Special Publication No. 17-14

Prince William Sound Area Commercial Salmon Fisheries: a Report to the Alaska Board of Fisheries, 2017

by

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and

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November 2017

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

Symbols and Abbreviations

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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, χ^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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November 2017

The Special Publication series was established by the Division of Sport Fish in 1991 for the publication of techniques and procedures manuals, informational pamphlets, special subject reports to decision-making bodies, symposia and workshop proceedings, application software documentation, in-house lectures, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Special Publications are intended for fishery and other technical professionals. Special Publications are available through the Alaska State Library, Alaska Resources Library and Information Services (ARLIS) and on the Internet: http://www.adfg.alaska.gov/sf/publications/. This publication has undergone editorial and peer review

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This document should be cited as follows:
Botz, J., and C. Russell. 2017. Prince William Sound area salmon fisheries: a report to the Alaska Board of Fisheries, 2017. Alaska Department of Fish and Game, Special Publication No. 17-14, Anchorage.

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ABSTRACT

The 2015–2017 Prince William Sound Area (PWS) commercial salmon total (all species) average annual harvest of 59.40 million fish is above the 10-year (2007–2016) average of 56.80 million fish. Average individual species contributions consisted of 52.97 million pink (*Oncorhynchus gorbuscha*), 2.27 million sockeye (*O. nerka*), 3.70 million chum (*O. keta*), 421,000 coho (*O. kisutch*), and 17,200 Chinook salmon (*O. tshawytscha*). Approximately 11% (6.47 million fish) of the total harvest average was composed of hatchery cost recovery and broodstock fish. The majority, 89% (52.90 million fish), were harvested in the common property fishery. The most notable events that have occurred since the 2014 Alaska Board of Fisheries meeting include: 1) the largest pink salmon harvest on record in 2015, 2) the 2016 PWS pink salmon harvest was the second lowest total run in 20 years, 3) the 2016 and 2017 increasingly restrictive management in western PWS to achieve the Coghill Lake sockeye salmon escapement goal, and 4) a record 2.39 million chum salmon were harvested in the purse seine commercial property fishery (CPF) in 2017.

Key words pink salmon *Oncorhynchus gorbuscha*, sockeye salmon *O. nerka*, chum salmon *O. keta*, coho salmon *O. kisutch*, Chinook salmon *O. tshawytscha*, harvest, drift gillnet, set gillnet, purse seine, common property fishery, hatchery, cost recovery, Prince William Sound

PRINCE WILLIAM SOUND SALMON FISHERIES

INTRODUCTION

This report summarizes Prince William Sound (PWS) commercial fishery performance (including the Copper and Bering districts) for the years 2015, 2016, and 2017, and highlights notable events since the 2014 PWS Alaska Board of Fisheries (BOF) meeting. At the time of writing this report, 2017 commercial fisheries were ongoing and complete harvest data were not available. Because the season has not concluded, an abbreviated 2017 season summary with preliminary harvest data is provided. Detailed annual summaries for 2015 and 2016 are available in the *Prince William Sound area finfish management report* for each year (AMRs) and that also provides historical data for comparisons and examination of trends (Haught et al. 2017; Russell et al. 2017).

Salmon returns and harvests have been consistently strong in 2 of 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 2014, and there are no stocks of concern. Wild pink salmon escapements were within or above escapement goals from 2015 to 2017, and were at record levels in 2015. Wild chum salmon escapements were within escapement goal ranges for the years 2015–2017. 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 notable events that have occurred since the 2014 BOF meeting include: 1) the largest pink salmon harvest on record in 2015, 2) increased salmon prices and high exvessel values for all gear groups, 3) PWS allocation moved towards parity between drift gillnet and purse seine gear groups due to consistently high drift gillnet exvessel values and large fluctuations in purse seine exvessel values, and 4) participation in all commercial salmon fisheries is at historically high levels.

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). Although the Copper River is within the PWS management area, Copper River salmon fisheries will not be addressed in this 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.

Six hatcheries contribute to the area's fisheries. Five are operated by the regional aquaculture association, Prince William Sound Aquaculture Corporation (PWSAC). Gulkana Hatchery (GH) 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. Wally H. Noerenberg (WNH) Hatchery in the northwestern sound produces pink, chum, and coho *O. kisutch* salmon. 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.

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, Unakwik, Coghill, and Eshamy districts. Set gillnet gear (29 permits) is allowed only in the Eshamy District. Purse seine gear (266 permits) is allowed in the Eastern, Northern, Unakwik, Coghill, Northwestern, Southwestern, Montague, and Southeastern districts.

SALMON HARVEST OVERVIEW 2015–2017

The 2015–2017 Prince William Sound Area (including the Copper and Bering districts) commercial salmon harvest average of 59.38 million fish is 4.6% higher than the 10-year harvest average (56.76 million fish) for this area (Table 1). The WNH chum salmon runs, 2015–2017, were all above forecast, and the 2017 run was in the top 10 overall. The MBH sockeye salmon run was a record large run in 2015 and below forecast in 2016 and 2017, showing mixed results from increased fry releases that started in 2012. During 2015–2017, PWS pink salmon runs varied greatly; the 2015 return was a record run, the 2016 return was a run failure, and the 2017 return was slightly below the 5-year odd year average.

The 2015 harvest of 103.49 million salmon was made up of a record 97.33 million pink, 3.40 million sockeye, 2.51 million chum, 225,000 coho, and 24,500 Chinook salmon *O. tshawytscha* (Table 2). Approximately 8.1% (8.39 million fish) of the harvest was composed of hatchery cost recovery and broodstock fish. The majority, 91.9% (95.08 million fish), were harvested in the common property fishery (CPF). The estimated value of the combined 2015 commercial salmon harvest is $117.17 million, including hatchery sales (Table 3).

The 2016 harvest of 18.73 million salmon was made up of 13.07 million pink, 1.99 million sockeye, 3.17 million chum, 484,000 coho, and 13,500 Chinook salmon (Table 4). Approximately 28.6% (5.39 million fish) of the harvest was composed of hatchery cost recovery and broodstock fish. The majority, 71.8% (13.32 million fish), were harvested in the CPF. The

estimated value of the combined 2016 commercial salmon harvest, including hatchery sales, was $62.64 million (Table 5).

The 2017 harvest of 56.12 million salmon was made up of 48.70 million pink, 1.43 million sockeye, 5.42 million chum, 554,000 coho, and 13,600 Chinook salmon (Table 6). Approximately 10.3% (5.81 million fish) of the harvest was composed of hatchery cost recovery and broodstock fish. The majority, 89.7% (50.31 million fish), were harvested in the CPF. The preliminary estimated value of the combined 2017 commercial salmon harvest is $127.96 million, including hatchery sales (Table 7).

GILLNET FISHERIES

Coghill District

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 WNH and wild sockeye salmon. The hatchery is located on Lake Bay at the southern end of Esther Island (Figure 1) and has annual production goals of ~3 million chum, ~9.5 million pink, and ~250,000 coho 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 and opens to purse seine permit holders beginning July 21 and ending when there is no longer a harvestable surplus of 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 in terminal areas. CPF openings in hatchery subdistricts 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 district is open to all drift and set gillnet permits in Area E and 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 salmon bound for other areas in PWS and harvest of wild sockeye salmon returning to Eshamy Lake.

During years in which the set gillnet gear group catches 5.0% 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 is limited to no more than 36 hours per week. In 2015 and 2016, the set gillnet gear group remained within the 5.0% allocation and no restrictions were triggered. However, in 2017, and in the upcoming 2018 season, the set gillnet group was above the 5.0% allocation and were/will be limited to 36 hours per week.

There are 7 proposals currently before the BOF that deal with issues specific to Eshamy District.

- Proposal 40–Increase minimum distances between set and drift gillnet gear in Crafton Island Subdistrict.
- Proposal 41–Minimum distances between set and drift gillnet gear in Crafton Island Subdistrict.

- Proposal 42–Minimum distances between set and drift gillnet gear in Main Bay Hatchery THA.
- Proposal 43–Legal operations of set and drift gillnets in Main Bay Subdistrict.
- Proposal 44–Clarification of gillnet operation regulations.
- Proposal 45–Limit set gillnet buoy and line setups.
- Proposal 46–Change Main Bay Subdistrict boundary coordinates.

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. In 2014, the Port Chalmers area returned to the purse seine gear group when allocation came back into balance. However, the area was allocated to the drift gillnet gear group in 2015 and 2016 because of the high purse seine pink salmon harvests which resulted in exceeding the 45.0% trigger in the allocation plan. For 2017 and 2018, allocation returned to parity and the area again returned to the purse seine gear group. PWSAC chum salmon runs to the Port Chalmers remote release have been consistently below forecast since 2010 and have not contributed to allocation to the extent intended.

Gillnet Season Summary 2015

Based on the allocation plan, the drift gillnet fleet had exclusive access to the Port Chalmers Subdistrict through chum salmon run timing during the 2015 fishing season (June 1 to July 30), and the set gillnet fleet was not restricted.

The 2015 PWS drift gillnet harvest of 4.91 million salmon was composed of 977,000 pink, 1.05 million chum, 2.70 million sockeye, 161,000 coho, and 27,800 Chinook salmon. The 2015 PWS set gillnet harvest of 317,000 salmon was composed of 29,100 pink, 21,700 chum, 265,000 sockeye, 839 coho, and 61 Chinook salmon (Table 2).

The enhanced chum salmon run to WNH in 2015 was forecast to be 1.33 million fish. PWSAC's projection for cost-recovery and broodstock requirements was approximately 812,000 fish, leaving 519,000 chum salmon for the CPF (Table 8). The CPF harvest of chum salmon in the Coghill District was 899,000 fish; 21.0% greater than forecast. PWSAC harvested 979,000 chum salmon for cost-recovery and broodstock (Table 2). Approximately 4.0% of chum salmon harvested in the Coghill District CPF were wild stocks. The purse seine fleet was allowed into the WNH Special Harvest Area (SHA) to harvest excess chum salmon prior to the July 21 regulatory opening.

The 2015 forecast of the sockeye salmon run to Coghill Lake sockeye salmon escapement was 123,000 fish, with 93,000 available for the CPF (Table 8). Sockeye salmon escapement into Coghill Lake was 13,584 which was below the SEG range of 20,000–60,000 fish. The total CPF harvest of sockeye salmon in the Coghill District was 76,500 fish (Table 2) of which 22,200 fish (29.0%) were wild stocks and assumed to be Coghill origin.

Pink salmon CPF harvest in the Coghill District was 6.26 million fish and composed of 12.0% wild stocks. PWSAC forecasted a CPF harvest of 54,000 coho salmon to WNH (Table 8). The total CPF harvest of coho salmon in the Coghill District was 7,300 fish, the majority of which

were probably enhanced from WNH. The enhanced coho salmon run to WNH was 49.7% less than the preseason forecast, but the hatchery's broodstock goal was achieved.

PWSAC forecasted a run of 258,000 chum salmon to the Port Chalmers remote release site in 2015. Drift gillnet CPF harvest of 168,000 chum salmon in the Montague District was 34.9% below that forecast and 37.3% below the 5-year (2010–2014) CPF average of 268,000 chum salmon. The proportion of wild chum salmon in the Port Chalmers Subdistrict CPF harvest was 10.9%.

ADF&G's preseason harvest forecast for Eshamy Lake was 32,000 wild sockeye salmon and PWSAC forecasted a CPF harvest of 1.56 million MBH enhanced sockeye salmon (Table 8). Overall, 861,000 sockeye, 85,900 chum, and 178,000 pink salmon were harvested in the Eshamy District by 313 drift gillnet permit holders (Table 2). A total of 30 set gillnet permit holders harvested 265,500 sockeye, 21,700 chum, and 29,100 pink salmon (Table 2). The total MBH sockeye salmon run was 1.55 million fish and is the largest on record. Contribution estimates show that wild sockeye salmon (assumed to be Coghill Lake origin) comprised 48,000 fish (4.3%) of the 1.13 million harvested, wild chum salmon comprised 13.2% of the 107,500 harvest, and wild pink salmon comprised 82.9% of the 207,400 harvest.

Escapement monitoring into Eshamy Lake in 2015 was attempted using a video monitoring system. However, escapement counts were incomplete because the weir allowed fish to pass uncounted.

Gillnet Season Summary 2016

Based on the allocation plan, the drift gillnet fleet had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2016, and the set gillnet fleet was not restricted.

The 2016 PWS drift gillnet harvest was 4.08 million salmon and composed of 115,000 pink, 1.81 million chum, 1.70 million sockeye, 448,000 coho, and 12,600 Chinook salmon. The set gillnet harvest was 247,000 salmon and composed of 8,000 pink, 20,800 chum, 218,000 sockeye, 13 coho, and 34 Chinook salmon (Table 4).

The enhanced chum salmon run to WNH was forecast to be 2.15 million fish. PWSAC's projection for cost-recovery and broodstock requirements was approximately 1.17 million fish, leaving approximately 978,000 chum salmon for the CPF (Table 9). The Coghill District drift gillnet fishery was largely concentrated in hatchery subdistricts and terminal areas focusing fishing effort on the WNH chum salmon run that was stronger than anticipated throughout the season. The CPF harvest of chum salmon in the Coghill District was 1.63 million fish. PWSAC harvested 959,000 chum salmon for cost-recovery and broodstock (Table 4). The proportion of wild chum salmon in the Coghill District CPF was 0.9%.

The 2016 forecast of the sockeye salmon run to Coghill Lake was 110,000 fish, with 80,000 fish for the CPF (Table 9). Sockeye salmon escapement past the Coghill River weir was 8,708, which was below the SEG range of 20,000–60,000 fish for the third time in the last 4 years. The total CPF harvest of sockeye salmon in the Coghill District was 63,200 fish (Table 4) composed of approximately 8,400 (13.2%) wild and 54,800 enhanced sockeye salmon. The purse seine fleet was allowed into the WNH SHA for two 12-hour periods to harvest excess chum salmon prior to the July 21 regulatory opening.

Pink salmon CPF harvest in the Coghill District was 13,500, 26.1% of which were assumed wild stocks. PWSAC forecasted a CPF harvest of 18,000 coho salmon to WNH (Table 9). The total CPF harvest of coho salmon in the Coghill District was 11 fish, of which all are assumed to be from WNH (Table 4). The enhanced coho salmon run to WNH was 95.5% less than the preseason forecast and the hatchery's broodstock goal was not achieved.

PWSAC forecasted a run of 330,000 chum salmon to the Port Chalmers remote release site in 2016. Drift gillnet harvest of chum salmon in the Montague District of 197,000 fish was 40.5% below forecast and 22.4% below the 5-year (2011–2015) average of 253,084 fish. The proportion of wild chum salmon in the Montague District CPF harvest was 11.4%.

PWSAC projected the total run of enhanced sockeye salmon to MBH to be 1.60 million fish, of which 8,940 fish were required for broodstock and the remaining 1.59 million fish would be available for harvest in the CPF (Table 9). Overall, 288 drift gillnet permit holders harvested 443,800 sockeye, 78,400 chum, and 51,900 pink salmon (Table 4). A total of 29 set gillnet permit holders harvested 218,000 sockeye, 20,800 chum, and 8,000 pink salmon (Table 4). The harvest of 779,000 MBH sockeye salmon was 51.3% below forecast. Eshamy District contribution estimates show that wild sockeye salmon (assumed to be Coghill Lake origin) comprised 21,500 fish (3.2%) of the 662,000 harvested sockeye salmon, 54,300 (90.7%) of the 59,900 harvested pink salmon, and 8,600 (8.7%) of the 99,200 harvested chum salmon.

No preseason forecast of the sockeye salmon run to Eshamy Lake was developed in 2016. The Eshamy River weir did not operate in 2016 and the attempt to count fish with remote video was unsuccessful.

Gillnet Season Summary 2017

Based on the allocation plan, the purse seine fleet had exclusive access to the Port Chalmers Subdistrict for the first time since 2014 and the set gillnet gear group was limited to 36 hours per week beginning July 10, 2017.

The 2017 PWS drift gillnet salmon harvest was 4.91 million salmon and composed of 1.04 million pink, 2.29 million chum, 1.12 million sockeye, 440,000 coho, and 13,300 Chinook salmon. Set gillnet salmon harvest was 237,400 fish composed of 37,600 pink, 17,600 chum, 182,000 sockeye, and 216 coho salmon (Table 6).

The enhanced chum salmon run to WNH was forecast to be 1.97 million fish. PWSAC's projection for cost recovery and broodstock requirements was approximately 818,000 fish, leaving 1.15 million fish available for CPF (Table 10). The WNH chum salmon run of 4.04 million fish was 68.0% higher than PWSAC's forecast. The CPF harvest of chum salmon in the Coghill District was 3.04 million fish; well above the anticipated harvest projection. PWSAC harvested 724,000 chum salmon for cost-recovery and broodstock (Table 6). The proportion of wild chum salmon in the Coghill District CPF was 5.5%. The purse seine fleet was allowed into the WNH SHA for two 12-hour periods to harvest excess chum salmon prior to the July 21 regulatory opening.

The 2017 forecast of the sockeye salmon run to Coghill Lake was 74,000 fish with 44,000 fish available for CPF (Table 10). Due to this weak forecast and the recent pattern of missed Coghill Lake sockeye salmon escapement goals, conservative management was implemented in all early season western PWS commercial salmon fisheries. This management approach limited fishing to hatchery terminal areas and subdistricts and also entailed reduced frequency short duration

fishing periods in areas with higher Coghill Lake sockeye salmon harvest potential. Total sockeye salmon escapement past the Coghill River weir was 50,300 fish and within the SEG range of 20,000–60,000 fish. The total CPF harvest of sockeye salmon in the Coghill District was 118,000 fish (Table 6) and otolith contribution estimates indicated that approximately 32,600 wild and 85,100 MBH sockeye salmon were harvested. The proportion of wild sockeye salmon in the Coghill District CPF harvest was 27.6%.

Pink salmon CPF harvest in the Coghill District was 1.44 million fish, 68.3% (1.35 million) of which were assumed wild stocks. PWSAC forecasted a CPF harvest of 227,000 coho salmon to WNH (Table 10). The total CPF harvest of coho salmon in the Coghill District was 14,400 fish (Table 6), of which all are assumed to be from WNH. Sufficient coho salmon broodstock were not available onsite at WNH with the remaining balance coming from SGH.

PWSAC projected the total run of enhanced sockeye salmon to MBH to be 1.15 million fish, of which 8,940 fish were required for broodstock and the remaining 1.14 million fish would be available for harvest in the CPF (Table 10). Overall, 338 drift gillnet permit holders harvested 439,000 sockeye, 103,000 chum, and 312,700 pink salmon (Table 6). A total of 29 set gillnet permit holders harvested 182,000 sockeye, 17,600 chum, and 37,600 pink salmon (Table 6). Preliminary contribution estimates show that wild stocks comprised 52,000 fish (8.4%) of the 621,000 harvested sockeye salmon and are assumed to be Coghill Lake origin. Wild stocks also made up 73.4% of the 350,300 harvested pink salmon, and 22.2% of the 120,200 harvested chum salmon harvest in the Eshamy District. The estimated enhanced sockeye salmon run to MBH, 728,000 fish, was 36.7% lower than the preseason harvest forecast of 1.15 million fish.

No preseason forecast of the wild sockeye salmon run to Eshamy Lake was developed in 2017. Escapement video monitoring at Eshamy Lake again failed and no estimate of escapement is available for 2017. Due to uncertainty in escapement at Eshamy River, openings in Eshamy District after July 22 were restricted to short duration fishing periods, and occasional area restrictions.

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 cost recovery and broodstock goals. Escapement of pink and chum salmon is monitored throughout the season by weekly aerial surveys of 134 index streams. Pink and chum salmon escapement trends determine the area and duration of fishing periods within districts.

Purse Seine Season Summary 2015

The 2015 pink salmon preseason forecast was 54.19 million fish and liberal fishing time and area was anticipated if returns were as strong as expected. This forecast included 16.87 million wild fish, 21.60 million PWSAC fish, and 15.72 million VFDA fish. Approximately 3.13 million (14.5%) of PWSAC's pink salmon preseason forecast was projected for cost recovery and broodstock with the remaining 18.47 million PWSAC fish expected to be available for common property fishery (CPF) harvest. Approximately 3.10 million (19.7%) of VFDA's pink salmon preseason forecast were projected for cost recovery and broodstock. The remaining 12.62 million

VFDA fish were expected to be available for CPF harvest. Approximately 1.45 million wild pink salmon were forecasted for escapement and 15.42 million wild pink salmon were projected for CPF harvest in PWS (Table 8).

The 2015 PWS purse seine CPF salmon harvest was a record 89.85 million fish composed of 89.11 million pink, 463,000 chum, 241,000 sockeye, 45,000 coho, and 497 Chinook salmon (Table 2). The purse seine CPF total harvest of 89.10 million pink salmon was the largest PWS pink salmon harvest on record and exceeded the preseason forecast of 54.19 million by 60.1%. Pink salmon total harvest was 97.33 million fish, including 7.21 million fish for hatchery cost recovery (4.59 million for PWSAC and 2.63 million for VFDA). PWS purse seine CPF fishery participation was 222 permits in 2015 (Table 3). Pink salmon harvests were composed of 25.54 million wild stock fish and 31.39 million VFDA fish (both of which are records) and 33.14 million PWSAC fish.

Hatchery pink salmon represented 69.6% of the record total run of 104.15 million fish (harvest, broodstock, and wild stock escapement) with VFDA and PWSAC contributing 33.3% and 36.3%, respectively. Wild stock pink salmon harvest of 25.54 million fish combined with an escapement index of 6.15 million resulted in the largest wild pink salmon return on record of 31.68 million fish. VFDA cost recovery and broodstock harvest of 2.63 million fish was approximately 7.5% of the record pink salmon total run of 34.71 million VFDA fish. PWSAC cost-recovery and broodstock harvest of 4.59 million fish was approximately 12.2% of the pink salmon total run of 37.76 million PWSAC fish.

The 2015 chum salmon preseason forecast total run in PWS was 2.4 million fish. The majority, 1.9 million (79.2%), were from PWSAC hatchery production, with 280,000 fish returning to AFK. Based on ADF&G's wild chum salmon preseason forecast of 484,000 fish, there was a potential CPF harvest of 284,000 wild chum salmon.

Chum salmon CPF harvest in PWS was 2.51 million fish, which was 110,000 fish greater than the preseason forecast. The purse seine fleet harvested 463,000 chum salmon in 2015 and otolith contribution estimates indicate that 183,000 AFK chum salmon were harvested which was 34.6% less than the preseason forecast of 280,000 fish. A record 103,500 sockeye salmon were harvested in the AFK chum salmon fishery of which 98,500 (95.2%) originated from MBH and 5,000 (4.8%) were wild stock and assumed to be Coghill Lake origin. Time and area adjustments were not taken at AFK inseason to address the high harvest of salmon destined for other areas of PWS. Purse seine fishing in the Esther Subdistrict first occurred between July 11 and 21, prior to the regulatory July 21 opening date set in the allocation plan, and resulted in the harvest of 115,000 chum salmon. The purpose of this fishery was to prevent the deterioration of fish quality of the harvestable surplus of chum salmon that were not being adequately harvested by the drift gillnet fleet.

The 2015 VFDA enhanced coho salmon forecast was 105,000 fish with an anticipated CPF harvest of 38,600 fish. The VFDA coho salmon run was less than forecast, and few surplus fish were available for CPF harvest. Total commercial purse seine harvest of coho salmon in PWS was 45,000 fish. Enhanced coho salmon runs to VFDA have been less than the preseason forecast 7 out of the past 10 years.

The 2015 PWS pink salmon escapement aerial index was the largest on record and met or exceeded all district specific escapement goals. Chum salmon escapement goals were also achieved in all districts.

Purse Seine Season Summary 2016

The 2016 pink salmon preseason forecast was for an above average run and liberal fishing time and area were anticipated if returns were as strong as expected. The 2016 pink salmon total run forecast for PWS was 40.90 million fish, of which 31.62 million were anticipated to be available for the CPF. This total run estimate included 3.80 million wild fish, 19.60 million PWSAC fish, and 17.40 million VFDA fish. Approximately 4.70 million (24.0%) of PWSAC's pink salmon forecast was projected for cost recovery and broodstock with the remaining 14.90 million fish expected to be available for CPF harvest. Approximately 3.40 million (19.5%) of VFDA's pink salmon forecast were projected for cost recovery and broodstock. The remaining 14.04 million VFDA fish were expected to be available for CPF harvest. Approximately 1.20 million wild fish are forecasted for escapement and 2.68 million wild stock pink salmon are projected for CPF harvest in PWS (Table 9).

The 2016 PWS pink salmon CPF harvest of 8.65 million pink salmon was the lowest harvest since 2002 and the second lowest in the last 20 years, or 72.6% below the 31.62 million preseason forecast. The 2016 Prince William Sound pink salmon fishery was determined to be a commercial fishery failure and was subsequently declared a federal disaster in January 2017. Purse seine CPF salmon harvest of 9.00 million fish was composed of 8.52 million pink, 379,000 chum, 64,600 sockeye, 29,200 coho, and 47 Chinook salmon (Table 4). Prince William Sound purse seine CPF fishery participation was 210 permits in 2016 (Table 5). Total pink salmon harvest of 13.07 million fish included 4.42 million fish for hatchery cost recovery (2.39 million for PWSAC and 2.03 million for VFDA). Pink salmon otolith contribution estimates from CPF harvests were 25.7% wild stock fish, 68.9% VFDA fish, and 5.5% PWSAC fish.

Hatchery pink salmon represented 75.5% of the total run of 14.3 million fish (harvest, broodstock, and escapement), with VFDA and PWSAC contributing 55.4% and 20.1%, respectively. VFDA cost recovery and broodstock harvest of 2.03 million fish was approximately 25.7% of the total pink salmon run of 7.90 million fish to VFDA. PWSAC cost-recovery and broodstock harvest of 2.39 million fish was approximately 85.4% of the total PWSAC pink salmon run of 2.80 million PWSAC hatchery fish. Wild stock pink salmon harvest of 2.20 million fish combined with an escapement index of 1.32 million resulted in a total wild pink salmon return of 3.52 million fish.

The 2016 chum salmon forecast total run in PWS was 3.33 million fish. The majority, 2.90 million (87.9%), were forecast from PWSAC hatchery production, with 394,000 fish forecast to return to AFK. Based on ADF&G's wild chum salmon preseason forecast of 426,000 fish, there was a potential CPF harvest of 226,000 wild chum salmon.

Chum salmon CPF harvest in PWS was 2.21 million fish, which was 130,000 (5.9%) fish less than the preseason harvest forecast. The purse seine fleet harvested 379,000 chum salmon in 2016. Approximately 246,000 AFK chum salmon were harvested in the PWS CPF, 37.6% less than the preseason forecast of 394,000 fish. A total of 51,600 sockeye salmon were harvested in the AFK chum salmon fishery of which 49,200 (95.5%) originated from MBH and 2,300 (4.5%) were wild stock and assumed to be Coghill Lake origin. Incidental catch of salmon destined for other areas of PWS increased at AFK during mid-June. In order to limit harvest of these salmon fishing periods were gradually restricted from a weekly schedule of 60 hour and 84 hour fishing periods to every other day 8 hour fishing periods. Purse seine fishing in the Coghill District began on July 9 prior to the regulatory July 21 opening date set in the allocation plan with two

12-hour openings in the WNH SHA and resulted in a harvest of 101,000 chum salmon. The purpose of this fishery was preventing the deterioration of fish quality of the harvestable surplus of chum salmon that was not being adequately harvested by the drift gillnet fleet.

The 2016 VFDA enhanced coho salmon forecast was 101,000 fish with an anticipated CPF harvest of 52,800 fish. The VFDA coho salmon run was below forecast and few surplus fish were available for CPF harvest. Total commercial purse seine harvest of coho salmon in PWS was 29,000 fish. Enhanced coho salmon runs to VFDA have been less than the preseason forecast 7 out of the past 10 years.

During the 2016 season, bad weather and limited pilot availability resulted in incomplete aerial survey escapement data. When surveys were completed, escapement indices were above anticipated escapements in most districts for most of the season. This allowed for some opportunity to target surplus wild pink salmon. Escapements were below anticipated within the Northern District for most of the season and a conservative management approach was taken in Northern District migration corridors to ensure escapement goals were met. The 2016 PWS pink salmon escapement aerial index was 1.32 million; the Southwestern, Montague, and Eshamy Districts were excluded from the total aerial index number due to incomplete survey coverage. Chum salmon escapement goals were achieved in all districts.

Purse Seine Season Summary 2017

The 2017 pink salmon total run forecast for PWS was 67.16 million fish, of which 59.41 million were estimated to be available for CPF harvest. This estimate included 27.40 million PWSAC enhanced fish, a record 21.01 million wild fish, and 18.75 million VFDA enhanced fish. Approximately 3.20 million (11.7%) of PWSAC's pink salmon forecast was projected for cost recovery and broodstock with the remaining 23.80 million PWSAC fish expected to be available for CPF harvest. Approximately 3.30 million (17.6%) of VFDA's pink salmon forecast were projected for cost recovery and broodstock and the remaining 15.48 million VFDA fish were expected to be available for CPF harvest. Approximately 1.45 million wild fish are forecasted for escapement and 19.65 million wild stock pink salmon are projected for CPF harvest in PWS (Table 10).

The 2017 PWS purse seine CPF salmon harvest was a 45.16 million fish composed of 42.56 million pink, 2.39 million chum, 121,000 sockeye, 88,000 coho, and 305 Chinook salmon (Table 6). The CPF harvest of 43.64 million pink salmon was 25.9% below the 58.92 million CPF forecast, largely due to poor returns to all hatcheries. The pink salmon CPF harvest was composed of 20.27 million wild stock fish, 12.54 million VFDA fish, and 10.69 million PWSAC fish. The VFDA pink salmon run was 24.6% (4.61 million) below the forecast of 18.75 million fish. The PWSAC pink salmon run was 48.4% (13.26 million) below the forecast of 27.40 million fish. Total pink salmon harvest was 48.70 million fish; including 5.06 million fish for hatchery cost recovery, broodstock, and raceway sales 3.46 million for PWSAC and 1.60 million for VFDA). The number of active permits fished in the PWS purse seine fishery was the highest number since 1991 at 229 permits (Table 7).

Hatchery pink salmon represented 58.3% of the total commercial harvest of 48.70 million fish (harvest and cost recovery/broodstock), with VFDA and PWSAC contributing 29.1% and 29.1%, respectively. VFDA cost recovery and broodstock harvest of 1.60 million fish was approximately 11.3% of the total VFDA pink salmon run of 14.14 million fish. PWSAC cost-recovery and

broodstock harvest of 3.46 million fish was approximately 24.5% of the total PWSAC pink salmon run of 14.14 million fish.

The 2017 chum salmon forecast total run in PWS was 3.17 million fish. The majority, 2.80 million (88.3%), are from PWSAC hatchery production with 456,000 fish returning to the AFK. Based on ADF&G's natural chum salmon forecast of 371,000 fish, there was a potential common property harvest of 171,000 natural chum salmon.

Total commercial chum salmon harvest in PWS was 5.42 million fish, including 724,000 fish for WNH broodstock and cost recovery. A record 2.39 million chum salmon were harvested in the purse seine CPF compared to a 595,000 recent 10-year (2007–2016) harvest average. Purse seine chum salmon harvest in PWS was predominantly from the Montague, Southwestern, Eastern, and Coghill districts. Approximately 446,000 AFK chum salmon were harvested in the PWS CPF, nearly matching the forecast. A total of 28,100 sockeye salmon were harvested in the AFK chum salmon fishery of which 24,900 (88.6%) originated from MBH and 3,200 (11.4%) were wild stock and assumed to be Coghill Lake origin. The 2017 forecast of the sockeye salmon run to Coghill Lake was 74,000 fish with 44,000 fish available for CPF (Table 10). Due to this weak forecast and the recent pattern of missed Coghill Lake sockeye salmon escapement goals, conservative management was implemented in all early season western PWS commercial salmon fisheries. In order to limit harvest of salmon destined for other areas of PWS, fishing periods were restricted at AFK from a weekly schedule of 60 hour and 84 hour fishing periods to three 8-hour fishing periods per week as soon as harvest rates increased. Montague District chum salmon commercial harvest was 539,000 fish, 40.7% above the Port Chalmers forecast. However, 299,000 fish were of WNH origin and intercepted offshore of the Port Chalmers terminal area. Eastern District chum salmon commercial harvest was 317,000 fish, of 91% were of wild origin. The purse seine fleet was allowed into the Coghill District starting on July 15 prior to the regulatory July 21 opening date set in the allocation plan 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. The resultant purse seine harvest was 862,000 chum salmon.

The 2017 VFDA enhanced coho salmon forecast was 105,000 fish with an anticipated CCPF harvest of 40,000 fish. Total commercial purse seine harvest of coho salmon in PWS was 88,000 fish.

The 2017 PWS pink and chum salmon escapement estimate was not available at the time of writing this report. However, inseason aerial survey escapement estimates were above anticipated counts in most districts and escapement goals were probably met for all districts. This often allowed for expanded time and area for fishing effort targeting surplus wild pink salmon.

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. The set gillnet gear group allocation is 4.0% of the 5-year average value of PWSAC enhanced salmon stocks. Drift gillnet and purse seine gear groups each receive

50.0% of the remaining value of PWSAC enhanced salmon stocks. If the set gillnet gear group exceeds 5.0% 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 45.0% or less, then in the year following the current calculations, the drift gillnet gear group shall have exclusive access to the Port Chalmers Subdistrict from June 1 through July 30, during fishing periods established by emergency order. If the purse seine gear group harvest value is 45.0% or less, then in the year following the calculations, purse seine gear shall have exclusive access to the Esther Subdistrict from June 1 through July 20, during fishing periods established by emergency order.

In addition, the plan limits the time and area open to specific gear groups to achieve allocation and management objectives. For example, per 5 AAC 24.370(e)(2)(A), the Southwestern District is closed to purse seine fishing prior to July 18 to ensure that early season chum and sockeye salmon bound for gillnet districts reach their intended destinations. Moreover, per 5 AAC 24.370(e)(5)(B), the purse seine gear group is allowed to fish in the Coghill District after July 21 when the harvest is predominately pink salmon. There are also regulatory provisions that allow for enhanced chum salmon to be harvested prior to July 21 in the Coghill District when the available surplus is not being adequately harvested by the drift gillnet fleet.

There are 7 proposals currently before the BOF that concern allocation in the general PWS area.

- Proposal 38–Seeks to modify purse seine gear length.
- Proposal 39–Allow for permit stacking in PWS seine fishery.
- Proposal 47–Seeks to include Valdez Fisheries Development Association (VFDA) enhanced salmon harvest value in the *Prince William Sound Management and Salmon Enhancement Allocation Plan.*
- Proposal 48–Allow for salmon fishing in the Southwestern District before July 18.
- Proposal 49–Amendments to chum salmon fishery section of the *Prince William Sound Management and Salmon Enhancement Allocation Plan.*
- Proposal 51–Define district and subdistrict boundaries within Prince William Sound.
- Proposal 52–Specify longitude boundary lines of the Prince William Sound area.

In 2014–2017, ADF&G calculated the exvessel value percentages for each gear group using the Commercial Operator's Annual Reports (COAR) area specific prices and ADF&G harvest estimates of PWSAC enhanced fish by species and gear type (Table 11).

2015 Allocation

The 5-year (2009–2013) average value percentages for each gear type were 44.6% drift gillnet, 55.4% purse seine, and 4.3% set gillnet (Table 12). As a result, the drift gillnet gear group had exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2015, and the set gillnet gear group was not limited to 36 hours per week beginning July 10, 2015.

2016 Allocation

The 5-year (2010–2014) average value percentages for each gear type were 44.7% drift gillnet, 55.3% purse seine, and 4.5% set gillnet (Table 12). As a result, the drift gillnet gear group had

exclusive access to the Port Chalmers Subdistrict from June 1 to July 30 in 2016, and the set gillnet gear group was not limited to 36 hours per week beginning July 10, 2016.

2017 Allocation

The 5-year (2011–2015) average value percentages for each gear type were 47.0% drift gillnet, 53.0% purse seine, and 5.1% set gillnet (Table 12). As a result, the purse seine gear group had exclusive access to the Port Chalmers Subdistrict for the entire 2017 fishing season, and the set gillnet gear group was limited to 36 hours per week beginning July 10, 2017.

2018 Allocation

The 5-year (2012–2016) average value percentages for each gear type are 46.7% drift gillnet, 53.3% purse seine, and 5.2% set gillnet (Table 12). As a result, the purse seine gear group will have exclusive access to the Port Chalmers Subdistrict for the entire 2018 fishing season, and the set gillnet gear group will be limited to 36 hours per week beginning July 10, 2018.

REFERENCES CITED

COAR (Commercial Operator's Annual Reports). 2017 [Internet]. Commercial fishing reporting system. Alaska Department of Fish and Game. http://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.coar

Haught, S., J. Botz, S. Moffitt, and B. Lewis. 2017. 2015 Prince William Sound area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 17-17, Anchorage

Russell, C. W., J. Botz, S. Haught, and S. Moffitt. 2017. 2016 Prince William Sound area finfish management report. Alaska Department of Fish and Game, Fishery Management Report No. 17-37, Anchorage.

TABLES AND FIGURES

Table 1.–Commercial salmon harvest by species for all gear types, Prince William Sound, Copper, and Bering districts, 1988–2017.

Year [a]	Harvest					
	Chinook	Sockeye	Coho	Pink	Chum	Total
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
2014	10,117	3,307,398	600,303	43,902,238	1,529,730	49,336,286
2015	24,546	3,400,847	224,972	97,325,519	2,512,451	103,488,335
2016	13,466	1,989,266	483,944	13,070,491	3,171,765	18,729,318
2017	13,643	1,426,523	554,119	48,701,038	5,422,622	56,117,945
10-year average (2007–2016)	16,796	2,677,142	402,566	50,345,837	3,323,158	56,764,149

[a] Includes commercial common property, hatchery sales, and test fisheries harvest, personal use, educational, special use permit harvest, and donated fish, 1988–2013. Includes commercial common property and hatchery sales harvest, 2014–2017.

Table 2.–Prince William Sound (PWS) Management Area commercial salmon harvest by gear type and district, 2015.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	219	171	67,000	27,331	42,432,142	143,320	42,669,964
Northern	181	9	12,102	1,668	13,558,665	7,831	13,580,275
Coghill	108	0	2,120	1,215	5,601,620	121,213	5,726,168
Northwestern	0	0	0	0	0	0	0
Southwestern	180	169	113,937	9,641	23,753,197	176,739	24,046,092
Montague	36	62	760	1,208	1,530,931	579	1,533,540
Southeastern	106	79	43,284	3,915	2,235,414	13,532	2,296,224
Unakwik	8	7	1,994	0	346	245	2,592
Purse seine total		497	241,197	44,978	89,112,315	463,459	89,854,855
Bering River	34	13	2,137	12,106	10	1	14,267
Copper River	515	22,506	1,750,762	136,981	84,692	15,650	2,010,591
Coghill	265	93	74,416	6,094	655,320	778,112	1,514,035
Eshamy	313	92	860,637	4,611	178,336	85,864	1,129,540
Montague	104	90	9,804	714	58,508	168,142	237,258
Unakwik	6	1	2,958	0	55	23	3,037
Drift gillnet total		22,795	2,700,714	160,506	976,921	1,047,792	4,908,728
Eshamy	30	61	265,447	839	29,070	21,696	317,113
Set gillnet total		61	265,447	839	29,070	21,696	317,113
Solomon Gulch	1	0	0	17,126	2,629,533	0	2,646,659
Cannery Creek	1	0	0	0	556,835	0	556,835
Wally Noerenberg	1	0	0	0	2,715,357	979,357	3,694,714
Main Bay	1	0	180,516	0	0	0	180,516
Armin F. Koernig	1	0	0	0	1,312,910	0	1,312,910
Hatchery total [a]		0	180,516	17,126	7,214,635	979,357	8,391,634
Test fishery	0	0	0	0	0	0	0
Home pack	415	1,193	12,973	1,523	169	147	16,312
Confiscated fish	0	0	0	0	0	0	0
Donated fish	0	0	0	0	0	0	0
Misc. total		1,193	12,973	1,523	169	147	16,312
Prince William Sound total		24,546	3,400,847	224,972	97,325,519	2,512,451	103,488,642

[a] Hatchery sales for hatchery operating costs.

Table 3.–Mean price and estimated exvessel value of the total commercial salmon harvest by gear type, Prince William Sound, 2015.

Purse seine [a]			Average		
Species	Number	Pounds	weight	Price	Value
Chinook	497	6,150	12.37	$1.14	$6,990
Sockeye	241,197	1,276,775	5.29	$1.38	$1,766,230
Coho	44,978	287,375	6.39	$0.29	$83,363
Pink	89,112,315	301,531,658	3.38	$0.20	$60,306,332
Chum	463,459	2,912,060	6.28	$0.49	$1,436,448
	89,862,446	306,014,018			$63,599,363

Drift gillnet [a]			Average		
Species	Number	Pounds	weight	Price	Value
Chinook	22,795	392,427	17.22	$5.73	$2,250,068
Sockeye	2,700,714	13,925,879	5.16	$2.15	$29,962,566
Coho	160,506	1,176,345	7.33	$0.73	$862,745
Pink	976,921	3,572,099	3.66	$0.16	$569,851
Chum	1,047,792	6,677,339	6.37	$0.51	$3,426,951
	4,908,728	25,744,089			$37,072,182

Set gillnet [a]			Average		
Species	Number	Pounds	weight	Price	Value
Chinook	61	918	15.05	$1.35	$1,239
Sockeye	265,447	1,349,271	5.08	$1.40	$1,888,979
Coho	839	5,641	6.72	$0.18	$1,015
Pink	29,070	114,052	3.92	$0.13	$14,827
Chum	21,696	138,054	6.36	$0.50	$69,027
	317,113	1,607,936			$1,975,088

Hatchery sales [a]			Average		
Species	Number	Pounds	weight	Price	Value
Chinook	0	0	0	$0.00	$0
Sockeye	180,516	774,135	3.93	$1.50	$1,160,000
Coho	17,126	95,010	5.55	$0.32	$30,000
Pink	7,214,635	21,656,411	3	$0.46	$9,873,200
Chum	979,357	5,757,410	5.88	$0.60	$3,457,442
	8,391,634	28,282,966			$14,520,642

Combined			Average		
Species	Number	Pounds	weight	Species	Number
Chinook	23,353	399,495	17.11	$5.65	$2,258,297
Sockeye	3,387,874	17,326,060	5.09	$2.01	$34,777,776
Coho	223,449	1,564,371	7	$0.62	$977,124
Pink	97,332,941	326,874,220	3.36	$0.22	$70,764,209
Chum	2,512,304	15,484,863	6.16	$0.54	$8,389,869
	103,479,921	361,649,009			$117,167,274

Gear type	Value of catch	No. of permits	Average earnings
Purse seine	$63,599,363	222	$286,484
Drift gillnet	$37,072,182	525	$70,614
Set gillnet	$1,975,088	29	$68,106
Subtotal Value of CPF catch	$102,646,632		
Hatchery	$14,520,642		
Grand total	$117,167,274		

[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's Annual Reports (COAR 2017).

Table 4.–Prince William Sound (PWS) Management Area commercial salmon harvest by gear type and district, 2016.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	208	26	6,354	26,714	7,536,820	56,563	7,626,477
Northern	60	1	1,972	896	417,218	6,839	426,926
Coghill	29	0	44	6	4,583	100,547	105,180
Northwestern	35	4	3053	256	172360	4126	179,799
Southwestern	134	15	52,945	1,250	355,888	210,621	610,617
Montague	0	0	0	0	0	0	0
Southeastern	21	1	201	121	37,970	325	38,618
Unakwik	1	0	0	0	0	66	66
Purse seine total		47	64,569	29,243	8,524,839	379,087	8,997,785
Bering River	149	52	9,809	80,094	22	122	90,099
Copper River	520	12,348	1,175,100	367,630	34,430	5,476	1,594,984
Coghill	268	83	63,125	5	8,962	1,530,937	1,603,112
Eshamy	288	44	443,801	362	51,872	78,409	574,488
Montague	132	81	3,009	13	19,360	196,688	219,151
Unakwik	4	1	259	0	0	481	740
Drift gillnet total		12,608	1,695,103	448,104	114,646	1,812,113	4,082,574
Eshamy	29	34	218,013	13	8,011	20,831	246,902
Set gillnet total		34	218,013	13	8,011	20,831	246,902
Solomon Gulch	1	0	0	4,915	2,027,834	0	2,032,749
Cannery Creek	1	0	0	0	527,221	0	527,221
Wally Noerenberg	1	0	42	0	575,221	958,888	1,534,151
Main Bay	1	0	0	0	0	0	0
Armin F. Koernig	1	0	0	0	1,291,998	0	1,291,998
Hatchery total [a]		0	42	4,915	4,422,274	958,888	5,386,119
Test fishery	0	0	0	0	0	0	0
Home pack	382	777	11,519	1,669	721	64	15,132
Confiscated fish	4	0	20	0	0	782	806
Donated fish	0	0	0	0	0	0	0
Misc. total		777	11,539	1,669	721	846	15,938
Prince William Sound total		13,466	1,989,266	483,944	13,070,491	3,171,765	18,729,318

[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, 2016.

Purse seine [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	47	687	14.62	$1.28	$879
Sockeye	64,548	357,938	5.55	$1.54	$551,225
Coho	29,229	245,977	8.42	$0.79	$194,322
Pink	8,514,793	32,844,471	3.86	$0.28	$9,196,452
Chum	379,066	2,672,403	7.05	$0.60	$1,603,442
	8,987,683	36,121,476			$11,546,319

Drift gillnet [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	12,603	223,026	17.7	$6.03	$1,344,847
Sockeye	1,695,103	8,911,819	5.26	$2.30	$20,497,184
Coho	448,104	4,051,591	9.04	$1.47	$5,955,839
Pink	114,646	424,557	3.7	$0.18	$76,420
Chum	1,812,113	12,325,066	6.8	$0.56	$6,902,037
	4,082,569	25,936,059			$34,776,326

Set gillnet [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	33	603	18.27	$4.47	$2,695
Sockeye	218,013	1,113,861	5.11	$1.79	$1,993,811
Coho	13	90	6.92	$0.60	$54
Pink	8,011	32,364	4.04	$0.18	$5,826
Chum	20,831	154,881	7.44	$0.64	$99,124
	246,901	1,301,799			$2,101,510

Hatchery sales [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	0	0			$0
Sockeye	42	200	4.76	$1.50	$300
Coho	4,915	42,070	8.56	$0.38	$15,987
Pink	4,403,008	18,299,114	4.16	$0.46	$8,456,683
Chum	958,888	6,818,968	7.11	$0.84	$5,740,327
	5,366,853	25,160,352			$14,213,297

Combined Species	Number	Pounds	Average weight	Species	Number
Chinook	12,683	224,316	17.69	$6.01	1,348,422
Sockeye	1,977,706	13,797,065	6.98	$1.67	23,042,519
Coho	482,261	4,339,728	9	$1.42	6,166,201
Pink	13,040,458	51,600,506	3.96	$0.34	17,735,381
Chum	3,170,898	21,971,318	6.93	$0.65	14,344,930
	18,684,006	91,932,933			$62,637,452

Gear type	Value of catch	No. of permits	Average earnings
Purse seine	$11,546,319	210	$54,982
Drift gillnet	$34,776,326	517	$67,266
Set gillnet	$2,101,510	29	$72,466
Subtotal Value of CPF catch	$48,424,156		
Hatchery	$14,213,297		
Grand total	$62,637,452		

[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's Annual Reports (COAR 2017).

Table 6.–Prince William Sound (PWS) Management Area commercial salmon harvest by gear type and district, 2017.

District	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Eastern	228	60	15,024	46,041	17,671,121	317,219	18,049,465
Northern	210	8	16,925	12,401	7,301,043	128,629	7,459,006
Coghill	115	0	6,167	197	451,177	862,374	1,319,915
Northwestern	67	2	20,564	1,341	1,451,741	46,886	1,520,534
Southwestern	204	136	50,973	20,187	11,629,000	446,044	12,146,340
Montague	160	94	10,000	7,425	3,381,639	539,333	3,938,491
Southeastern	71	5	991	732	676,741	52,037	730,506
Unakwik	0	0	0	0	0	0	0
Purse seine		305	120,644	88,324	42,562,462	2,392,522	45,164,257
Bering River	115	36	2,593	118,172	105	14	120,920
Copper River	490	13,139	569,321	304,113	68,826	11,639	967,038
Coghill	397	74	112,202	14,241	661,976	2,174,175	2,962,668
Eshamy	338	89	439,050	3,790	312,684	102,638	858,251
Unakwik	5	0	764	0	208	70	1,042
Drift gillnet		13,338	1,123,930	440,316	1,043,799	2,288,536	4,909,919
Eshamy	29	0	181,949	216	37,633	17,583	237,381
Set gillnet		0	181,949	216	37,633	17,583	237,381
Solomon Gulch	1	0	0	25,263	1,602,084	0	1,627,347
Cannery Creek	1	0	0	0	527,103	0	527,103
Wally Noerenberg	1	0	0	0	1,061,669	723,981	1,785,650
Main Bay	1	0	10,000	0	0	0	0
Armin F. Koernig	1	0	0	0	1,866,288	0	1,866,288
Hatchery [a]		0	0	25,263	5,057,144	723,981	5,806,388
PWS total		13,643	1,426,523	554,119	48,701,038	5,422,622	56,117,945

[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, 2017.

Purse seine [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	305	3,591	11.77	$1.24	$4,453
Sockeye	120,644	703,537	5.83	$1.61	$1,132,695
Coho	88,324	612,436	6.93	$0.94	$575,690
Pink	42,562,462	165,400,223	3.89	$0.35	$57,890,078
Chum	2,392,522	17,418,740	7.28	$0.70	$12,193,118
	45,164,257	184,138,527			$71,796,033

Drift gillnet [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	13,338	271,699	20.37	$7.26	$1,972,535
Sockeye	1,123,930	6,401,770	5.7	$2.81	$17,988,974
Coho	440,316	3,649,156	8.29	$1.39	$5,072,327
Pink	1,043,799	4,038,643	3.87	$0.28	$1,130,820
Chum	2,288,536	17,545,612	7.67	$0.70	$12,281,928
	4,909,919	31,906,880			$38,446,584

Set gillnet [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	0	0	0	$0.00	$0
Sockeye	181,949	930,457	5.11	$1.54	$1,432,904
Coho	216	1333	6.17	$0.76	$1,013
Pink	37,633	146,700	3.9	$0.29	$42,543
Chum	17,583	131,011	7.45	$0.65	$85,157
	237,381	1,209,501			$1,561,617

Hatchery sales [a] Species	Number	Pounds	Average weight	Price	Value
Chinook	0	0	0	$0.00	$0
Sockeye	0	0	0	$0.00	$0
Coho	25,263	211,201	7.63	$1.15	$242,881
Pink	5,057,144	17,884,126	3.6	$0.63	$11,266,999
Chum	723,981	5,671,702	7.45	$0.82	$4,650,796
	5,806,388	23,767,029			$16,160,676

Combined Species	Number	Pounds	Average weight	Species	Number
Chinook	13,643	275,290	20.18	$7.18	$1,976,988
Sockeye	1,426,523	8,035,764	5.63	$2.56	$20,554,572
Coho	554,119	4,474,126	8.07	$1.32	$5,891,911
Pink	48,701,038	187,469,692	3.85	$0.38	$70,330,440
Chum	5,422,622	40,767,065	7.52	$0.72	$29,210,999
	56,117,945	241,021,937			$127,964,910

Gear type	Value of catch	No. of permits	Average earnings
Purse seine	$71,796,033	229	$313,520
Drift gillnet	$38,446,584	518	$74,221
Set gillnet	$1,561,617	29	$53,849
Subtotal Value of CPF catch	$111,804,234		
Hatchery	$16,160,676		
Grand total	$127,964,910		

[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's Annual Reports (COAR 2017).

Table 8.–Preseason harvest projections for the 2015 commercial salmon fishery by district and species (in thousands of fish), Prince William Sound Area.

		Chinook		Sockeye		Coho [c]		Pink		Chum	
District/facility [a]	Forecast type [b]	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range
Copper River [d]	CPF harvest	8.5	0-31	1,657	966-2348	201	54-348				
Bering River [e]	CPF harvest			14	8-20	46	0-101				
Coghill [f]	CPF harvest			93	44-216						
Eshamy [f]	CPF harvest			32	9-57						
Unakwik [g]	CPF harvest			3	1-5						
General districts	CPF harvest							15,400	540-4,820	284	0-688
Total wild stock		8.5	0-31	1,799	1,028-2,646	247	93-404	15,400	540-4,820	284	0-688
VFDA	CPF harvest					38		12,620			
AFK	CPF harvest							6,433		280	
WNH [h]	CPF harvest					54		5,291		519	
CCH	CPF harvest							6,745			
MBH [i]	CPF harvest			1,553							
GH	CPF harvest			130	220-410						
Total hatchery				1,863		92		31,089		799	
Total hatchery and wild	CPF harvest	8.5		3,662		339		46,489		1,083	

Note: All values are in thousands. NA (not available). Harvest estimates are made only for areas and species that constitute a significant portion of the catch. Prince William Sound Area hatchery facility abbreviations include VFDA (Valdez Fisheries Development Association), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] 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.

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

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

[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 only on-site release runs of chum and coho salmon. No remote release runs included.

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

Table 9.–Preseason harvest projections for the 2016 commercial salmon fishery by district and species (in thousands of fish), Prince William Sound Area.

		Chinook		Sockeye		Coho [c]		Pink		Chum	
District/facility [a]	Forecast type [b]	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range
Copper River [d]	CPF harvest	40	14-66	1,660	970-2,350	207	170-244				
Bering River [e]	CPF harvest			4	2-7	48	35-61				
Coghill [f]	CPF harvest			80	40-180						
Eshamy [f]	CPF harvest			NA	NA						
Unakwik [g]	CPF harvest			3	1-5						
General districts	CPF harvest							2,680	540-4,820	226	111-341
Total wild stock		40	14-66	1,743	1,013-2,542	255	205-305	2,680	540-4,820	226	111-341
VFDA	CPF harvest					52		14,041			
AFK	CPF harvest							4,704		394	
WNH [h]	CPF harvest					18		4,892		978	
CCH	CPF harvest							5,303			
MBH [i]	CPF harvest			1,591							
GH	CPF harvest			200	120-290						
Total hatchery				1,791		70		28,940		1,372	
Total hatchery and wild	CPF harvest	40		3,534		387		31,620		1,598	

Note: All values are in thousands. NA (not available). Harvest estimates are made only for areas and species that constitute a significant portion of the catch. Prince William Sound Area hatchery facility abbreviations include VFDA (Valdez Fisheries Development Association), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] 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.

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

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

[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 only on-site release runs of chum and coho salmon. No remote release runs included.

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

Table 10.–Preseason harvest projections for the 2017 commercial salmon fishery by district and species (in thousands of fish), Prince William Sound Area.

		Chinook		Sockeye		Coho [c]		Pink		Chum	
District/facility [a]	Forecast type [b]	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range	Point estimate	Range
Copper River [d]	CPF harvest	4	3-55	889	1,070-1,960	207	170-244				
Bering River [e]	CPF harvest			4	2-7	48	35-61				
Coghill [f]	CPF harvest			44	50-130						
Eshamy [f]	CPF harvest			NA	NA						
Unakwik [g]	CPF harvest			3	1-5						
General districts	CPF harvest							19,650	11,740-30,424	371	241-501
Total wild stock		4	3-55	940	1,123-2,102	255	205-305	19,650	11,740-30,424	371	241-501
VFDA	CPF harvest					40		15,477			
AFK	CPF harvest							7,194		456	
WNH [h]	CPF harvest					227		9,307		1,152	
CCH	CPF harvest							7,296			
MBH [i]	CPF harvest			1,138							
GH	CPF harvest			300	210-380						
Total hatchery				1,438		267		39,274		1,608	
Total hatchery and wild	CPF harvest	4		2,378		522		58,924		1,779	

Note: All values are in thousands. NA (not available). Harvest estimates are made only for areas and species that constitute a significant portion of the catch. Prince William Sound Area hatchery facility abbreviations include VFDA (Valdez Fisheries Development Association), AFK (Armin F. Koernig Hatchery), WNH (Wally Noerenberg Hatchery), CCH (Cannery Creek Hatchery), MBH (Main Bay Hatchery), and GH (Gulkana Hatchery).

[a] 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.

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

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

[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 only on-site release runs of chum and coho salmon. No remote release runs included.

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

Table 11.–Harvest values (in millions of fish) and percentages by gear type for Area E, 2000–2016.

Year	DGN[a]	%DGN	PS[a]	%PS	SGN[a]	%SGN	Annual total[a]
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
2014	$20.33	57.7%	$14.89	42.3%	$2.73	7.2%	$37.95
2015	$13.18	35.6%	$23.83	64.4%	$1.93	5.0%	$38.94
2016	$13.95	86.0%	$2.28	14.0%	$1.82	10.1%	$18.05

Note: Drift gillnet (DGN), Purse Seine (PS), Set gillnet (SGN).

[a] Fish ticket harvest and Commercial Operator's Annual Reports (COAR 2017) values used to calculate annual gear specific harvest values.

Table 12.–5-year rolling average harvest allocation percentages by gear type for Area E, 2007–2017.

Year	DGN[a]	PS[a]	SGN[a]
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%
2016	47.0%	53.0%	5.1%
2017	46.7%	53.3%	5.2%

Note: Drift gillnet (DGN), Purse Seine (PS), Set gillnet (SGN).

[a] Fish ticket harvest and Commercial Operator's Annual Reports (COAR 2017) values used to calculate average gear specific harvest values.

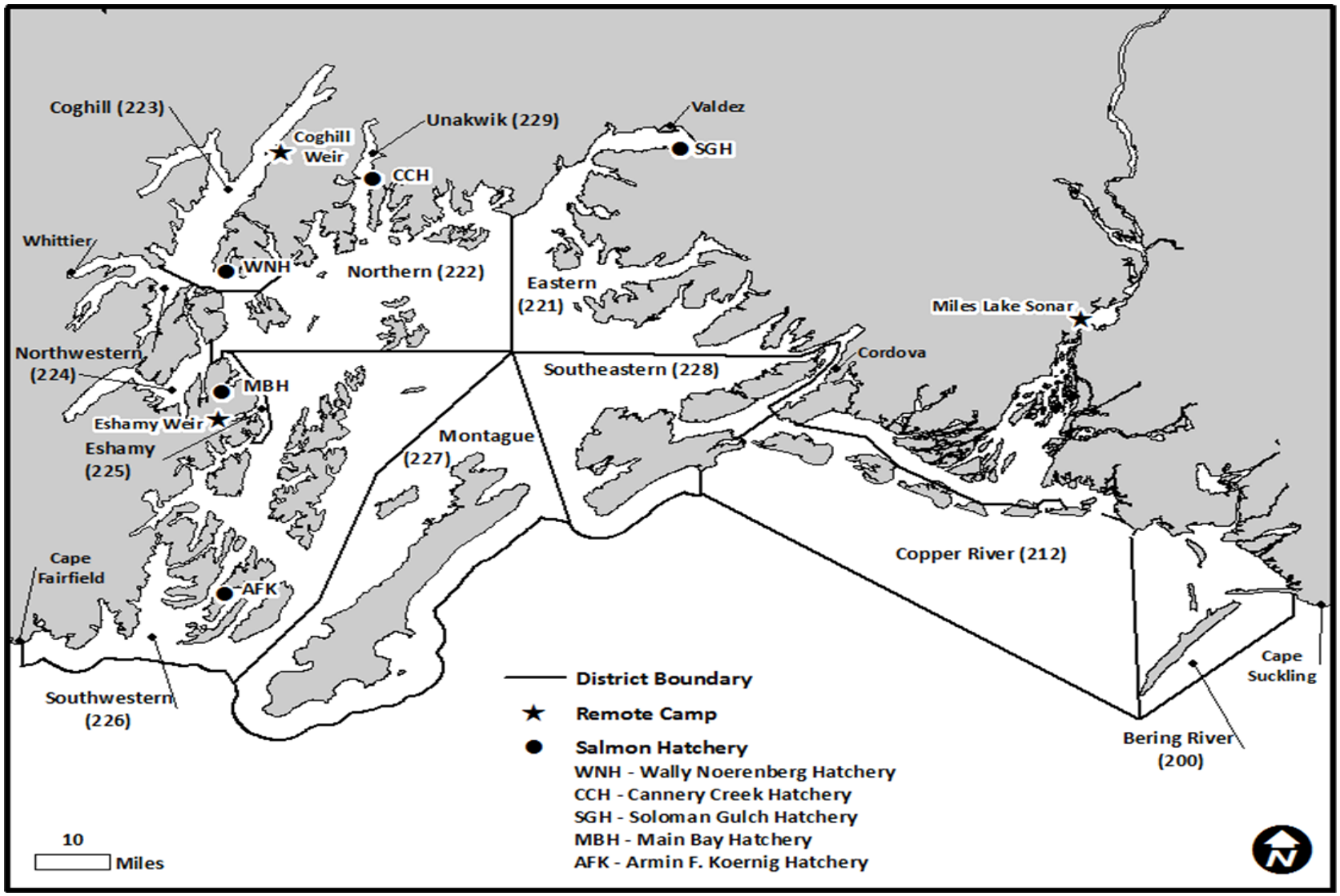

Figure 1.–Prince William Sound Management Area showing towns, commercial fishing districts, salmon hatcheries, weir locations, and Miles Lake sonar camp.