| 2012 | 39.1% | 60.9% | 3.7% |
| 2013 | 42.4% | 57.6% | 4.1% |
| 2014 | 46.3% | 53.7% | 4.3% |
| 2015 | 44.6% | 55.4% | 4.3% |

*Note*: Drift gillnet (DGN), purse seine (PS), set gillnet (SGN).

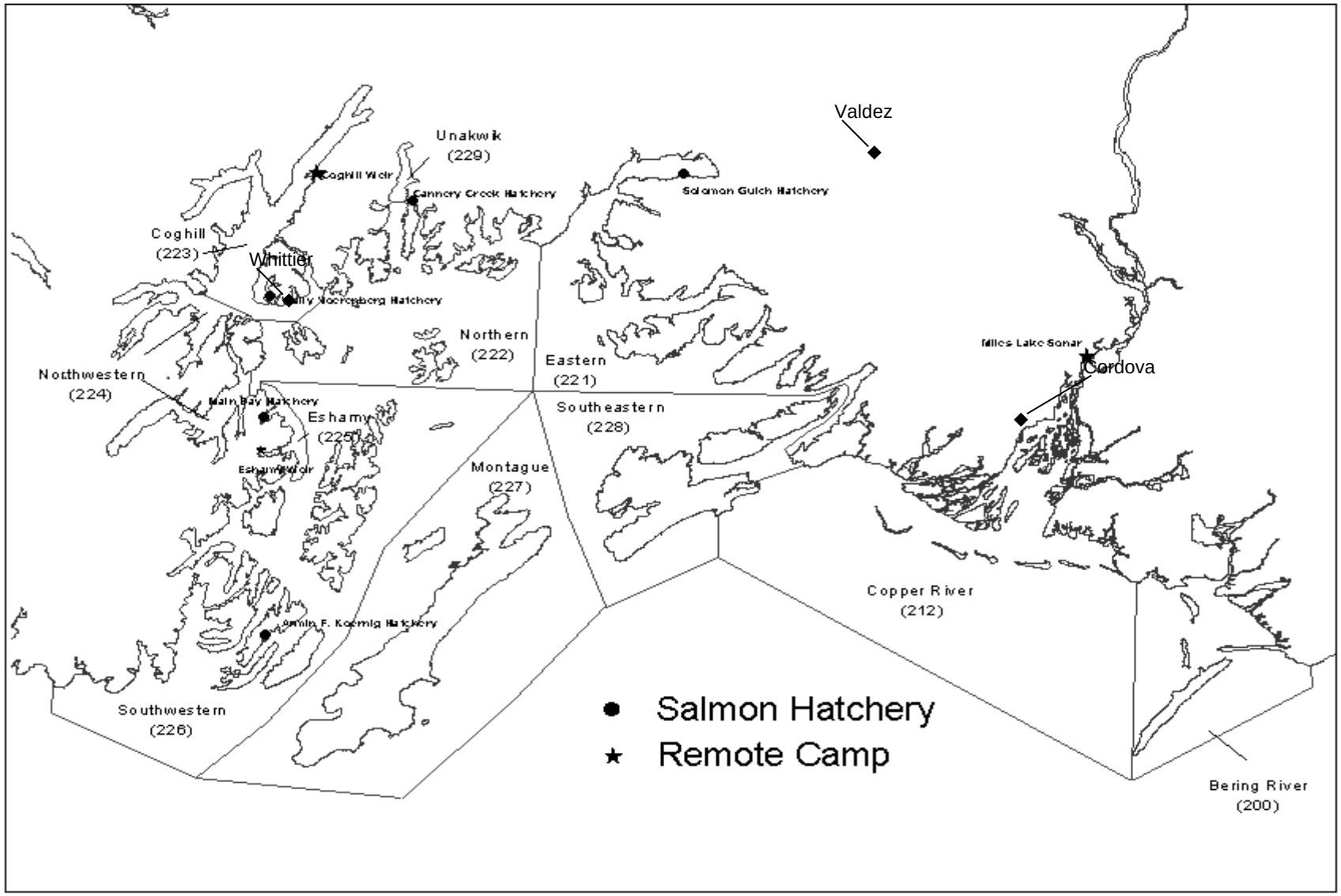


Figure 1.–Prince William Sound Management Area showing towns, commercial fishing districts, salmon hatcheries, weir locations, and the Miles Lake sonar camp.

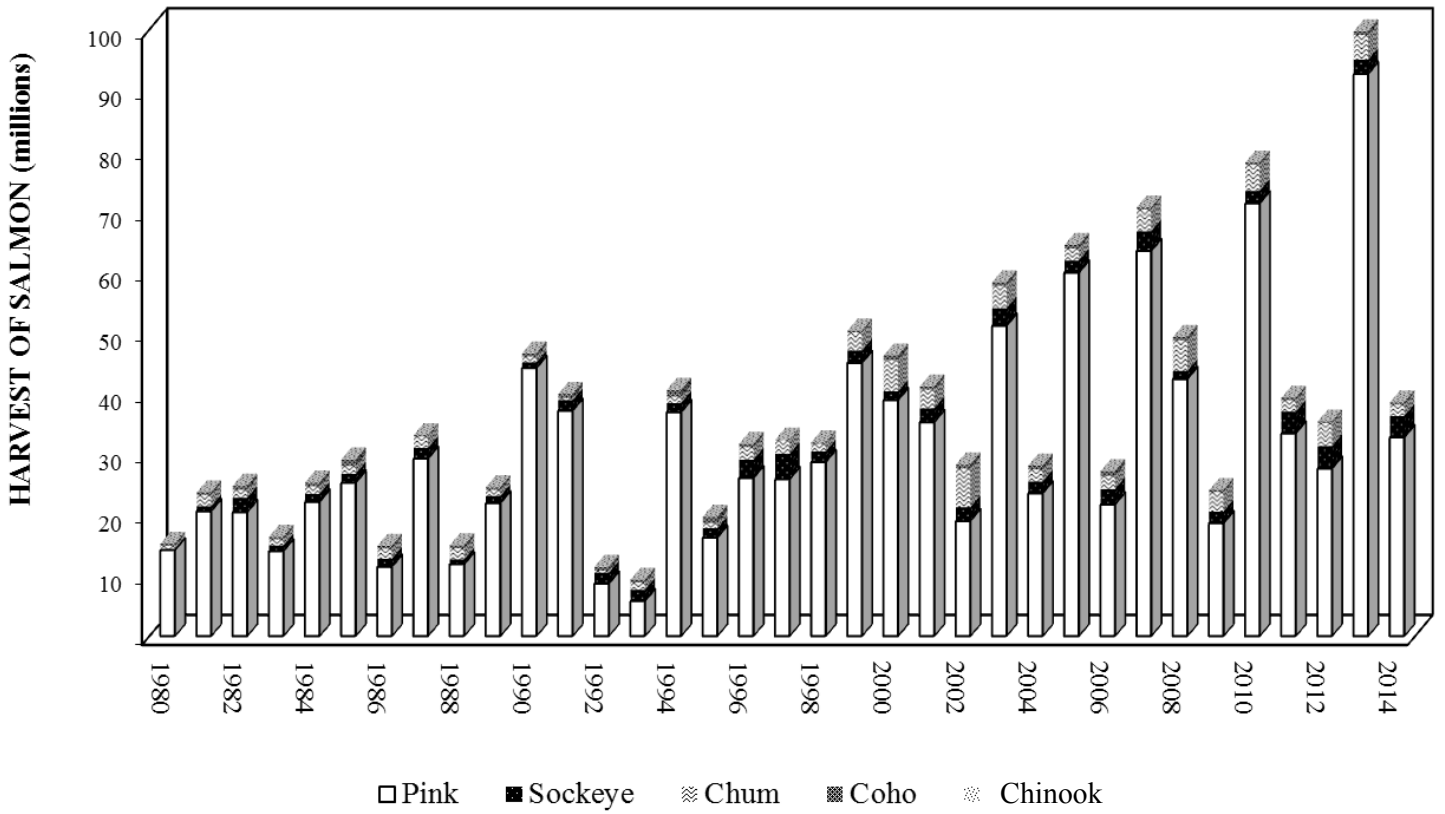


Figure 2.–Commercial salmon harvests in Prince William Sound, 1980–2014.

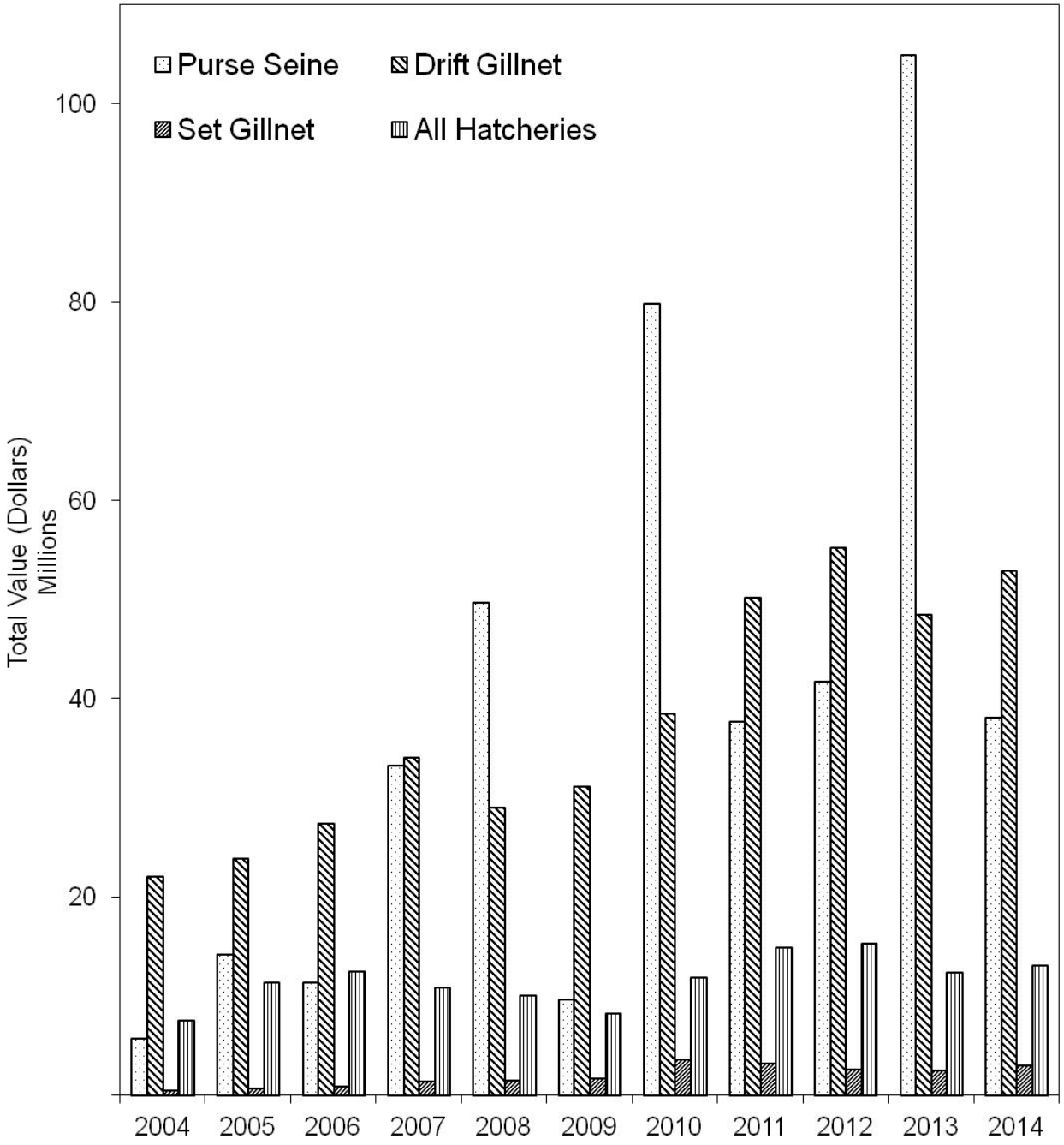


Figure 3.–Exvessel value of the commercial salmon harvest by gear type, 2004–2014.