

STATE OF WASHINGTON

September 2019

Washington State Sport Catch Report 2017



by Eric Kraig
and
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WASHINGTON STATE SPORT CATCH REPORT 2017

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INTRODUCTION

The Washington State Sport Catch Report was first published in 1967. The report originally provided salmon catch estimates, which were and still are based on data from catch record cards (punch cards). In 1975, marine fish sport harvest estimates were added to the report, followed by shellfish estimates in 1976. Marine fish and intertidal shellfish sport harvest estimates are based on field and creel surveys. In 1994, with the merger of the departments of Fisheries and Wildlife, steelhead sport harvest estimates were added to the report. Now, catch record card data are collected for salmon, sturgeon, steelhead, Dungeness crab and halibut. The card data is supplemented with field or creel survey data or telephone surveys where available to improve recreational harvest estimate accuracy. The sport harvest estimates for salmon, steelhead, sturgeon, marine fish and shellfish are produced at varying times of each year.

The 2017 sport estimates reflect harvest from April 1, 2017, through March 31, 2018. Historically, salmon, sturgeon, halibut, marine fish and shellfish estimates were made on a calendar year basis from January 1 through December 31. Steelhead estimates were summarized from May 1 through the next April 30 to better capture the results of steelhead “run years”. Effective January 1, 1999, the sport license system adopted an April 1 to March 31 license year for all species. To adjust to the new reporting time frames, the 1999 sport report included 15 months of salmon and sturgeon catch and 11 months of steelhead catch (May 1, 1999 – March 31, 2000). When comparing past years’ sport harvest estimate tables, please note the changes in the license structure and reporting year as described above.

Sport Licenses and Catch Record Cards

In 2017, the following licenses and catch record cards were required to fish in Washington:

- Saltwater license: Required for saltwater fishing, for all anglers aged sixteen and over. Available for residents, resident seniors (70 and older), and non-residents. Catch record cards required for salmon, steelhead, sturgeon and halibut, for anglers of all ages.
- Freshwater license: Required for freshwater fishing, for all anglers aged sixteen and over. Available for residents, resident seniors (70 and older), and non-residents. Catch record cards required for salmon, steelhead and sturgeon, for anglers of all ages.
- Shellfish/seaweed license: Required for harvesters aged sixteen and over. Available for residents, resident seniors (70 and older), and non-residents. Allows the holder to harvest clams, mussels, oysters, shrimp, crab, squid, other shellfish, and seaweed. In addition, a Puget Sound crab endorsement and catch record card was required to harvest Dungeness crab in Marine Areas 5-13.
- Combination license: Allows anglers to fish in both saltwater and freshwater and to harvest shellfish and seaweed. Available for both residents and non-residents aged fifteen and over.

Fish catch record cards were required for salmon, steelhead, sturgeon and halibut. Each species group could be issued as a separate card, or included together on one card. Separate catch record cards were required for recording Dungeness crab in Puget Sound. Separate crab cards were required for the summer and fall/winter seasons.

In 2001 WDFW implemented the Washington Interactive Licensing Data (WILD) system to electronically capture recreational license issuance information at the point of sale. The catch record card remained the same paper document distributed by sport license vendors, but demographic data about persons receiving the cards became available almost immediately.

Table 1 lists license sales for the license year which ran from April 1, 2017 through March 31, 2018. Table 2 provides counts for the numbers of fish and crab catch cards issued going back to 1971. Table 3 shows the return rate, expansion factor, and non-response bias correction factors for the 2017-2018 cards.

METHODS

Catch Record Cards

Card Issuance

Catch cards are required for all anglers fishing for salmon, steelhead, sturgeon, or halibut. Separate crab catch cards are required for Dungeness crab fishing in Puget Sound. The catch card requirement applies to everyone, including anglers under the age of fifteen who are not required to purchase a fishing license. The first catch card issued to an angler is free with the purchase of a license. If an angler fills the initial card with catch, additional cards can be purchased for a fee. Sturgeon and halibut have annual catch limits, so additional cards are not available for these species.

Most catch cards are issued from the Washington Interactive Licensing Database (WILD) system. WILD-issued cards include the angler's name, city of residence, and their WILD ID, a unique identifier assigned to each angler in the system. Each issued card is assigned a unique document number.

Pre-printed catch cards are provided to charter boat operators and fishing guides to be issued along with one-day charter licenses. Anglers write their name/address information on the charter card "stub" which is retained by the operator and sent back to the agency. The same pre-printed cards may also be issued to anglers that purchase "Hot Key" licenses. These are temporary licenses sold through the WILD system, but without the requirement for an angler entry in the database. The angler name and address is entered on the stub, just as with charter licenses. Charter and hot key cards make up about three to five percent of the total card issuance annually.

Card Returns

Fish catch cards are due back on April 30, one month after the end of the license year, which runs from April 1 through March 31. Crab catch cards are issued for two separate seasons. Summer season cards are due back by October 1; winter season cards are due back by February 1. Cards can be mailed in or dropped off at WDFW offices. Online reporting is available for crab cards, but not yet for fish cards.

For fish catch cards, the CRC unit randomly selects twenty-five percent of the cards issued each year for use in generating catch estimates. These cards are referred to as the "in-sample" group. Cards are selected based on the last two digits of the document numbers printed on the cards. Two reminder postcards are sent out to anglers with cards in the in-sample range, in an effort to increase return rates. For crab catch cards, all reports are processed, including both returned card and those reported online.

Estimation

Once the cards have been returned, the expansion factor is calculated. This is the ratio of total cards issued to cards returned. For cards issued through the Wild system, calculating the total sold is straightforward; canceled or voided cards are subtracted from the total issuance number to arrive at the number of valid cards that were available for use. For charter cards, the total number of issued cards is estimated. Some, but not all, of the name/address stubs are returned by the charter operators, and some, but not all, of the cards are returned by anglers. Thus, total issuance for charter cards is estimated as follows:

N_T = total charter/hot key cards issued

N_r = in-sample name/address stubs returned

n_v = total in-sample cards voluntarily returned (returned prior to reminder mailings)

n_m = voluntary returns that match returned stubs

It is assumed that:

$$\frac{n_m}{n_v} = \frac{N_r}{N_T}$$

Therefore:

$$N_T = \frac{N_r n_v}{n_m}$$

Charter and hotkey cards make up less than five percent of the total card issuance; thus, we assume that the uncertainty in the numbers does not have a large impact in the overall estimation process.

Catch from the returned in-sample cards is expanded out across all issued cards. The expansion factor is one over the in-sample return rate multiplied by the twenty-five percent sample rate. In-sample return rates in recent years have been in the 30 to 40 percent range. In 2017 the return rate was about 34%, so the expansion factor was:

$$\frac{1}{0.34(0.25)} = 11.76$$

Estimates are generated for each catch area, species, and time period. The following estimation method was implemented after a five-year intensive study conducted in the late 1980's (Conrad, Alexandersdottir, 1993). Variance is calculated using a random group method (Wolter, 1985) in which the in-sample returned cards are randomly assigned to four subgroups. Estimates are then calculated separately for each subgroup as well as for the entire group, and the variance is calculated using the deviations of the sample estimates from the over-all estimate.

In general, cards that are not returned have a lower mean catch per card than those that are returned. To adjust for this non-response bias, a correction factor is applied. Different correction factors are used for different species.

The in-sample cards are randomly subdivided into four groups, and estimates are calculated using each of those groups as follows:

- N_i = number of cards in subsample i
- N_T = total number of cards issued
- h_i = number of fish for subsample i
- H_i = estimated harvest based on subsample i
- H_i = non-response bias correction factor

Then the total estimate of harvest is generated as follows:

- H_T = total estimate
- V_{H_T} = variance of total estimate

The above process generates estimates for total harvest for each area/species/time period combination. For historical reasons, the time periods differ for each species type. Calendar months are used for steelhead, sturgeon, and crab. For salmon, statistical months or statistical weeks are often used. Statistical weeks (defined as Monday-Sunday) are consecutively numbered weeks beginning on January 1. Statistical months are made up of a set number of statistical weeks, which do not necessarily coincide with calendar month start and end dates.

REVIEW

The CRC catch estimates for each area/time period/species are routed to biologists (both state and tribal) for review. The biologists are asked to list those entries that are questionable, either because the area was closed to fishing during that time period or because the likelihood of encountering that species at that time/place was low. The review comments are compiled and used to draw up a list of those anglers reporting the questionable catch. CRC staff attempt to contact these anglers by phone in order to resolve the issues. If the anglers cannot be reached, the biologists make the decisions on how to handle the reports; generally if the catch is biologically feasible the report is left as is, otherwise it is changed to "unknown". Once the calls are completed to resolve possible errors, and the individual catch records are corrected accordingly, the estimation process is rerun.

Salmon

Catch record card estimates are generated for both marine and freshwater areas. In areas where regular long-standing creel surveys are conducted, the catch card numbers are replaced with the estimates generated from the creel surveys. In marine areas, creel estimates were used in Areas 1-4 (not including Willapa Bay or Grays Harbor) and for some Puget Sound fisheries, primarily mark-selective chinook fisheries in the summer and winter months. In freshwater, creel estimates are used for catch in the Columbia River below Bonneville Dam.

Steelhead

Steelhead estimates are generated from catch card returns, as described above. Since steelhead harvest numbers are quite small for many streams, the estimates are first generated for entire river systems. The estimates are then broken out across the individual streams by using catch reported from all returned cards, both those that are in the sample group, and those that are out of sample.

Steelhead are categorized as “summer-run” or “winter-run” based on the month of harvest. In general, fish caught from May through October are considered summer-run and fish caught from November through April are considered winter-run. For most areas in the Columbia system above Bonneville Dam, all fish are considered summer-run.

Sturgeon

Sturgeon estimates are generated from catch card returns, as described above. Retention of Green Sturgeon is now prohibited statewide, so most reported fish are White Sturgeon. Creel estimates are used for the lower Columbia River, up to McNary Dam.

Marine Fish

Marine fish are those species that live their entire lives in salt water. There are four general groups of marine fish for management purposes: 1) bottomfish, which are species such as rockfish, lingcod and flounder; 2) forage fish, which are small schooling fish such as herring and smelt; 3) pelagic fish such as tuna and mackerel; 4) Pacific halibut.

The recreational catch of bottomfish, halibut, and tuna in ocean waters (Catch Area 1-4) is estimated from port-based creel and effort surveys. The estimates are made for each of the four main coastal fishing areas: Ilwaco, Westport, La Push, and Neah Bay.

The Puget Sound (Catch Areas 5-13) catch of bottomfish is estimated using a combination of two surveys: a creel survey of anglers to determine the catch rate and species composition and a phone survey of licensed anglers to determine total fishing effort. Halibut catch is estimated by combining creel data with on-the-water effort surveys. Catch record card estimates are also generated for halibut, but these numbers are not used for the published estimates.

Recreational catch of forage fish is not routinely monitored and no harvest estimates are available.

Crab

Catch record card returns are used to estimate Dungeness crab harvest in Puget Sound. Estimates are generated for two seasons: summer, which generally runs from June through Labor Day, and winter, which runs from the day after Labor Day through December 31. A ten-dollar penalty is assessed for failure to report, so all returned cards and online reports are processed and used for estimation. Non-response bias varies depending on return rate.

Estimates are not available for recreational catch of Dungeness crab from the coast or the Columbia River mouth, or for other crab species such as Red Rock or Tanner Crab.

Shrimp

Puget Sound spot shrimp estimates are calculated from boat ramp creel surveys combined with effort estimates generated by aerial boat counts or on-the-water buoy counts.

Clams and Oysters

Coastal razor clam harvest estimates are generated by combining effort estimates (digger trips) with catch per trip numbers from creel surveys.

Puget Sound clam and oyster harvest estimates are generated for actively managed beaches. Aerial surveys are used to estimate effort, and creel checks are used to determine catch per trip. For beaches that are passively managed, only effort estimates are generated.

Ocean Catch Data

Sport catch data from coastal areas 1 – 4 were reported using “port sampling” (creel survey) catch estimates. Such estimates were derived by monitoring daily landings at four coastal ports: Ilwaco, Westport, La Push, and Neah Bay. Catch is reported in the area where the fish was caught and not the area where it was landed.

Statistical Months and Statistical Weeks

Some catch data (i.e. salmon and bottomfish) are reported using statistical months or statistical weeks. Statistical weeks (defined as Monday-Sunday) are consecutively numbered weeks beginning on January 1 and continuing through week 53 or 54, ending on December 31. The first and last weeks of any year usually contain less than 7 days. Statistical months are made up of a set number of statistical weeks, which approximate calendar months but do not coincide with calendar month start and end dates. For example, in 2017, the statistical month of January begins January 1 and ends February 2 and the statistical month of February starts on February 3 and ends March 2. Due to the differences between calendar and statistical months, some catch may be reported during what appears to be a closed period.

Salmon

Annual sport salmon catch estimates for 1971 through 2017 are shown in Table 4. Between April 1, 2017, and March 31, 2018 a total of 165,455 salmon were caught in marine areas, and 220,195 salmon were caught in freshwater. The marine totals by species, as shown in Table 5, are: 71,062 chinook; 75,100 coho; 6,629 chum; 12,284 pink; 54 sockeye; and 326 jacks (all species combined). Freshwater species breakdowns are: 101,242 chinook; 54,273 coho; 9,169 chum; 32,960 pink; 7,944 sockeye; 17,262 jacks (all species combined).

Catch record card returns are used to estimate sport salmon catch in marine and freshwater areas. For some areas, the catch cards numbers are replaced with estimates based on creel surveys. In marine areas, creel estimates were used in Areas 1-4 (not including Willapa bay or Grays Harbor), and for many of the Puget Sound fisheries including the summer months in Area 5, 9, 10 and 11.

Sturgeon

On the new combined sport catch record card, sturgeon fishers were required to record their catch statewide. The total sport harvest for 2017, based on creel surveys and catch record card returns, was 5,006 fish. Sturgeon retention was only allowed in the Columbia and Snake River systems.

Steelhead

Harvest estimates for sport-caught summer and winter steelhead are based on catch record card returns. Steelhead caught during the months of May through October are considered “summer-runs,” designated S. Steelhead caught from November through April are considered “winter-runs,” designated W, with the exception of steelhead caught above Bonneville Dam on the Columbia River, where all steelhead are considered “summer-runs,” because of run and spawn timing.

Table 31 presents steelhead sport harvest estimates for the 2017-2018 season geographically by stream and river system. Monthly estimate totals are given for marked and unmarked steelhead.

Marine Fish

Marine fish are those species of fish which live their entire lives in salt water. There are four general groups of marine fish for management purposes: 1) bottomfish, which are species such as rockfish, lingcod and most species of sole and flounder; 2) forage fish, which are small, schooling fish such as herring and smelt; 3) tunas and mackerels; 4) Pacific halibut.

The recreational catch of bottomfish and halibut in ocean waters (Catch Areas 1-4) is estimated from marine surveys (Table 35 and 36). The estimates are made for each of the four main coastal fishing areas: Ilwaco, Westport, La Push and Neah Bay.

The Puget Sound (Catch Areas 5-13) catch of bottomfish, excluding halibut, is estimated using a combination of two surveys: a creel survey of anglers to determine the catch rate and species composition and a phone

survey of licensed anglers to determine total fishing effort. These estimates are shown in Table 37. The recreational catch of forage fish is not routinely monitored and no harvest estimate is available.

Shellfish

Razor clam harvest on the coastal beaches is summarized in Table 38. During the fall of 2017 and the spring of 2017 257,616 digging trips resulted in a harvest of 2,736,124 clams, for an average of 10.15 clams per trip.

Puget Sound recreational clam and oyster harvest estimates are shown in Table 39. Harvest totals for Manila and native littleneck clams, butter clams, cockles, softshell clams, horse clams, geoducks and oysters are shown for public access beaches. Estimates show 101,661 sport harvester trips gathered 259,935 total pounds of clams and 714,825 oysters in 2017 on the monitored beaches.

The Puget Sound and Hood Canal shrimp fishery harvest is reported in Table 40. Shrimpers caught 204,665 pounds of shrimp between May and September. The sport crab fishery in the Puget Sound areas is summarized in Table 41. Crabbers harvested an estimated 1,664,718 pounds of Dungeness crab.

REFERENCES

Conrad, R. and M. Alexandersdottir. 1993. Estimating the Harvest of Salmon by the Puget Sound Sport Fishery in Puget Sound: Evaluation and Recommendations. Northwest Fishery Resource Bulletin, Manuscript Series Report No. 1. 82 p.

Wolter, K.M. 1985. Introduction to Variance Estimation. In: Springer Series in Statistics. Springer-Verlag. New York. 427 p.

SPORT LICENSES

Table 1. Number and Value of Sport Fishing Licenses Sold in Washington.

April 1, 2017 - March 31, 2018 - License Year			
Type of License	Price	Number Sold	Value
Saltwater			
Resident	\$30.05	35,108	\$877,700.00
Non-Resident	\$59.75	3,025	\$157,300.00
Senior	\$8.05	17,127	\$85,635.00
Freshwater			
Resident	\$29.50	319,891	\$7,997,275.00
Non-Resident	\$84.50	12,802	\$959,925.00
Senior	\$7.50	41,392	\$206,960.00
Shellfish/Seaweed			
Resident	\$17.40	98,738	\$987,380.00
Non-Resident	\$36.10	7,825	\$211,275.00
Senior	\$7.50	21,245	\$106,225.00
Combination (Saltwater/Freshwater/Shellfish)			
Resident	\$55.35	141,049	\$6,347,205.00
Non-Resident	\$124.65	3,344	\$361,152.00
Senior	\$19.05	3,676	\$55,140.00
Disabled/Veteran - Res	\$11.35	15,561	\$77,805.00
Disabled/Veteran - NR	\$55.35	376	\$16,920.00
Youth	\$8.05	10,012	\$50,060.00
Promo Upgrade		2	\$40.00
Short-term Combination			
1-day Resident	\$11.35	45,231	\$361,848.00
1-day Non-Resident	\$20.15	34,447	\$551,147.00
2-day Resident	\$15.75	9,440	\$113,280.00
2-day Non-Resident	\$28.95	11,913	\$285,912.00
3-day Resident	\$19.05	10,215	\$153,225.00
3-day Non-Resident	\$35.55	18,050	\$541,500.00
Razor Clam			
Annual Resident	\$14.10	24,103	\$192,824.00
Annual Non-resident	\$21.80	4,368	\$54,138.00
3-day	\$9.70	31,858	\$159,290.00
PS Crab Endorsement			
Annual	\$8.75	166,093	\$1,245,698.00
1-5 day	\$3.80	11,652	\$34,956.00
Charter/Guide Stamps			
Charter/Guide Stamps	\$8.50	28,634	\$243,389.00
Two-Rod Endorsements			
Resident / Non-resident	\$14.80	60,602	\$787,826.00
Senior	\$6.00	8,649	\$43,245.00
Columbia River Endorsements			
Resident / Non-resident	\$8.75	171,540	\$1,286,550.00
Senior / Youth	\$7.10	16,198	\$97,188.00
Duplicates			
Additional Catch Cards	\$12.60	18,649	\$205,139.00
Licenses	\$9.70	168	\$920.00
Total		1,402,983	\$24,856,072.00

TECHNICAL DATA

Table 2. Number of Catch Record Cards Issued 1971-2017

Year	Salmon	Steelhead	Sturgeon
1971	541,600	145,647	
1972	536,750	153,977	
1973	568,825	165,671	
1974	562,375	154,051	
1975	576,075	no data	
1976	660,150	no data	
1977	641,050	no data	
1978	580,375	130,000	
1979	487,875	136,000	
1980	433,700	139,500	
1981	463,561	132,000	
1982	481,915	100,000	
1983	481,025	101,800	
1984	364,286	133,400	
1985	403,523	121,500	
1986	431,898	100,500	
1987	475,459	102,000	
1988	486,356	108,182	33,195
1989	509,534	106,666	35,576
1990	497,215	98,362	32,421
1991	489,394	98,328	32,396
1992	419,986	98,933	37,615
1993	447,986	94,913	43,067
1994	244,629	87,093	54,837
1995	416,707	101,303	62,572
1996	333,773	92,858	69,639
1997	331,511	68,341	76,806
1998	265,296	85,636	79,264
1999-2000	352,003	183,520	132,503
	Combined	Crab - Summer	Crab - Winter
2000-2001*	539,898		
2001-2002	827,443		
2002-2003	767,465		
2003-2004	799,326		
2004-2005	715,395		
2005-2006	686,831		
2006-2007	672,753		
2007-2008**	640,893	210,327	157,712
2008-2009	603,539	210,893	207,143
2009-2010	729,319	236,665	89,259
2010-2011	574,969	208,458	70,731
2011-2012	632,564	230,355	28,514
2012-2013	566,372	200,711	27,711
2013-2014	631,536	214,692	29,638
2014-2015	606,471	213,741	35,371
2015-2016	636,596	232,619	36,397
2016-2017	499,989	216,949	26,591
2017-2018	541,830	215,929	23,277

*Starting with the 2000-2001 season, all species were combined on a single card.

**Starting with the 2007-2008 season, separate cards were issued for Dungeness Crab, for both the summer season and the fall/winter season.

Table 3. 2017-2018 Catch Record Card Technical Data

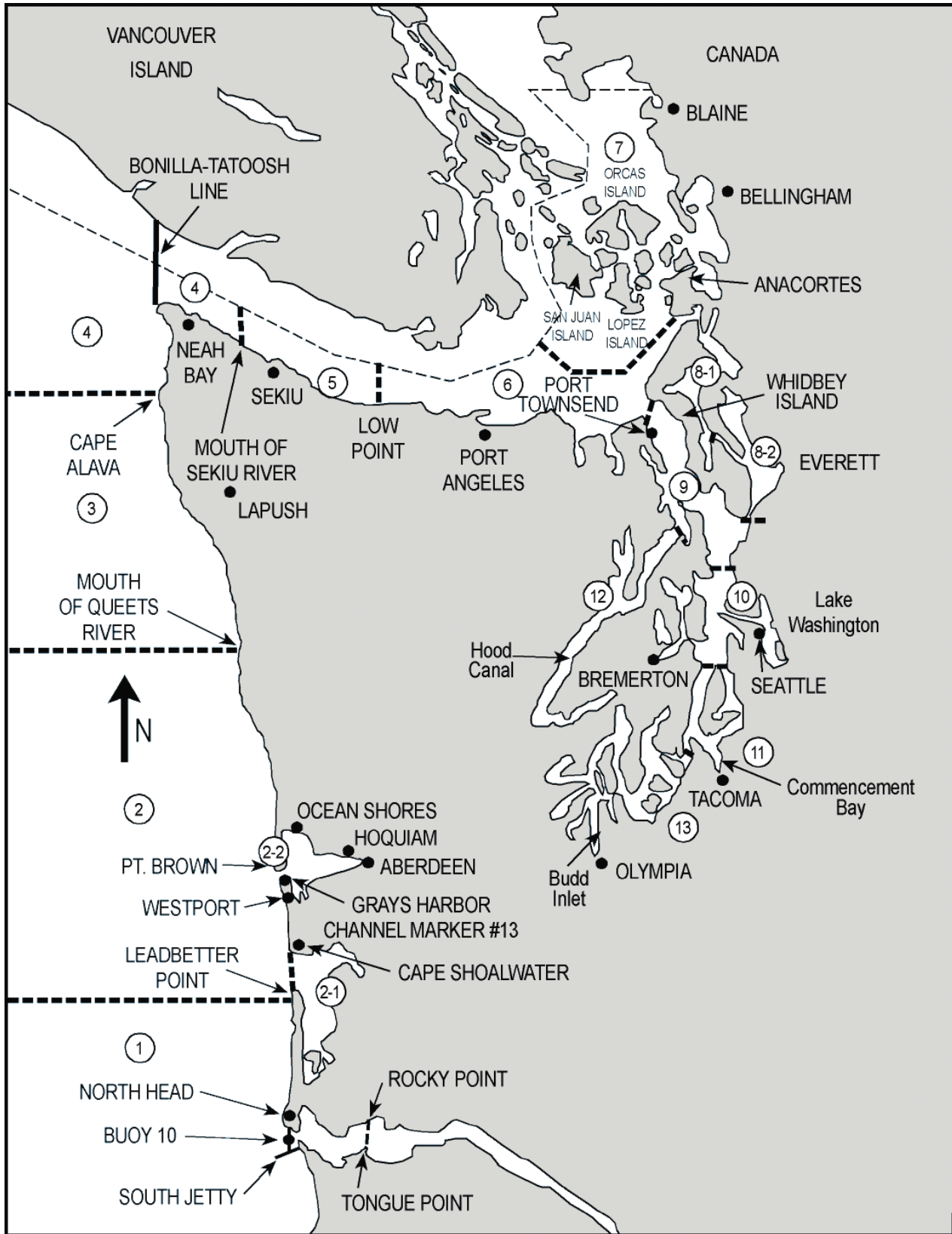
Cards Issued	541,830
In-sample cards	135,458
In-sample cards returned	45,706
Expansion Factor (Cards Issued / In-sample Returns)	11.85
Non-reporting bias correction factors	
Salmon - Marine Area 5	1.00
Salmon - Puget Sound Marine Areas	1.46
Salmon - Freshwater, Grays Harbor, Willapa Bay	1.20
Steelhead	0.98
Sturgeon	1.00

Salmon



MAP OF SALMON CATCH RECORD CARD AREAS

MARINE WATERS ONLY



1	ILWACO	West of the Buoy 10 line at the Columbia River mouth, north to Leadbetter Point.
2	WESTPORT-OCEAN SHORES	From Leadbetter Point north to the Queets River, excluding Willapa Bay and Grays Harbor.
2-1	WILLAPA BAY	East of a line from Leadbetter Point to Cape Shoalwater.
2-2	GRAYS HARBOR	East of a line from the tip of the North Jetty to exposed end of the South Jetty.
3	LA PUSH	From the Queets River north to Cape Alava.
4	NEAH BAY	From Cape Alava north and inside Juan de Fuca Strait to the Sekiu River.
5	SEKIU AND PILLAR POINT	From mouth of the Sekiu River east to Low Point, mouth of the Lyre River.
6	EAST JUAN DE FUCA STRAIT	From Low Point east to the Partridge Point - Point Wilson line north to the line from Trial Island (near Victoria B.C.) - Vessel Traffic Separation Buoy "R" - Smith Island to the Lawson Reef Buoy to Northwest Island to the Initiative 77 marker on Fidalgo Island.
7	SAN JUAN ISLANDS	All marine waters north of the Trial Island line described under Area 6 to the United States-Canada boundary.
8-1	DECEPTION PASS, SKAGIT BAY	From West Point to Reservation Head eastward through Deception Pass, including all waters of Swinomish Slough and Skagit Bay, and the portion of Saratoga Passage north and west of a line from East Point Light to light on Camano Island (Saratoga Pass Light #4FI Red 4 Sec.).
8-2	PORTS SUSAN AND GARDNER	East of East Point Light-Camano Island Light line (described in 8-1 above) and north of the Possession Point-Shipwreck line (described in 9 below).
9	ADMIRALTY INLET	All waters inside and south of the Partridge Point - Point Wilson line, south and west of a line from Possession Point 110° true to shipwreck, north of the Hood Canal Bridge, and north of the Apple Cove Point-Edwards Point line.
10	SEATTLE-BREMERTON AREA	South from the Apple Cove Point-Edwards Point line to a line projected true east- west through the north tip of Vashon Island.
11	TACOMA-VASHON ISLAND	South from a line projected true east west through the north tip of Vashon Island to the Tacoma Narrows Bridge.
12	HOOD CANAL	All waters south of the Hood Canal Bridge.
13	SOUTH PUGET SOUND	All waters south of Tacoma Narrows Bridge.

FRESHWATER AREAS

RIVERS OR STREAMS OR LAKES - Name of river, stream or lake, except for Buoy 10

BUOY 10 (1A)

From Buoy 10 Line to Rocky Point-Tongue Point Line

Table 4. Annual Sport Salmon Catch 1971-2017

Table with columns: Year, Total, Fresh-water, Un-known, Area 1, Area 1A, Area 2, Area 2-1, Area 2-2, Area 3, Area 4, Area 5, Area 6, Area 7, Area 8, Area 8-1, Area 8-2, Area 9, Area 10, Area 11, Area 12, Area 13. Rows list annual catch data from 1971 to 2017.

Note: In 1976, several area boundary lines were changed resulting in thirteen catch areas instead of twelve. The changes were mostly reflected in catch Areas 8, 9, 10 and new Area 13. In 1989, catch Area 8 was subdivided into Areas 8-1 and 8-2 and catch Area 2 was subdivided into Areas 2, 2-1 and 2-2. For comparative purposes, the catch for Areas 8-1 and 8-2 are totaled and entered under Area 8 until 1990. Beginning in 1991, Areas 8-1 and 8-2, are reported separately. Similarly, the catch in Areas 2, 2-1 and 2-2 are included in the total catch for Area 2 until 1990. Beginning in 1991, they are reported separately. The total catch for Area 1 and Area 1A is included in the total catch for Area 1 until 1981. Starting in 1982, they are reported separately. Beginning in 2002, Area 1A catch is included in the freshwater total. Note: Prior to 1999, sport salmon estimates were based on calendar years. In 1999, the sport estimates cover January 1, 1999 - March 31, 2000. Starting in 2000, sport salmon estimates are based on the fishing license year which runs from April 1 to March 31.

Table 5. Total 2017-2018 Sport Salmon Catch

Marine Area	Chinook	Coho	Chum	Pink	Sockeye	Chinook Jacks	Coho Jacks	Total Salmon	Marine Angler Trips	Salmon per Trip
Ilwaco-Ocean (Area 1)	5,863	15,681						21,544	22,764	0.95
Westport (Area 2)	6,391	15,063		44				21,498	25,997	0.83
Willapa Bay (Area 2.1)	5,044	923				157	68	6,192	N/A	
Grays Harbor (Area 2.2)	635	1,748	10			9	92	2,494	N/A	
LaPush (Area 3)	297	1,717		11				2,025	1,901	1.07
Neah Bay (Area 4)	7,467	3,591		674				11,732	10,791	1.09
Subtotal Coast*	25,697	38,723	10	729		166	160	65,485	61,453	0.92
Sekiu-Pillar Point (Area 5)	3,422	4,769		5,120	7			13,318	24,252	0.55
East Juan de Fuca (Area 6)	5,583	75		194				5,852	7,462	0.78
San Juan Islands (Area 7)	11,214	55	7	1,744	35			13,055	36,195	0.36
Deception Pass, Hope Island (Area 8-1)	517							517	2,479	0.21
Port Susan & Port Gardner (Area 8-2)	1,162	181		153				1,496	5,561	0.27
Admiralty Inlet (Area 9)	8,758	4,188	6	1,322	12			14,286	32,814	0.44
Seattle-Bremerton (Area 10)	3,122	20,364	176	1,917				25,579	37,298	0.69
Tacoma-Vashon Island (Area 11)	4,636	3,424		666				8,726	37,425	0.23
Hood Canal (Area 12)	2,927	2,424	5,671	375				11,397	6,895	1.65
South Puget Sound (Area 13)	4,024	897	759	64				5,744	6,458	0.89
Subtotal Puget Sound	45,365	36,377	6,619	11,555	54			99,970	196,839	0.51
Marine Area Totals*	71,062	75,100	6,629	12,284	54	166	160	165,455	258,292	0.64
Freshwater Totals	101,242	54,273	9,169	32,960	7,944	12,040	5,222	222,850	N/A	
Grand Totals	172,304	129,373	15,798	45,244	7,998	12,206	5,382	388,305	N/A	

*Salmon per trip is calculated after subtracting the catch totals for Willapa Bay and Grays Harbor, where angler trip data is not available.

Table 6. 2017 Sport Salmon Catch, Area 1 - Ilwaco: Ocean

Week Ending	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Angler Trips	Salmon per Trip
June 25	2017	319	30				349	388	0.90
July 2	2017	798	98				896	1,310	0.68
July 9	2017	602	116				718	1,474	0.49
July 16	2017	270	1,420				1,690	1,803	0.94
July 23	2017	195	1,834				2,028	1,936	1.05
July 30	2017	340	2,259				2,599	2,009	1.29
August 6	2017	484	2,361				2,846	3,287	0.87
August 13	2017	1,131	3,502				4,632	4,554	1.02
August 20	2017	1,497	3,783				5,280	5,157	1.02
August 27	2017	228	279				507	847	0.60
Total		5,863	15,681				21,544	22,764	0.95

Table 7. 2017 Sport Salmon Catch, Area 1 - Ilwaco: River (Buoy 10)

Week Ending	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Angler Trips	Salmon per Trip
August 6	2017	350	28				378	1,850	0.20
August 13	2017	623	172				795	2,712	0.29
August 20	2017	2,070	645				2,715	7,461	0.36
August 27	2017	1,692	1,010				2,702	7,801	0.35
September 3	2017	1,974	2,766				4,740	7,081	0.67
September 10	2017	155	1,241				1,396	2,277	0.61
September 17	2017		686				686	1,532	0.45
September 24	2017	4	175				179	495	0.36
October 1	2017		137				137	440	0.31
Total		6,868	6,860				13,728	31,649	0.43

Table 8. 2017 Sport Salmon Catch, Area 2 - Westport

Week Ending	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
July 2	2017	767	33				800	1,757	0.46
July 9	2017	491	258				749	2,355	0.32
July 16	2017	284	1,048	6			1,338	2,239	0.60
July 23	2017	989	2,054	24			3,068	2,587	1.19
July 30	2017	1,703	3,253	5			4,961	4,279	1.16
August 6	2017	789	4,114				4,903	4,444	1.10
August 13	2017	782	2,966	9			3,757	4,339	0.87
August 20	2017	536	926				1,462	3,359	0.44
August 27	2017	50	410				460	639	0.72
Total		6,391	15,063	44			21,498	25,997	0.83

Table 9. 2017-2018 Sport Salmon Catch, Area 2-1 - Willapa Bay

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Chinook Jacks	Coho Jacks	Total Salmon
June	2017	10							10
July	2017	1,234	50					10	1,294
August	2017	2,893	325				101	20	3,339
September	2017	897	486				56	28	1,467
October	2017	10	62					10	82
Total		5,044	923				157	68	6,192

Table 10. 2017-2018 Sport Salmon Catch, Area 2-2 - Grays Harbor

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Chinook Jacks	Coho Jacks	Total Salmon
June	2017	30	31						61
July	2017	41	10						51
August	2017	214	81						295
September	2017	350	839				9	74	1,272
October	2017		746					18	764
November	2017		31			10			41
January	2018		10						10
Total		635	1,748			10	9	92	2,494

Table 11. 2017 Sport Salmon Catch, Area 3 - La Push

Week Ending	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
June 25	2017	7	13				20	82	0.24
July 2	2017			2			2	67	0.03
July 9	2017	14	1	2			17	86	0.19
July 16	2017		16				16	89	0.18
July 23	2017	2	31				33	75	0.44
July 30	2017	30	71				101	148	0.68
August 6	2017	40	214	2			256	226	1.13
August 13	2017	62	379	3			445	287	1.55
August 20	2017	48	250	1			299	213	1.41
August 27	2017	57	319	1			377	279	1.35
September 3	2017	34	346				380	291	1.31
September 10	2017	3	76				80	57	1.39
Total		297	1,717	11			2,025	1,901	1.07

Table 12. 2017 Sport Salmon Catch, Area 4 - Neah Bay

Week Ending	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
June 25	2017	244	42	1			287	386	0.74
July 2	2017	658	113	9			780	992	0.79
July 9	2017	1,519	250	56			1,826	1,975	0.92
July 16	2017	2,413	303	46			2,761	1,999	1.38
July 23	2017	1,182	577	94			1,853	1,698	1.09
July 30	2017	526	563	162			1,251	1,211	1.03
August 6	2017	468	407	191			1,066	790	1.35
August 13	2017	303	186	30			518	476	1.09
August 20	2017	73	346	54			473	409	1.16
August 27	2017	48	296	24			368	363	1.02
September 3	2017	31	473	7			511	455	1.12
September 10	2017	3	34	-			37	39	0.95
Total		7,467	3,591	674			11,732	10,791	1.09

Table 13. 2017-2018 Sport Salmon Catch, Area 5 - Sekiu - Pillar Point

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	574					574	984	0.58
July	2017	1,741	252	760			2,753	10,448	0.26
August	2017	765	4,432	4,360	7		9,564	12,393	0.77
September	2017		85				85	85	1.00
March	2018	342					342	342	1.00
Total		3,422	4,769	5,120	7		13,318	24,252	0.55

NOTE: Estimates for July to August 15 are from creel surveys; other estimates are from catch record cards.

Table 14. 2017-2018 Sport Salmon Catch, Area 6 - East Juan de Fuca Strait

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	249					249	740	0.34
June	2017	8					8	7	1.14
July	2017	3,678	16	14			3,708	3,761	0.99
August	2017	657		180			837	973	0.86
October	2017		59				59	29	2.03
March	2018	991					991	1,952	0.51
Total		5,583	75	194			5,852	7,462	0.78

NOTE: Estimates for April and March are from creel surveys; other estimates are from catch record cards.

Table 15. 2017-2018 Sport Salmon Catch, Area 7 - San Juan Islands

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	1,611					1,611	3,277	0.49
May	2017	8					8	12	0.67
June	2017	8					8	11	0.73
July	2017	3,615		30	8		3,653	17,268	0.21
August	2017	1,832	6	1,191	20		3,049	4,015	0.76
September	2017	2,119	49	523	7	7	2,705	4,057	0.67
October	2017	42					42	84	0.50
January	2018	1,063					1,063	3,214	0.33
February	2018	464					464	1,971	0.24
March	2018	452					452	2,286	0.20
Total		11,214	55	1,744	35	7	13,055	36,195	0.36

NOTE: Estimates for April, July, and January-March are from creel surveys; other estimates are from catch record cards.

Table 16. 2017-2018 Sport Salmon Catch, Area 8-1 - Deception Pass / Hope Island

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	63					63	662	0.10
June	2017	8					8	13	0.62
July	2017	25					25	38	0.66
August	2017	17					17	26	0.65
November	2017	81					81	294	0.28
February	2018	122					122	347	0.35
March	2018	201					201	1,099	0.18
Total		517					517	2,479	0.21

NOTE: Estimates for April and November-March are from creel surveys; other estimates are from catch record cards.

Table 17. 2017-2018 Sport Salmon Catch, Area 8-2 - Port Susan / Port Gardner

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	148					148	983	0.15
May	2017	17					17	33	0.52
June	2017	142					142	257	0.55
July	2017	191	2				193	273	0.71
August	2017	34	75	75			184	279	0.66
September	2017	44	104	78			226	226	1.00
November	2017	76					76	542	0.14
December	2017	17					17	34	0.50
January	2018	8					8	17	0.47
February	2018	183					183	777	0.24
March	2018	302					302	2,140	0.14
Total		1,162	181	153			1,496	5,561	0.27

NOTE: Estimates for April and February-March are from creel surveys; other estimates are from catch record cards.

Table 18. 2017-2018 Sport Salmon Catch, Area 9 - Admiralty Inlet

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	528					528	1,215	0.43
May	2017	8					8	11	0.73
June	2017	33					33	46	0.72
July	2017	5,560	543	28			6,131	18,709	0.33
August	2017	39	2,804	907	12		3,762	4,276	0.88
September	2017	57	804	387			1,248	1,504	0.83
November	2017	25	34				59	81	0.73
December	2017	486				6	492	1,675	0.29
January	2018	8					8	11	0.73
February	2018	450					450	1,303	0.35
March	2018	1,564	3				1,567	3,983	0.39
Total		8,758	4,188	1,322	12	6	14,286	32,814	0.44

NOTE: Estimates from July 16-30, November, and February-March are from creel surveys; all other estimates are from catch record cards.

Table 19. 2017-2018 Sport Salmon Catch, Area 10 - Seattle / Bremerton

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	8					8	10	0.80
May	2017		8				8	9	0.89
June	2017		8				8	9	0.89
July	2017	495	2,152	8			2,655	6,937	0.38
August	2017	2,066	1,936	1,669		5	5,676	12,061	0.47
September	2017	128	14,783	240			15,151	14,650	1.03
October	2017	58	1,441				1,499	1,736	0.86
November	2017	36	17			171	224	662	0.34
December	2017	42					42	460	0.09
January	2018	107	19				126	367	0.34
February	2018	132					132	347	0.38
March	2018	50					50	50	1.00
Total		3,122	20,364	1,917		176	25,579	37,298	0.69

NOTE: Estimates from July 16-August 15, and November-February estimates are from creel surveys; all other estimates are from catch record cards.

Table 20. 2017-2018 Sport Salmon Catch, Area 11 - Tacoma / Vashon Island

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	42					42	64	0.66
June	2017	147	12				159	3,379	0.05
July	2017	754	492	84			1,330	9,541	0.14
August	2017	2,421	1,226	529			4,176	16,677	0.25
September	2017	275	1,428	53			1,756	6,303	0.28
October	2017	171	247				418	583	0.72
November	2017	163	4				167	163	1.02
December	2017	75					75	93	0.81
January	2018	176	8				184	207	0.89
February	2018	171	5				176	166	1.06
March	2018	241	2				243	249	0.98
Total		4,636	3,424	666			8,726	37,425	0.23

NOTE: Estimates for June-September are from creel surveys; other estimates are from catch record cards.

Table 21. 2017-2018 Sport Salmon Catch, Area 12 - Hood Canal

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	134					134	141	0.95
July	2017	36		190			226	239	0.95
August	2017	1,255	888	166			2,309	1,920	1.20
September	2017	1,168	1,520	19		9	2,716	2,061	1.32
October	2017	70	11			2,145	2,226	1,020	2.18
November	2017					3,517	3,517	1,183	2.97
December	2017	59					59	47	1.26
January	2018	33					33	57	0.58
February	2018	29	5				34	39	0.87
March	2018	143					143	188	0.76
Total		2,927	2,424	375		5,671	11,397	6,895	1.65

Table 22. 2017-2018 Sport Salmon Catch, Area 13 - South Puget Sound

Statistical Month	Year	Chinook	Coho	Pink	Sockeye	Chum	Total Salmon	Marine Angler Trips	Salmon per Trip
April	2017	34	67				101	72	1.40
May	2017	119	48				167	119	1.40
June	2017	117					117	102	1.15
July	2017	533	129				662	694	0.95
August	2017	2,212	86	29			2,327	2,885	0.81
September	2017	790	263	35			1,088	1,317	0.83
October	2017	44	44			222	310	399	0.78
November	2017					520	520	347	1.50
December	2017	17	8			17	42	42	1.00
January	2018	53	106				159	265	0.60
February	2018	4	96				100	65	1.54
March	2018	101	50				151	151	1.00
Total		4,024	897	64		759	5,744	6,458	0.89

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COASTAL RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017									2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Grays Harbor	Elk River	342	Coho							69						69	
			Total							69							69
	Hoquiam River	355	Coho							39	39					78	
			Total							39	39						78
	Humptulips River	358	Chinook						1,198	1,000	30						2,228
			Chum						49	49							98
			Coho						60	856	159	299	90				1,464
			Jackchin						29	39							68
			Jackcoho							20							20
	Total						1,287	1,964	238	299	90					3,878	
Johns River	367	Coho							10							10	
		Total							10							10	
Wishkah River	335	Chum									10					10	
		Coho							88	20	39					147	
		Jackcoho							10							10	
		Total							98	30	39					167	
Chehalis R. System	Chehalis River	315	Chinook					10	10							20	
			Chum							20							20
			Coho						612	2,618	642	247					4,119
			Jackchin						49	99							148
			Jackcoho						503	877	10						1,390
	Total					10	1,174	3,614	652	247					5,697		
	Newaukum River	325	Coho										39			39	
			Total										39			39	
	Quigg Lake	370	Coho							10						10	
			Total							10						10	
Satsop River	329	Chum							99	246						345	
		Coho						10	493	424	355	39	10			1,331	
		Jackchin							10							10	
		Jackcoho							59	10						69	
Total						10	661	680	355	39	10				1,755		

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COASTAL RIVER SYSTEMS																		
System	Catch Area	CRC Code	Species	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Chehalis R. System (cont.)	Skookumchuck River	333	Coho									20	30			50		
			Total										20	30			50	
	Wynoochee River	337	Chum								30	10					40	
			Coho								89	59	30					178
			Jackcoho							10						10		
			Total							129	69	30				228		
Copalis R. System	Copalis River	339	Coho								232	39					271	
			Jackcoho								96						96	
			Total								328	39					367	
Hoh R. System	Hoh River above Oxbow Launch	348	Chinook								10	20					30	
			Coho								119	54					173	
			Total								129	74					203	
	Hoh River below Oxbow Launch	350	Chinook							71	81	41					193	
			Coho							72	289	351					712	
			Jackchin							41						41		
			Jackcoho							41						41		
			Total						143	452	392					987		
Joe Creek System	Joe Creek	323	Coho								132	81	20				233	
			Jackcoho								10						10	
			Total								142	81	20				243	
Queets R. System	Clearwater River	392	Chinook						10								10	
			Total						10								10	
	Queets River	394	Chinook							10								10
			Coho								83							83
			Jackcoho								10							10
			Total						103							103		
Salmon River (Jefferson Co)	396	Coho							10								10	
			Total						10								10	

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COASTAL RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017									2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Quillayute R. System	Bogachiel River	398	Chinook								10					10	
			Coho										99				99
			Sockeye									10					10
			Jackchin									79					79
			Jackcoho										10				10
				Total							99	109				208	
	Calawah River	400	Chinook				10			30							40
			Coho										10				10
			Total				10			30			10				50
	Dickey River (Clallam Co)	402	Jackcoho									20					20
Total											20					20	
Quillayute River	404	Chinook			10				49	247	10					316	
		Coho				89	238	159	1,837	20						2,343	
		Jackchin							30	129						159	
		Jackcoho						10	30	109						149	
		Total			10	89	248	268	2,322	30						2,967	
Sol Duc River	406	Chinook	10	220	529	130	20	30	10	10					10	969	
		Coho			32	116	116	126	53	547						990	
		Sockeye			20	10											30
		Jackchin			49				10	40							99
		Jackcoho			10			20									30
		Total	10	220	640	256	156	166	103	557						10	2,118
Quinault R. System	Quinault River	410	Chinook								21					21	
			Coho								10	10					20
			Jackchin							10							10
			Total							10	31	10					51
Sooes R. System	Sooes River (Clallam Co.)	418	Coho					10								10	
			Total					10									10
Van Winkle Creek	Van Winkle Creek	419	Coho									10				10	
			Total										10				10

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COASTAL RIVER SYSTEMS																
System	Catch Area	CRC Code	Species	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Willapa Bay	Naselle River	375	Chinook					90	348	149	10					597
			Chum									20				20
			Coho						60	726	139	109				1,034
			Jackchin					10	30	10						50
			Jackcoho						10	40						50
			Total					100	448	925	169	109				1,751
	Nemah River	379	Chinook				20	30	1,731	418						2,199
			Chum							20						20
			Coho						10	10	10					30
			Jackchin							70						70
	Niawiakum River	389	Chinook						60							60
			Total						60							60
	North River	382	Coho							159	119					278
			Jackcoho							100						100
			Total							259	119					378
	Smith Creek (Pacific Co)	384	Chinook							10						10
			Coho							129	50					179
			Jackcoho							70						70
			Total							209	50					259
	Willapa River	424	Chinook					10	398	806	20					1,234
			Coho						50	159	169	328	50			756
			Jackchin							10						10
			Total					10	448	975	189	328	50			2,000
	Coastal River Totals			Chinook	10	220	539	160	160	3,945	2,762	141			10	7,947
			Chum						218	335				553		
			Coho			32	205	364	1,252	8,127	3,071	1,496	179	10	14,736	
			Sockeye			20	10		10						40	
			Jackchin			49		10	228	457					744	
			Jackcoho			10		30	553	1,462	30				2,085	
			Total	10	220	650	375	564	5,978	13,036	3,577	1,496	179	10	10	26,105

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS																			
System	Catch Area	CRC Code	Species	2017									2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar				
Columbia R. Mainstem	B10 Line - Rocky Pt - Tongue Pt Line	519	Chinook	91	20	43	53	4,735	2,133	93						26	7,194		
			Coho					1,855	4,868	209	40							6,972	
			Jackchin			11												11	
			Jackcoho								2							2	
			Total	91	20	54	53	6,590	7,001	304	40						26	14,179	
	Columbia - below Bonneville	521	Chinook	Coho	4,335	89	1,480	348	1,935	9,614	2,323	10			6	941		21,081	
				Sockeye			132	7		133	534	673	30						1,370
				Jackchin	88		114	54	117	594	138						2		1,107
				Jackcoho						16	22								38
				Total	4,423	89	1,726	409	2,185	10,758	3,156	40				6	943		23,735
Cowlitz R. System	Cispus River	555	Chinook				69	20									89		
			Coho							247	237	138					622		
			Jackchin							10	40	10	10				70		
			Jackcoho									119	20	10			149		
			Total				69	20	10	406	267	158					930		
	Cowlitz R. below Mayfield Dam	561	Chinook	Coho	1,774	2,013	1,086	349	169	459	30			10		219	6,109		
				Jackchin	131	151	50	71	30	60	30							3,401	
				Jackcoho						31	216	10						257	
				Total	1,905	2,164	1,136	420	268	669	1,808	1,592	99	10		219		10,290	
	Cowlitz R. between Mayfield & Cowlitz Falls Dams	563	Coho	Total								10				10			
				Total									10				10		
	Cowlitz R. above Cowlitz Falls Dam	559	Chinook	Coho	158	208	218	138								11	733		
				Jackchin			30				10	148	188	137			483		
				Jackcoho								69	30				99		
				Total	158	208	248	138			10	217	218	148			1,345		

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017									2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Cowlitz R. System (cont.)	Green River (Cowlitz Co.) below Toutle Hatchery	565	Chinook						10	59						69	
			Coho								20						20
			Total						10	79							89
	Mill Cr. (Lewis Co.)	625	Chinook								10						10
			Total								10						10
	Tilton River	571	Chinook								45	23	14				82
			Coho								438	292	39				769
			Jackchin								20						20
			Jackcoho								59	49	10				118
	Total									562	364	63				989	
Toutle River	573	Chinook							20							20	
		Coho									10					10	
		Total							20	10						30	
Toutle River, No Fork	575	Chinook							59							59	
		Coho							20	10						30	
		Total							79	10						89	
Lewis R. System	Lewis River	611	Chinook			29		10	10				10			59	
			Coho						10	19	10					39	
			Jackcoho							10						10	
			Total			29		10	30	19	10	10				108	
	Lewis River, North Fork	615	Chinook	10		146	10	39	340	311	58	19				933	
Coho								302	399	195					896		
Jackchin					68				29	117					214		
Jackcoho									68	97					165		
Total		10	214	10	39	739	924	253	19					2,208			

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS																
System	Catch Area	CRC Code	Species	2017									2018			Total
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Lower Columbia	Deep River (Wahkiakum Co)	580	Chinook					19								19
			Total					19								19
	Elochoman R. above Foster Rd Bridge	584	Chinook								10					10
			Total								10					10
	Elochoman R. below Foster Rd Bridge	583	Jackchin								10					10
			Total								10					10
	Grays River above Barr Rd Bridge	595	Chinook								19					19
			Coho								10					10
	Grays River below Barr Rd Bridge	594	Chinook							10						10
			Coho									19				19
	Grays River, West Fork	596	Chinook									141	33			174
			Jackcoho									68				68
Kalama River below Modrow Bridge	604	Chinook	77	454	19	10	58	396							1,014	
		Coho						39	58						97	
Kalama River between Modrow Bridge and Kalama Falls Hatchery	603	Jackchin		29										10	1,122	
		Total	77	483	19	10	58	435	58					10	1,140	
Little Washougal River	661	Chinook								19					19	
		Total								19					19	
Washougal R., West Fork	665	Chinook									10				10	
		Total									10				10	

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS																
System	Catch Area	CRC Code	Species	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Lower Columbia (cont.)	Washougal River above County Line Access	668	Chinook						19							
			Coho							145	213					
			Jackcoho							10						
	Total						19	155	213							
Washougal River below County Line Access	667	Chinook					135	531	29							
		Coho						29	19							
		Jackchin						10	10							
		Total					135	570	58							
Lower Columbia System Totals			Chinook	6,493	3,393	3,446	987	7,120	13,630	2,949	91	54	10	6	1,196	39,375
			Coho					2,057	5,931	4,165	2,849	413				15,415
			Sockeye			132	7									139
			Jackchin	219	199	350	125	147	703	384	10	10			2	2,149
			Jackcoho						125	662	109	20				916
			Total	6,712	3,592	3,928	1,119	9,324	20,389	8,160	3,059	497	10	6	1,198	57,994
Klickitat River	Klickitat River above Fishway 5	608	Chinook			38	19	10	230	240						
			Coho							38						
			Jackchin							29	19					
			Total			38	19	10	259	297						
Klickitat River below Fishway 5	607	Chinook		125	154	19		1,085	1,229	226	129					
		Coho						29	1,085	1,032	783	250				
		Jackchin		10	29			29	58	29	19					
		Jackcoho							38	115	125	67				
			Total	135	183	19		1,143	2,410	1,402	1,056	317				
Little White Salmon River & Drano Lake	Little White Salmon River & Drano Lake	618	Chinook	123	1,335	170	19	341	919	350						
			Coho					28	198	264						
			Jackchin		38	28		19	179	56						
			Jackcoho						28	19						
			Total	123	1,373	198	19	388	1,324	689						

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017									2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Mid Columbia	Columbia Bonneville Dam to The Dalles Dam	527	Chinook	10	39		20	178	2,633	967	10					10	3,867
			Coho						146	988	736	19	19				1,908
			Jackchin						10	300	107						417
			Jackcoho							10	10	10					30
				Total	10	39		20	188	3,089	2,072	756	19	19		10	6,222
	Columbia The Dalles Dam to John Day Dam	529	Chinook	29	10	10	49	234	1,703	325							2,360
			Coho						39	132	39						210
			Jackchin		10	10		29	145	48							242
				Total	29	20	20	49	263	1,906	505	39					2,831
Columbia John Day Dam to McNary Dam	531	Chinook	10		10			10	29	136						195	
		Coho								78						78	
		Sockeye						10								10	
		Jackchin						29	10							39	
			Total	10		39	20	10	29	214						322	
Wind R. System	Wind River above Shipherd Falls	677	Chinook			107										107	
			Total			107										107	
Wind R. System	Wind River below Shipherd Falls	680	Chinook		1,551	98	10		20	20						1,699	
			Jackchin		145	21										166	
			Total		1,696	119	10		20	20						1,865	
Middle Columbia System Totals			Chinook	172	3,060	587	136	773	6,619	3,267	236	129			10	14,989	
			Coho					28	412	2,585	1,807	802	269			5,903	
			Sockeye				10									10	
			Jackchin		203	117	10	58	682	288	29	19				1,406	
			Jackcoho						57	67	125	125	67			441	
			Total	172	3,263	704	156	859	7,770	6,207	2,197	1,075	336		10	22,749	
Entiat River	Entiat River	586	Chinook				83		10	31						124	
			Jackchin				21	10								31	
			Total				104	10	10	31							155

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017								2018			Total		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar	
Okanogan R. System	Okanogan River	627	Chinook				10		31							41	
			Jackchin				21										21
			Total				31		31								62
	Similkameen River	629	Chinook					41	31							72	
			Total					41	31							72	
Upper Columbia	Columbia McNary Dam to Hwy. 395 Bridge	533	Chinook					10	69	177						256	
			Coho							10	10					20	
			Jackchin					20		20						40	
			Total					30	69	207	10					316	
	Columbia Hwy. 395 Bridge to I-182 Bridge	534	Chinook				30	30	220	380						660	
			Coho						10	10	10					30	
			Sockeye				39									39	
			Jackchin				10	10	39	39						98	
				Total			79	40	269	429	10				827		
	Columbia I-182 Bridge-old Hanford townsite	535	Chinook			90	60	30	1,108	4,922			10			6,220	
			Coho							49						49	
			Sockeye			180	490									670	
Jackchin					21	31		104	249						405		
			Total			291	581	30	1,212	5,220	10			7,344			
Columbia Old Hanford townsite-Priest Rapids Dam	536	Chinook			30	30	10	1,008	4,728			10			5,816		
		Coho						11	68						79		
		Sockeye			10	69									79		
		Jackchin			11	11		74	575						671		
		Jackcoho							10						10		
			Total			51	110	10	1,093	5,381	10			6,655			
Columbia Priest Rapids to Wanapum Dam	537	Chinook				384	49	99	355						887		
		Sockeye				552									552		
		Jackchin				49		30	30						109		
		Total				985	49	129	385						1,548		

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS															
System	Catch Area	CRC Code	Species	2017								2018			Total
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Upper Columbia (cont.)	Columbia Wanapum to Rock Island Dam	539	Chinook				10	10	39	286	10				355
			Sockeye			39									39
			Jackchin							20					20
			Total			49	10	39	306	10					414
	Columbia Rock Island to Rocky Reach Dam	541	Chinook				246	177	59	49					531
			Sockeye				345								345
			Jackchin				30	30	39	10					109
			Total				621	207	98	59					985
	Columbia Rocky Reach to Wells Dam	543	Chinook				1,032	415	81	20					1,548
			Sockeye				10								10
			Jackchin				89	30		10					129
			Total				1,131	445	81	30					1,687
Columbia Wells to Chief Joseph Dam	545	Chinook				692	808	160	90					1,750	
		Sockeye				922								922	
		Jackchin				59	79	10	10					158	
		Total				1,673	887	170	100					2,830	
Wenatchee River System	Icicle Creek	672	Chinook			10	10							20	
			Jackchin			10								10	
			Total			20	10							30	
	Wenatchee River	674	Chinook					83	41					124	
			Total					83	41				124		
Yakima R. System	Yakima River	690	Chinook			10			31	189	10			240	
			Coho							86				86	
			Jackchin			10								10	
			Jackcoho							10				10	
			Total			20			31	285	10			346	

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

COLUMBIA RIVER SYSTEMS															
System	Catch Area	CRC Code	Species	2017								2018			Total
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Upper Columbia System Totals			Chinook			140	2,587	1,663	2,987	11,227	20	20			18,644
			Coho						21	223	20			264	
			Sockeye			190	2,466							2,656	
			Jackchin			52	321	179	296	963				1,811	
			Jackcoho							20				20	
			Total			382	5,374	1,842	3,304	12,433	40	20		23,395	
Snake R. System	Snake River: below Ice Harbor	640	Chinook		20									20	
			Jackchin						10					10	
			Total		20				10					30	
	Snake River: Lower Monumental to Little Goose Dam	644	Chinook		71				51	234					356
			Jackchin						31	245				276	
			Total		71				82	479				632	
	Snake River: Little Goose to Lower Granite Dam	646	Chinook							92	31				123
			Jackchin							20				20	
			Total							112	31			143	
	Snake River: Lower Granite to Interstate Bridge	648	Chinook						122						122
			Jackchin						20	41				61	
			Total						142	41				183	
Snake River: upstream of Interstate Bridge	650	Chinook						24	48					72	
		Jackchin						31	51				82		
		Total						55	99				154		
Snake River System Totals			Chinook		91				197	374	31			693	
			Jackchin						92	357				449	
			Total		91				289	731	31			1,142	

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

PUGET SOUND RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017									2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Deschutes R. System	Deschutes River	728	Chinook				10									10	
			Total				10										10
Dewatto R. System	Dewatto River	732	Coho							224	41					265	
			Total								224	41					265
Duckabush R. System	Duckabush River	736	Chum								21					21	
			Total									21					21
Dungeness R. System	Dungeness River	738	Coho							683	337	10				1,030	
			Jackcoho								10						10
			Total								693	337	10				1,040
Green-Duwamish R. System	Green - Duwamish River	746	Chinook					11	284							295	
			Chum					21	73	134	341						569
			Pink					1,316	3,489	1,761							6,566
			Coho					10	569	639	72						1,290
			Jackchin							20	41						61
			Jackcoho								91	132					
			Total					1,358	4,526	2,707	413					9,004	
Kennedy Cr. System	Kennedy Creek	754	Chum								25	37				62	
			Total									25	37				62
Lake Washington System	Lake Sammamish	764	Coho								31					31	
			Jackcoho									10					10
	Total										41					41	
Lake Washington	Lake Washington	762	Coho							250	261					511	
			Jackcoho									10					10
			Total								250	271					521
Minter Cr. System	Minter Creek	778	Chum								5,054	1,365	40			6,459	
			Total									5,054	1,365	40			6,459

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

PUGET SOUND RIVER SYSTEMS															
System	Catch Area	CRC Code	Species	2017								2018			Total
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Nisqually R. System	Nisqually River	786	Chinook				20	1,307	6,348	778	20				8,473
			Chum									188	20		208
			Pink				10	115	1,275	188					1,588
			Coho					41	1,393	2,510					3,944
			Jackchin						670	2,439	180				3,289
			Jackcoho						10	297	267	10			584
			Total				30	2,143	11,752	3,923	30	188	20	18,086	
Nooksack Samish R. System	Dakota Creek (Whatcom Co)	724	Coho							39				39	
			Total							39				39	
	Nooksack River	788	Chinook						19	10					29
			Chum							48	251	48			347
			Pink				10	1,248	290	10					1,558
			Coho						174	484	48				706
			Jackcoho							10					10
				Total				10	1,248	483	562	299	48		2,650
	Samish River	816	Chinook					503	5,367	1,507					7,377
			Pink						97	49					146
			Coho						68	39					107
			Jackchin					39	513	232					784
Jackcoho									19					19	
			Total				542	6,064	1,827					8,433	
Whatcom Creek	884	Chum							126	676	19			821	
		Coho									78			78	
		Total								126	754	19		899	
Puyallup R. System	Carbon River	802	Chinook						261	131				392	
			Pink						208	174					382
			Coho						113	287	31				431
			Jackchin						163	82					245
			Jackcoho						20	29					49
						Total				765	703	31			

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

PUGET SOUND RIVER SYSTEMS															
System	Catch Area	CRC Code	Species	2017								2018			Total
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Puyallup R. System (cont.)	Puyallup River	804	Chinook					278	564	79					921
			Chum									39			39
			Pink					4,567	5,530	139					10,236
			Coho					422	2,718	511	140	10			3,801
			Jackchin					216	411	20					647
			Jackcoho					110	359	120					589
			Total					5,593	9,582	869	140	49			
Quilcene R. System	Quilcene River	812	Coho					746	1,401	82				2,229	
			Jackcoho						20					20	
			Total					746	1,421	82				2,249	
Skagit R. System	Baker Lake	825	Sockeye				3,688	1,090	20					4,798	
			Total				3,688	1,090	20					4,798	
	Cascade River	826	Chinook			160	110							270	
			Jackchin			50	40								90
			Total			210	150								360
	Skagit River	830	Chinook			180	80								260
Pink								30						30	
Sockeye					100	180								280	
Jackchin					10									10	
Total			290	260	30								580		
Snohomish R. System	Skykomish River	844	Chinook			255	245							500	
			Pink						384	1,300	89	20			1,793
			Coho						10	41	194				245
			Jackchin			69	137	10							216
			Jackcoho							29	29				58
	Total			324	382	404	1,370	312	20				2,812		
	Snohomish River	850	Pink					3,481	6,495	110				10,086	
Coho							507	1,490	10				2,007		
Jackcoho								29	69				98		
Total							3,481	7,031	1,669	10			12,191		

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

PUGET SOUND RIVER SYSTEMS																	
System	Catch Area	CRC Code	Species	2017								2018			Total		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar	
Snohomish R. System (cont.)	Snoqualmie River	852	Pink					10	29							39	
			Total					10	29							39	
	Wallace River	860	Pink						78							78	
			Coho								343	69					412
			Jackcoho									29					29
			Total							78	372	69					519
Puget Sound System Totals			Chinook			595	465	2,099	12,843	2,505	20					18,527	
			Chum					21	73	333	6,380	1,659	60			8,526	
			Pink				20	11,151	18,791	2,520	20					32,502	
			Coho					1,229	7,234	7,817	826	20				17,126	
			Sockeye			100	3,868	1,090	20							5,078	
			Jackchin			129	177	935	3,546	555						5,342	
			Jackcoho						120	864	715	10				1,709	
			Total			824	4,530	16,645	43,371	14,445	7,256	1,679	60			88,810	

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

UNKNOWN AREAS																
System	Catch Area	CRC Code	Species	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Unknown Area Totals			Chinook	35	23	46	100	187	263	355	58					1,067
			Chum						13	26	38	13				90
			Pink				14	298	106	40						458
			Coho		27		14	71	410	254	53					829
			Sockeye					21								21
			Jackchin				23	12	46	46	12					139
			Jackcoho						17	17	17					51
			Total	35	50	46	151	589	855	738	178	13				2,655

Table 23. 2017-2018 Freshwater Salmon Sport Catch by Area and Month

STATEWIDE TOTALS																
System	Catch Area	CRC Code	Species	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Statewide Totals			Chinook	6,710	6,787	5,353	4,435	12,002	40,484	23,439	597	203	10	6	1,216	101,242
			Chum					21	86	577	6,753	1,672	60			9,169
			Pink				34	11,449	18,897	2,560	20					32,960
			Coho		27	32	219	3,749	15,260	23,171	8,626	2,731	448	10		54,273
			Sockeye			442	6,361	1,111	20	10						7,944
			Jackchin	219	402	697	656	1,341	5,593	3,050	51	29			2	12,040
			Jackcoho			10		150	1,616	2,943	291	145	67			5,222
			Total	6,929	7,216	6,534	11,705	29,823	81,956	55,750	16,338	4,780	585	16	1,218	222,850

Table 24. 2017-2018 Washington Sport Salmon Fishing, by Residence

County of Residence	Number Catch Record Cards	Population by County	% Catch Record Card Holders	Total Freshwater Salmon Catch	Total Marine Salmon Catch	Total Salmon	Average Catch per Card
Adams	1,219	19,506	6.2	573	19	592	0.49
Asotin	1,561	22,535	6.9	447		447	0.29
Benton	15,125	198,171	7.6	7,139	1,670	8,809	0.58
Chelan	5,834	76,533	7.6	2,349	1,013	3,362	0.58
Clallam	9,444	75,474	12.5	2,277	8,801	11,078	1.17
Clark	36,705	474,643	7.7	22,018	6,251	28,269	0.77
Columbia	446	4,047	11	219		219	0.49
Cowlitz	17,268	106,910	16.2	10,090	2,116	12,206	0.71
Douglas	2,741	41,945	6.5	1,111	225	1,336	0.49
Ferry	354	7,594	4.7	64	236	300	0.85
Franklin	6,607	92,125	7.2	2,678	121	2,799	0.42
Garfield	268	2,210	12.1	9		9	0.03
Grant	4,758	95,158	5	1,157	337	1,494	0.31
Grays Harbor	10,746	72,697	14.8	6,301	7,091	13,392	1.25
Island	11,329	83,159	13.6	1,020	3,844	4,864	0.43
Jefferson	3,941	31,234	12.6	228	4,641	4,869	1.24
King	95,244	2,188,649	4.4	32,170	32,623	64,793	0.68
Kitsap	22,365	266,414	8.4	3,842	13,287	17,129	0.77
Kittitas	2,820	46,205	6.1	519	766	1,285	0.46
Klickitat	2,602	21,811	11.9	3,096	192	3,288	1.26
Lewis	9,989	78,200	12.8	6,246	3,081	9,327	0.93
Lincoln	686	10,579	6.5	100	55	155	0.23
Mason	6,457	63,710	10.1	1,157	4,026	5,183	0.8
Okanogan	2,563	41,742	6.1	1,157	58	1,215	0.47
Pacific	4,230	21,626	19.6	3,205	3,804	7,009	1.66
Pend Oreille	507	13,354	3.8	182	148	330	0.65
Pierce	62,242	876,764	7.1	30,304	19,841	50,145	0.81
San Juan	2,380	16,715	14.2	9	1,732	1,741	0.73
Skagit	16,137	125,619	12.8	3,752	4,027	7,779	0.48
Skamania	1,154	11,837	9.7	956	85	1,041	0.9
Snohomish	60,021	801,633	7.5	20,853	18,107	38,960	0.65
Spokane	12,953	506,152	2.6	4,271	1,397	5,668	0.44
Stevens	3,263	44,730	7.3	828	205	1,033	0.32
Thurston	21,611	280,588	7.7	13,704	8,622	22,326	1.03
Wahkiakum	1,100	4,264	25.8	865	100	965	0.88
Walla Walla	3,840	60,567	6.3	920	210	1,130	0.29
Whatcom	17,981	221,404	8.1	5,026	2,778	7,804	0.43
Whitman	1,478	49,046	3	273	45	318	0.22
Yakima	14,031	250,193	5.6	7,713	1,664	9,377	0.67
Unknown WA	1,259			619	349	968	0.77
Washington Total	495,259	7,405,743	6.7	199,447	153,567	353,014	0.71
Other State Total	44,321			23,239	11,668	34,907	0.79
Canada	1,662			118	188	306	0.18
Other	587			46	32	78	0.13
Grand Total	541,829			222,850	165,455	388,305	0.72

Source: Table 1: Annual Estimates of the Resident Population for Counties of Washington: April 1, 2010 to July 1, 2017. Source: Population Division, U.S. Census Bureau. Release Date: June 2018.

Table 25. 2017-2018 Frequency Distribution of Estimated Salmon Catch Record Cards and Catch

#Salmon per Catch Record Card	Number of Cards	Cumulative Number of Cards	Percent Cards	Cumulative Percent Cards	Total Catch	Cumulative Total Catch	Percent Catch	Cumulative Percent Catch
0	448,342	448,342	82.7%	82.7%	0	0	0.0%	0.0%
1	31,340	479,682	5.8%	88.5%	31,340	31,340	8.1%	8.1%
2	21,302	500,984	3.9%	92.5%	42,604	73,944	11.0%	19.0%
3	9,038	510,022	1.7%	94.1%	27,114	101,058	7.0%	26.0%
4	7,251	517,273	1.3%	95.5%	29,004	130,062	7.5%	33.5%
5	4,094	521,367	0.8%	96.2%	20,470	150,532	5.3%	38.8%
6	3,932	525,299	0.7%	96.9%	23,592	174,124	6.1%	44.8%
7	2,647	527,946	0.5%	97.4%	18,529	192,653	4.8%	49.6%
8	2,289	530,235	0.4%	97.9%	18,312	210,965	4.7%	54.3%
9	1,668	531,903	0.3%	98.2%	15,012	225,977	3.9%	58.2%
10	1,226	533,129	0.2%	98.4%	12,260	238,237	3.2%	61.4%
11	1,149	534,278	0.2%	98.6%	12,639	250,876	3.3%	64.6%
12	936	535,214	0.2%	98.8%	11,232	262,108	2.9%	67.5%
13	834	536,048	0.2%	98.9%	10,842	272,950	2.8%	70.3%
14	613	536,661	0.1%	99.0%	8,582	281,532	2.2%	72.5%
15	664	537,325	0.1%	99.2%	9,960	291,492	2.6%	75.1%
16	460	537,785	0.1%	99.3%	7,360	298,852	1.9%	77.0%
17	434	538,219	0.1%	99.3%	7,378	306,230	1.9%	78.9%
18	400	538,619	0.1%	99.4%	7,200	313,430	1.9%	80.7%
19	409	539,028	0.1%	99.5%	7,771	321,201	2.0%	82.7%
20	349	539,377	0.1%	99.5%	6,980	328,181	1.8%	84.5%
21	340	539,717	0.1%	99.6%	7,140	335,321	1.8%	86.4%
22	230	539,947	0.0%	99.7%	5,060	340,381	1.3%	87.7%
23	213	540,160	0.0%	99.7%	4,899	345,280	1.3%	88.9%
24	289	540,449	0.1%	99.7%	6,936	352,216	1.8%	90.7%
25	238	540,687	0.0%	99.8%	5,950	358,166	1.5%	92.2%
26	1,055	541,742	0.2%	100%	27,430	385,596	7.1%	99.3%
27	43	541,785	0.0%	100%	1,161	386,757	0.3%	99.6%
28	9	541,794	0.0%	100%	252	387,009	0.1%	99.7%
29	9	541,803	0.0%	100%	261	387,270	0.1%	99.7%
30 or more	27	541,830	0.0%	100%	1,035	388,305	0.3%	100.0%
Total	541,830		100.0%		388,305		0.3%	

*Note: A single card has room for twenty-six salmon entries. Cards showing more than that were filled out incorrectly, with more than one salmon per line.

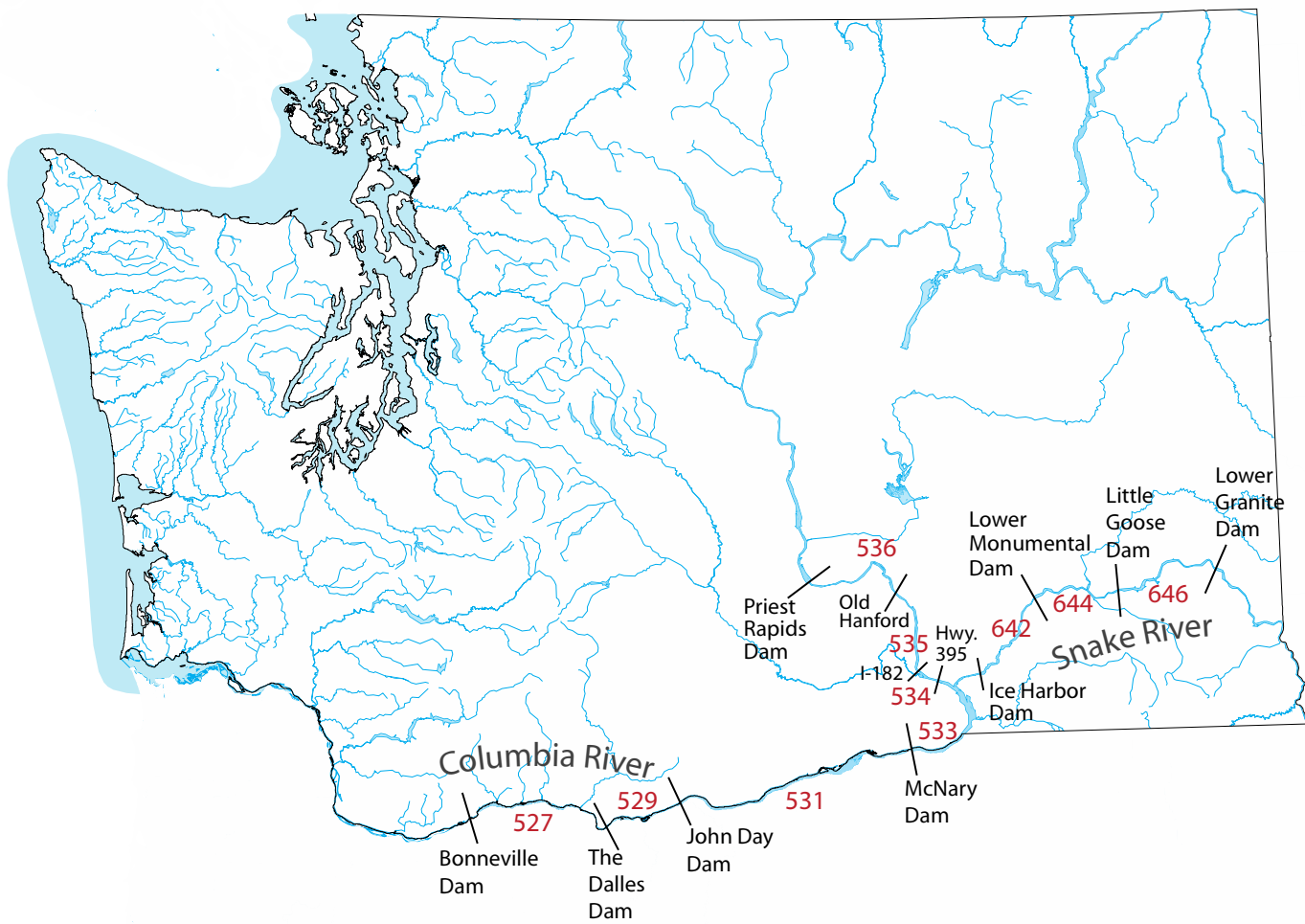
Table 26. 2017-2018 Sport Salmon Inventory of Catch Record Cards Received

Response Type	With Catch	No catch	Total Reports	Number of Salmon	Catch per Card
Prior to reminder	5,499	7,072	12,571	26,503	2.11
After 1st reminder postcard	4,200	19,721	23,921	15,192	0.64
After 2nd reminder postcard	1,297	8,391	9,688	4,324	0.45
Total	10,996	35,184	46,180	46,019	1.00

Sturgeon



MAP OF STURGEON CATCH RECORD CARD AREAS



DESCRIPTION OF STURGEON CATCH RECORD CARD AREAS

Columbia River

527	Bonneville to the Dalles Dam
529	The Dalles Dam to John Day Dam
531	John Day to McNary Dam
533	McNary Dam to Highway 395 Bridge at Pasco
534	Highway 395 Bridge at Pasco to I-82 Bridge
535	I-82 Bridge to Old Hanford Townsite
536	Old Hanford Townsite to Priest Rapids Dam

Snake River

640	Below Ice Harbor Dam
642	Ice Harbor to Lower Monumental Dam
644	Lower Monumental to Little Goose Dam
646	Little Goose to Lower Granite Dam

Table 27. 2017-2018 Sport Sturgeon Catch, by Area and Month

COLUMBIA RIVER SYSTEMS															
Catch Area	Species	2017										2018			Total
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Columbia R 01: Buoy 10 to Tongue Pt.-Rocky Pt.	White			852										852	
Columbia R 02: Tongue Pt. Rocky Pt. to Longview Br.	White			864						65				929	
Columbia R 03: Longview Br. to I-5 Br.	White									118				118	
Columbia R 05: Bonneville to The Dalles Dam	White			74							77	16		167	
Columbia R 06: The Dalles to John Day Dam	White										8			8	
Columbia R 07: John Day to McNary Dam	White										31			31	
Columbia R 08: McNary Dam - Hwy 395 Bridge in Pasco	White			27	69									96	
Columbia R 09: I-182 Bridge to old Hanford townsite	White		12	12	36									60	
Columbia R 09: Old Hanford townsite to Priest Rapids Dam	White	84	12	48	12							12		168	
Columbia R 16: above Grand Coulee Dam (Lake Roosevelt)	White			157	1,422	867								2,445	
Elochoman River below Foster Rd. Bridge	White			12										12	
Little White Salmon River & Drano Lake	White										24			24	
Snake R1: below Ice Harbor Dam	White				12									12	
Total	White	84	181	3,311	996					183	140	28		4,922	

Table 27. 2017-2018 Sport Sturgeon Catch, by Area and Month (continued)

UNKNOWN															
Catch Area	Species	2017										2018			Total
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Unknown Area Totals	White		12	60						12				84	

Table 27. 2017-2018 Sport Sturgeon Catch, by Area and Month (continued)

STATEWIDE TOTALS															
Catch Area	Species	2017										2018			Total
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
Statewide Totals	White	84	193	3,371	996					195	140	28		5,006	

Table 28. 2017-2018 Washington Sport Sturgeon Fishing, by Residence

County of Residence	Number Catch Record Cards	Population by County	% Catch Record Holders	Total Sturgeon	Average Catch per Catch Record Card
Adams	1,219	19,506	6.2	23	0.02
Asotin	1,561	22,535	6.9		
Benton	15,125	198,171	7.6	126	0.01
Chelan	5,834	76,533	7.6		
Clallam	9,444	75,474	12.5	23	0.00
Clark	36,705	474,643	7.7	743	0.02
Columbia	446	4,047	11		
Cowlitz	17,268	106,910	16.2	457	0.03
Douglas	2,741	41,945	6.5		
Ferry	354	7,594	4.7	23	0.06
Franklin	6,607	92,125	7.2	23	0.00
Garfield	268	2,210	12.1		
Grant	4,758	95,158	5	103	0.02
Grays Harbor	10,746	72,697	14.8	57	0.01
Island	11,329	83,159	13.6		
Jefferson	3,941	31,234	12.6		
King	95,244	2,188,649	4.4	23	0.00
Kitsap	22,365	266,414	8.4	23	0.00
Kittitas	2,820	46,205	6.1	11	0.00
Klickitat	2,602	21,811	11.9	23	0.01
Lewis	9,989	78,200	12.8	160	0.02
Lincoln	686	10,579	6.5	11	0.02
Mason	6,457	63,710	10.1	34	0.01
Okanogan	2,563	41,742	6.1	23	0.01
Pacific	4,230	21,626	19.6	400	0.09
Pend Oreille	507	13,354	3.8	46	0.09
Pierce	62,242	876,764	7.1	92	0.00
San Juan	2,380	16,715	14.2		
Skagit	16,137	125,619	12.8		
Skamania	1,154	11,837	9.7		
Snohomish	60,021	801,633	7.5	23	0.00
Spokane	12,953	506,152	2.6	937	0.07
Stevens	3,263	44,730	7.3	640	0.20
Thurston	21,611	280,588	7.7	57	0.00
Wahkiakum	1,100	4,264	25.8	69	0.06
Walla Walla	3,840	60,567	6.3	57	0.01
Whatcom	17,981	221,404	8.1	11	0.00
Whitman	1,478	49,046	3		
Yakima	14,031	250,193	5.6	92	0.01
Unknown WA	1,259			11	0.01
Washington Total	495,259	7,405,743	6.7	4,321	0.01
Other State Total	44,321			685	0.02
Canada	1,662				
Other	587				
Grand Total	541,829			5,006	0.01

Note: The figures do not accurately multiply across because of the bias adjustment factor and rounding of numbers.
 Source: Table 1: Annual Estimates of the Resident Population for Counties of Washington: April 1, 2010 to July 1, 2017. Source: Population Division, U.S. Census Bureau. Release Date: June 2018

Table 29. 2017-2018 Frequency Distribution of Estimated Sturgeon Catch Record Cards and Catch

#Sturgeon per Catch Record Card	Number of Cards	Cumulative Number of Cards	Percent Cards	Cumulative Percent Cards	Total Catch	Cumulative Total Catch	Percent Catch	Cumulative Percent Catch
0	537,609	537,609	99.2%	99.2%	0	0	0.0%	0.0%
1	3,436	541,045	0.7%	99.9%	3,436	3,436	68.6%	68.6%
2	785	541,830	0.1%	100.0%	1,570	5,006	31.4%	100.0%
Total	541,830		100.0%		5,006		100.0%	

Table 30. 2017-2018 Sport Sturgeon Inventory of Catch Record Cards Reported

Response Type	With Catch	No Catch	Total Reports	Number of Sturgeon	Catch per Card
Prior to reminder	203	16,828	17,031	246	0.014
After 1st reminder postcard	127	23,595	23,722	149	0.006
After 2nd reminder postcard	41	5,386	5,427	45	0.008
Total	371	45,809	46,180	440	0.010

Steelhead



Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month

COASTAL RIVERS AND MARINE CATCH AREAS																		
System	River	Run	Mark Type	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Chehalis R. System	Chehalis R. above Black R.	W	Marked										3	21	114	45	183	
	Chehalis R. below Black R.	S	Marked			6	6										12	
		W	Marked									3	17	96	210	17	343	
	Chehalis River, So. Fork	W	Marked												3		3	
	Cloquallam Creek	S	Marked												3		3	
	Newaukum River	W	Marked												3	3	6	
	Satsop River	S	Marked								12							12
		W	Marked									10	10	303	385	172	880	
	Satsop River, West Fork	W	Marked										3		7		10	
	Skookumchuck River	S	Marked				13	6			6							25
		W	Marked	69										11	315	691	1,038	2,124
	Van Winkle Creek	S	Marked			6	6										12	
		W	Marked										3	10			13	
	Wishkah River	S	Marked								30							30
		W	Marked									10	3	3				16
Wynoochee River	S	Marked			466	780	381	169	127							1,923		
	W	Marked	10								31	224	678	781	466	2,190		
Chehalis R. System Totals	S	Marked			478	811	387	169	187							2,032		
	W	Marked	79								54	274	1,426	2,197	1,741	5,771		
Copalis R. System	Copalis River	W	Marked											14		14		
Hoh R. System	Hoh River above Oxbow Launch	W	Marked									5	5	5	41	10	66	
	Hoh River below Oxbow Launch	W	Marked										24	5	28	33	90	
	Hoh River, So. Fork	W	Marked										5			5		
	Hoh R. System Totals	W	Marked										5	34	10	69	43	161
Hoquiam R. System	Hoquiam River	W	Marked										14			14		

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COASTAL RIVERS AND MARINE CATCH AREAS																
System	River	Run	Mark Type	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Humptulips R. System	Humptulips River	S	Marked			38	142	115	35	77					407	
		W	Marked	4							44	702	456	95	60	1,361
	Humptulips River, E. Fork	S	Marked				4	4								8
		W	Marked												8	8
	Humptulips River, W. Fork	W	Marked									4	8			12
	Stevens Creek	W	Marked										12	12	4	28
	Humptulips R. System Totals	S	Marked			38	146	119	35	77						415
W		Marked	4							44	718	476	99	68	1,409	
Marine Water	Area 1: Col R - Ledbetter	S	Marked				19	13							32	
		W	Marked								19				19	
	Area 2-1: Willapa Bay	W	Marked											9	9	
	Marine Water Totals	S	Marked				19	13								32
		W	Marked									19			9	28
Marine Water	Area 2: Westport	W	Marked	C										5	5	
	Area 2-2: Grays Harbor	S	Marked							6					6	
	Area 4: Cape Flattery	S	Marked					6							6	
	Marine Water Totals	S	Marked					6		6						12
		W	Marked											5		5
Naselle R. System	Naselle River	W	Marked								5	66		5	76	
	Salmon Creek (Pacific Co.)	S	Marked					6							6	
		W	Marked									5	5		10	
	Naselle R. System Totals	S	Marked					6							6	
		W	Marked								5	71	5	5	86	
North R. System	North River	W	Marked										28		28	
	Smith Creek (Pacific Co.)	W	Marked										5		5	
	North R. System Totals	W	Marked										33		33	
Ozette R. System	Ozette River	W	Marked									5			5	

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COASTAL RIVERS AND MARINE CATCH AREAS																		
System	River	Run	Mark Type	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Queets R. System	Clearwater River	W	Marked										4		4		8	
	Queets River	S	Marked						12									12
		W	Marked										71	63	67		201	
	Salmon River (Jefferson Co.)	W	Marked										63	134	71	8	276	
	Queets R. System Totals	S	Marked						12									12
W		Marked										138	197	142	8	485		
Quillayute R. System	Bogachiel River	S	Marked			4	2										6	
		W	Marked	4							137	1,183	129	39	86	1,578		
	Calawah River	S	Marked			11	16	11	21	11								70
		W	Marked								73	437	13				523	
	Quillayute River	W	Marked									17	4				21	
	Sol Duc River	S				2											2	
		W	Marked	5								5	5	27	27		69	
Quillayute R. System Totals	S	Marked			13	20	13	21	11								78	
	W	Marked	9								215	1,637	151	66	113	2,191		
Quinault R. System	Quinault R, Lower (below L. Quinault, not Cook Cr.)	W	Marked										9				9	
	Quinault R, Upper (above L. Quinault)	W	Marked													5	5	
	Quinault R. System Totals	W	Marked										9			5	14	
Willapa R. System	Willapa River	W	Marked										102	147	122	26	397	
Coastal Rivers/Streams and Marine Catch Area Totals	S	Marked			529	996	544	237	281								2,587	
		Total			529	996	544	237	281								2,587	
	W	Marked	92									342	3,002	2,445	2,714	2,018	10,613	
		Total	92									342	3,002	2,445	2,714	2,018	10,613	

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES																	
System	River	Run	Mark Type	2017								2018			Total		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar	
Coal Cr. System	Coal Creek (Cowlitz Co.)	S	Marked									3				3	
Columbia R. Mainstem	Columbia R 01: Buoy 10 to Tongue Pt.-Rocky Pt.	S	Marked			9	3		1							13	
		W	Marked												1	1	
	Columbia R 02: Tongue Pt. Rocky Pt. to Longview Br.	S	Marked			249	391		12	10						662	
		W	Marked	13									8		12	33	
	Columbia R 03: Longview Br. to I-5 Br.	S	Marked			16	250		83	6						355	
		W	Marked	17							4	8	12		7	48	
	Columbia R 04: I-5 Br. to Bonneville Dam	S	Marked			11	105	1	15	5						137	
		W	Marked	1											8	2	
															4	147	
	Columbia R 05: Bonneville to The Dalles Dam	S	Marked				47	4	66	15		11				4	
	Columbia R 06: The Dalles to John Day Dam	S	Marked						15	4	15	18	4				56
	Columbia R 07: John Day to McNary Dam	S	Marked		7	4			4			15	4	4			38
	Columbia R 08: McNary Dam - Hwy 395 Bridge @ Pasco	S	Marked							88			77	18			183
	Columbia R 09: Hwy 395 Bridge to I-182 Bridge	S	Marked								7	11					18
	Columbia R 09: I-182 Bridge to old Hanford townsite	S	Marked	15						4	78	140	81	63	37	144	562
Columbia R 09: Old Hanford townsite to Priest Rapids Dam	S	Marked								4	11					15	
Columbia R. Mainstem Totals	S	Marked	15	7	289	796	24	273	140	195	177	85	37	148	2,186		
	W	Marked	31								4	16	20		22	93	

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES																		
System	River	Run	Mark Type	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Cowlitz R. System	Blue Creek (Lewis Co.)	S	Marked	4				25							29			
		W	Marked										3	3				
	Coweeman River	W	Marked							4			11	36	51			
	Cowlitz R. above Cowlitz Falls Dam	W	Marked										4		4			
	Cowlitz R. below Mayfield Dam	S	Marked	140		407	1,745	1,342	443	281							4,358	
		W	Marked	2,518									116	18	62	211	1,059	3,984
	Cowlitz R. between Mayfield & Cowlitz Falls Dams	W	Marked	11									4		4	19		
	Toutle River	S	Marked							4						4		
	Toutle River, So. Fork	S	Marked	18		151	154	29	43	11							406	
		W	Marked										7	4	4		15	
Cowlitz R. System Totals	S	Marked	158		558	1,899	1,371	490	292							4,768		
	W	Marked	2,529									127	26	62	226	1,103	4,073	
Elochoman R. System	Elochoman River above Foster Rd. Bridge	S	Marked	2		21											23	
		W	Marked							42		277	53	3	3	378		
	Elochoman River below Foster Rd. Bridge	S	Marked	4												4		
		W	Marked							3		125	25	6			159	
	Elochoman R. System Totals	S	Marked	2		25											27	
		W	Marked										45	402	78	9	3	537
Grande Ronde R. System	Grande Ronde River	S	Marked							4	246	251	141	229	325	611	1,807	
Grays R. System	Grays River above Barr Rd. Bridge	W	Marked										3		3			6
	Grays River below Barr Rd. Bridge	S	Marked							4						4		
		W	Marked										3		3	6		
	Grays River, West Fork	W	Marked										3		3	6		
	Grays R. System Totals	S	Marked							4						4		
W		Marked										6	6	3	3	18		

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES																	
System	River	Run	Mark Type	2017								2018			Total		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar	
Kalama R. System	Kalama River above Kalama Falls Hatchery	S	Marked	5		26	31							5		67	
	Kalama River below Modrow Bridge	S	Marked		31	110	121	126	26							414	
		W	Marked	36								13	49	13	13	18	142
	Kalama River between Modrow Bridge and Kalama Falls Hatchery	S	Marked		105	73	215	84	89	26						592	
		W	Marked	58									31	103	27	18	22
Kalama R. System Totals	S	Marked	5	136	209	367	210	115	26					5		1,073	
	W	Marked	94									44	152	40	31	40	401
Klickitat R. System	Klickitat River above Fishway 5	S	Marked			50	91	109	136	50	14					450	
	Klickitat River below Fishway 5	S	Marked	14	50	50	36	32	54	36	27	5		9		313	
	Klickitat R. System Totals	S	Marked	14	50	100	127	141	190	86	41	5		9		763	
Lewis R. System	Cedar Creek (Clark Co.)	S	Marked				10	7								17	
	Lewis River (below E. Fork)	S	Marked			14	34		10							58	
		W	Marked									7	39	14		4	64
	Lewis River, E. Fork	S	Marked				3										3
		W	Marked									4	7		4	7	22
	Lewis River, No. Fork	S	Marked		24	106	403	219	58	7							817
		W	Marked	4								7	158	35	11	4	219
Lewis R. System Totals	S	Marked		24	120	450	226	68	7			18	204	49	15	15	895
	W	Marked	4														305
Little White Salmon R. Sys.	Little White Salmon River & Drano Lake	S	Marked	3		11	182				27				5		228
Salmon Cr. System (Clark)	Salmon Creek (Clark Co.)	W	Marked										44	59	15		118
Skamokawa Cr. System	Skamokawa Creek	W	Marked										6	3			9

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES																	
System	River	Run	Mark Type	2017								2018			Total		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar	
Snake R. Mainstem	Snake R 1: below Ice Harbor Dam	S	Marked									4				4	
	Snake R 2: Ice Harbor to Lower Monumental Dam	S	Marked									179	214	80	22	45	540
	Snake R 3: Lower Monumental to Little Goose Dam	S	Marked									71	94	49	98	125	437
	Snake R 4: Little Goose to Lower Granite Dam	S	Marked									112	165	98	31	9	415
	Snake R 5: Lower Granite Dam to Interstate Bridge, Clarkston	S	Marked								44	44	53	19		10	170
	Snake R 6: upstream of the Interstate Bridge, Clarkston	S	Marked									502	463	82	135	5	1,187
	Snake R. Mainstem Totals	S	Marked									546	873	608	381	156	189
Tucannon R. System	Tucannon River	S	Marked						4	59						4	67
Walla Walla R. System	Touchet River	S	Marked											7	14		21
	Walla Walla River	S	Marked							62	62	7		69	49		249
	Walla Walla R. System Totals	S	Marked							62	62	7		76	63		270
Washougal R. System	Washougal River above County Line Access	S	Marked			5	5										10
		W	Marked										55	23			78
	Washougal River below County Line Access	S	Marked			40	119	70									229
		W	Marked			18							5	156	60	23	5
	Washougal River, West Fork	S	Marked			25	10	5	10								50
		W	Marked										5		5		10
	Washougal R. System Totals	S	Marked			40	149	85	5	10							289
W		Marked			18							5	216	88	23	5	355

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES																	
System	River	Run	Mark Type	2017								2018			Total		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar	
White Salmon R. System	Big White Salmon River	S	Marked			4	76	8	47						135		
Wind R. System	Wind River below Shipherd Falls	S	Marked				17	8	102						127		
Columbia River and Tributary System Totals (All non-Boldt)		S	Marked	37	417	1,465	4,003	1,993	1,303	1,520	1,422	938	709	599	1,015	15,421	
			Total	37	417	1,465	4,003	1,993	1,303	1,520	1,422	938	709	599	1,015	15,421	
		W	Marked	2,676								246	1,072	405	322	1,194	5,915
			Total	2,676								246	1,072	405	322	1,194	5,915

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS																
System	River	Run	Mark Type	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Marine Water	Area 9: Admiralty Inlet	S	Marked				10				5				15	
		W	Marked	5								22	22		11	60
Dungeness R. System	Dungeness River	W	Marked								22	5			27	
Green-Duwamish R. Sys	Green (Duwamish River) (King Co.)	S	Marked			46	42	34	77	38					237	
		W	Marked								43	71			114	
	Soos Creek	S	Marked			4									4	
	Green-Duwamish R. System Totals	S	Marked			46	46	34	77	38					241	
W		Marked								43	71			114		
Hoko R. System	Hoko River	W	Marked									104	22	11	44	181
Morse Cr. System	Morse Creek (Clallam Co.)	W	Marked									5			5	

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS																
System	River	Run	Mark Type	2017								2018			Total	
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar
Nooksack R. System	Nooksack River, Mid. Fork	W	Marked									11	11		22	
	Nooksack River, No. Fork	W	Marked									5	104	5	114	
	Nooksack River, below North Fork	W	Marked									27	11		38	
	Nooksack R. System Totals	W	Marked									43	126	5	174	
Skagit R. System	Cascade River	W	Marked										5		5	
	Skagit River	W	Marked									11	5		16	
	Skagit R. System Totals	W	Marked									11	10		21	
Snohomish R. System	Skykomish River	S	Marked		771	530	67	92	113							1,573
		W	Marked								116	1,021	672	54	1,863	
	Skykomish River, No. Fork	S	Marked		8		4									12
		W	Marked									9	4		13	
	Skykomish River, So. Fork	S	Marked		8		4	4								16
		W	Marked								4	27	18		49	
	Snohomish River	S	Marked		46	4		13								63
		W	Marked									49	72		121	
	Snoqualmie River	S	Marked		17					4						21
		W	Marked									166	49		215	
	Tokul Creek	W	Marked									161	220	9	390	
	Tolt River	W	Marked									4	4		8	
	Wallace River	S	Marked						4	46						50
W		Marked								27	206	121	4	358		
Snohomish R. System Totals	S	Marked		850	534	75	113	163							1,735	
	W	Marked								147	1,643	1,160	67	3,017		

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS																		
System	River	Run	Mark Type	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Stillaguamish R. System	Pilchuck Creek (Stillaguamish System)	S	Marked	5											5			
	Stillaguamish R, No. Fork	W	Marked									5	22	16		43		
	Stillaguamish R. System Totals	S	Marked	5											5			
		W	Marked									5	22	16		43		
Puget Sound, Strait of Juan de Fuca River Systems and Marine Catch Area Totals (All are Boldt Case Areas)		S	Marked	901 590 109 190 206											1,996			
			Total	901 590 109 190 206											1,996			
		W	Marked	5									217	1,921	1,361	83	55	3,642
			Total	5									217	1,921	1,361	83	55	3,642

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

UNKNOWN AREAS																		
System	River	Run	Mark Type	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Unknown Area Totals		S	Marked	54 54 11 22 22											163			
			Total	54 54 11 22 22											163			
		W	Marked	8									39	62	39	8	31	187
			Total	8									39	62	39	8	31	187

Table 31. 2017-2018 Steelhead Sport Catch, by Area and Month (continued)

STATEWIDE TOTALS																		
System	River	Run	Mark Type	2017								2018			Total			
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		Mar		
Statewide Totals		S	Marked	37	417	2,949	5,643	2,657	1,752	2,029	1,422	938	709	599	1,015	20,167		
		W	Marked	2,781								844 6,057			4,250	3,127	3,298	20,357
		Grand Total				2,818	417	2,949	5,643	2,657	1,752	2,029	2,266	6,995	4,959	3,726	4,313	40,524

Table 32. 2017-2018 Washington Sport Steelhead Fishing, by Residence

County of Residence	Number of Catch Record Cards	Population by County	% Catch Record Card Holders	Total Steelhead	Average Catch per Card
Adams	1,219	19,506	6.2	71	0.06
Asotin	1,561	22,535	6.9	687	0.44
Benton	15,125	198,171	7.6	722	0.05
Chelan	5,834	76,533	7.6	23	0.00
Clallam	9,444	75,474	12.5	1,029	0.11
Clark	36,705	474,643	7.7	3,420	0.09
Columbia	446	4,047	11	36	0.08
Cowlitz	17,268	106,910	16.2	2,485	0.14
Douglas	2,741	41,945	6.5	47	0.02
Ferry	354	7,594	4.7		
Franklin	6,607	92,125	7.2	639	0.10
Garfield	268	2,210	12.1	95	0.35
Grant	4,758	95,158	5	71	0.01
Grays Harbor	10,746	72,697	14.8	2,982	0.28
Island	11,329	83,159	13.6	23	0.00
Jefferson	3,941	31,234	12.6	178	0.05
King	95,244	2,188,649	4.4	6,686	0.07
Kitsap	22,365	266,414	8.4	970	0.04
Kittitas	2,820	46,205	6.1	165	0.06
Klickitat	2,602	21,811	11.9	580	0.22
Lewis	9,989	78,200	12.8	1,338	0.13
Lincoln	686	10,579	6.5		
Mason	6,457	63,710	10.1	828	0.13
Okanogan	2,563	41,742	6.1	47	0.02
Pacific	4,230	21,626	19.6	106	0.03
Pend Oreille	507	13,354	3.8	71	0.14
Pierce	62,242	876,764	7.1	3,668	0.06
San Juan	2,380	16,715	14.2	12	0.01
Skagit	16,137	125,619	12.8	213	0.01
Skamania	1,154	11,837	9.7	71	0.06
Snohomish	60,021	801,633	7.5	2,992	0.05
Spokane	12,953	506,152	2.6	1,645	0.13
Stevens	3,263	44,730	7.3	118	0.04
Thurston	21,611	280,588	7.7	3,100	0.14
Wahkiakum	1,100	4,264	25.8	556	0.51
Walla Walla	3,840	60,567	6.3	402	0.10
Whatcom	17,981	221,404	8.1	486	0.03
Whitman	1,478	49,046	3	224	0.15
Yakima	14,031	250,193	5.6	663	0.05
Unknown WA	1,259			23	0.02
Washington Total	495,259	7,405,743	6.7	37,472	0.08
Other State Total	44,321			2,993	0.07
Canada	1,662			47	0.03
Other	587			12	0.02
Grand Total	541,829			40,524	0.07

Source: Table 1: Annual Estimates of the Resident Population for Counties of Washington: April 1, 2010 to July 1, 2017. Source: Population Division, U.S. Census Bureau. Release Date: June 2018

Table 33. 2017-2018 Frequency Distribution of Estimated Steelhead Catch Record Cards and Catch

#Steelhead per Catch Record Card	Number of Cards	Cumulative Number of Cards	Percent Cards	Cumulative Percent Cards	Total Catch	Cumulative Total Catch	Percent Catch	Cumulative Percent Catch
0	527,188	527,188	97.3%	97.3%	0	0	0.0%	0.0%
1	7,427	534,615	1.4%	98.7%	7,427	7,427	18.3%	18.3%
2	2,932	537,547	0.5%	99.2%	5,864	13,291	14.5%	32.8%
3	1,218	538,765	0.2%	99.4%	3,654	16,945	9.0%	41.8%
4	875	539,640	0.2%	99.6%	3,500	20,445	8.6%	50.5%
5	497	540,137	0.1%	99.7%	2,485	22,930	6.1%	56.6%
6	485	540,622	0.1%	99.8%	2,910	25,840	7.2%	63.8%
7	154	540,776	0.0%	99.8%	1,078	26,918	2.7%	66.4%
8	236	541,012	0.0%	99.8%	1,888	28,806	4.7%	71.1%
9	225	541,237	0.0%	99.9%	2,025	30,831	5.0%	76.1%
10	118	541,355	0.0%	99.9%	1,180	32,011	2.9%	79.0%
11	24	541,379	0.0%	99.9%	264	32,275	0.7%	79.7%
12	24	541,403	0.0%	99.9%	288	32,563	0.7%	80.4%
13	47	541,450	0.0%	99.9%	611	33,174	1.5%	81.9%
14	59	541,509	0.0%	99.9%	826	34,000	2.0%	83.9%
15	59	541,568	0.0%	100.0%	885	34,885	2.2%	86.1%
17	59	541,627	0.0%	100.0%	1,003	35,888	2.5%	88.6%
18	24	541,651	0.0%	100.0%	432	36,320	1.1%	89.6%
19	24	541,675	0.0%	100.0%	456	36,776	1.1%	90.8%
20	47	541,722	0.0%	100.0%	940	37,716	2.3%	93.1%
21	12	541,734	0.0%	100.0%	252	37,968	0.6%	93.7%
22	12	541,746	0.0%	100.0%	264	38,232	0.7%	94.4%
25	12	541,758	0.0%	100.0%	300	38,532	0.7%	95.1%
26	12	541,770	0.0%	100.0%	312	38,844	0.8%	95.9%
27	24	541,794	0.0%	100.0%	648	39,492	1.6%	97.5%
28	24	541,818	0.0%	100.0%	672	40,164	1.7%	99.1%
30	12	541,830	0.0%	100.0%	360	40,524	0.9%	100.0%
Total	541,830		100.0%		40,524		100.0%	

Table 34. 2017-2018 Sport Steelhead Inventory of Catch Record Cards Reported

Response Type	With Catch	No Catch	Total Reports	Number of Steelhead	Catch per Card
Prior to reminder	658	11,959	12,617	2,079	0.16
After 1st reminder postcard	470	23,415	23,885	1,014	0.04
After 2nd reminder postcard	115	9,559	9,674	335	0.03
Total	1,243	44,933	46,176	3,428	0.07

Marine Fish



Table 35. 2017 Coastal Marine Fish Catch

Species	Catch Area					Total
	Area 1 Ilwaco	Area 2 Westport	Area 3 La Push	Area 4 Neah Bay (Ocean)	Area 4B Neah Bay (Strait)	
Black Rockfish	20,612	112,765	20,326	34,788	21,928	210,420
Blue Rockfish	154	270	160	744	148	1,476
Yellowtail Rockfish	7,625	31,043	637	714	60	40,079
China Rockfish	24	12	151	1,010	59	1,256
Quillback Rockfish	209	424	37	205	79	954
Copper Rockfish	67	48	21	461	88	685
Canary Rockfish	517	3,077	5	41	10	3,650
Yelloweye Rockfish	1	4	1	2		8
Tiger Rockfish	32	16	8	57	3	116
Vermillion Rockfish	8	3	3	447	30	491
Other Rockfish		10	1		5	16
Boccaccio	2	22	46	50		120
Lingcod	3,019	26,289	7,143	9,345	4,305	50,101
Kelp Greenling	445	266	213	919	1,130	2,973
Pacific Cod	1	6	18	86	24	135
Other Cod			10	17		27
Cabazon	393	441	357	1,002	406	2,599
Flatfish	683	3,729	16	262	350	5,040
Surf Perch	2,057	53		5	15	2,130
Albacore Tuna	14,176	16,180	72			30,428
Sharks and Skates	4	15		5		24
Miscellaneous	1,495	2,693	72	244	24	4,528

Table 36. Coastal Washington Recreational Pacific Halibut Catch 2000-2017

Year	Columbia Catch Area 1	South Coast Catch Area 2	North Coast Catch Areas 3-4
2000	370	1,980	4,286
2001	387	2,085	5,752
2002	347	1,644	5,219
2003	327	2,482	5,576
2004	447	3,455	5,627
2005	518	2,981	5,046
2006	693	2,377	4,562
2007	585	2,017	3,136
2008	667	2,375	4,408
2009	391	2,328	4,841
2010	428	2,259	5,438
2011	480	2,613	4,931
2012	350	2,588	5,130
2013	292	2,664	5,387
2014	540	2,465	6,064
2015	590	2,557	5,247
2016	702	2,543	6,003
2017	949	3,835	5,683

Table 40. 2017 Sport Bottomfish Catch by Boat-Based Anglers in Puget Sound

Species	Marine Area										Puget Sound Total	
	5	6	7	8-1	8-2	9	10	11	12	13		
Pacific Halibut	1,008	1,135	280	5		54						2,482
Starry Flounder	45	29	55	2	3	45	3	561	228	391		1,362
Soles	89	18	170	4	1,193	3,016	4,085	624	32	515		9,746
Sanddabs		2			703	5,268	6,344	1,024	5	953		14,298
Misc. Flatfish	23		19		1,343	1,021	8,294	1,141		228		12,070
Sablefish												0
Lingcod	1,690	160	2,488	256	34	588	41	27		39		5,324
Greenlings	387	176	773	87	2	1,784		2				3,210
Copper Rockfish	267	5	29		2		7	5				316
Quillback Rockfish	61				1							62
Brown Rockfish	4						5					9
Black Rockfish	9,633	17					3					9,653
Blue Rockfish	51											51
Yellowtail Rockfish	26			3								29
Vermillion Rockfish	15											15
Yelloweye Rockfish	15											15
Canary Rockfish	3											3
China Rockfish	42											42
Other Rockfishes	100	220	59					2				381
Pacific Cod	129	9						1				139
Walleye Pollock												0
Pacific Tomcod												0
Pacific Hake												0
Cabezon	123		87	11	2	12	5	3				243
Other Sculpins	6				5	31	227	31				301
Perches				11	105	227	6			9		358
Spiny Dogfish		22	15	7	18	1	155	136		78		432
Ratfish							2					2
Skates	4											4
Total	13,721	1,792	3,975	385	3,411	12,048	19,177	3,558	265	2,214		60,545



Shellfish



Table 38. 2017-2018 Seasonal Summary of Sport Razor Clam Digging on Ocean Beaches

Location	Fall/Winter ¹			Spring ²		
	Digger Trips	Clams Per Trip	Number of Clams	Digger Trips	Clams Per Trip	Number of Clams
Long Beach	63,662	10.4	663,861	30,551	5.2	159,420
Twin Harbors	36,051	12.1	435,334	19,537	9.4	184,562
Copalis	35,182	12.9	452,936	9,418	10.1	94,967
Mocrocks	39,046	11.2	437,347	24,169	12.7	307,697
Kalaloch						
Total	173,941	11.4	1,989,478	83,675	8.9	746,646

¹ During the 2017/2018 Season, Fall and Winter openers occur on evening (PM) tides that occurred between October 06, 2017 and March 17, 2018.

² During the 2017/2018 Season, Spring openers occurred on the morning (AM) tides that occur between April 19, 2018 and April 22, 2018.

Table 39. 2017 Clam and Oyster Recreational Use and Harvest Estimates from Intertidal Areas East of Dungeness Spit

Marine Areas	Beach Name	User Trips	Pounds of Clams Harvested							Total	Number of Oysters
			Manila	Littleneck	Butter	Cockle	Softshell	Horse	Geoduck		
6	Sequim Bay SP	3,299	277	5,316	49	4,674	89	1,567		11,972	33,887
7	Birch Bay SP	7,052	2,040	3,325	24,684	1,124	41	1,935		33,149	
	Drayton West	1,795	3,135	760	1,939	169	31	8		6,042	3,445
8-1	West Penn Cove	8,480	231	1,344	32,884	5,249	19	685		40,412	35,903
	Freeland CP	672	803	321	882	18	22			2,046	
9	Fort Flagler SP	1,687		2,170	6,985	543	6	1,800		11,504	
	Oak Bay CP	1,900	469	328	8,029	1,245	24	1,826	14	11,935	16
	Indian Island CP	833	1,050	103	1,200	85	3	324	46	2,811	73
	Port Gamble	2,165	4,351	927	1,245	571	135	1,295	41	8,565	13,986
	Wolfe + Shine SP	9,632	9,364	1,709	16,078	3,936	363	7,957	51	39,458	46,188
12	Dabob Broad Spit	410	1,261	119	5					1,385	770
	Quilcene Bay WDFW Tidelands	2,415	3,636				5			3,641	14,853
	Dosewallips SP	21,380	30,621	350	8	86	132			31,197	212,921
	Pt. Whitney Tidelands	1,066	568	65	32	3	1	2		671	12,600
	Pt. Whitney Lagoon	957	1,340			1				1,341	4,692
	Eagle Creek	1,471	138	29	6	87	2	2		264	10,467
	DNR-44A W Dewatto	1,499	1,364	345	100	83	1	17		1,910	19,566
	Rendsland Creek	887	422	47	16	162	4			651	12,542
	Potlatch SP	14,782	13,283	3,234	5,711	3,470	71	416		26,185	116,338
	Belfair SP	6,834	7,514				28			7,542	62,466
	Duckabush	1,892	1,530	60	116	374	18	6	80	2,184	10,417
	Triton Cove Tidelands	819	92	10	11	9				122	8,719
	Lilliwaup SP	1,435	10	504	2,842	578	1	220		4,155	10,985
Twanoh SP	7,860	6,322	38	12	3,287	44			9,703	81,912	
13	North Bay	439	1,018	57	6	6	3			1,090	2,079
Total		101,661	90,839	21,161	102,840	25,760	1,043	18,060	232	259,935	714,825

Note: Puget Sound recreational clam and oyster harvest estimates are shown in Table 39. Harvest totals for Manila and native littleneck clams, butter clams, cockles, softshell clams, horse clams, geoducks and Pacific oysters are shown for public access beaches along the 2017 aerial survey route as determined by annual state/Treaty management plans. Not all public tidelands are assessed for recreational harvest. In some cases, state/tribal agreements allow for estimates of sport harvester trips only without associated catch estimates, as displayed in Table 40. Estimates show 101,661 harvester trips gathered 227,051 total pounds of clams and 714,825 oysters from the 2017 group of monitored beaches.

Table 40. 2017 Puget Sound and Hood Canal Sport Spot Shrimp Fishery

Area	Date	Angler Trips	Pounds	CPUE (lbs. per trip)
4, 5	May-September	429	1,300	3.0
6	May-August	2,116	13,569	6.4
6 (Discovery Bay)	May (4 days)	768	2,354	3.1
7	May-July	12,395	54,693	4.4
8-1 & 8-2	May (2 days)	3,488	19,566	5.6
9	May (2 days)	1,878	9,056	4.8
10	May (1 day)	1,534	8,895	5.8
11	May (1 day)	638	2,910	4.6
12	May-June (5 days)	20,410	90,007	4.4
13	May (2 days)	1022	2,315	2.3
Total		44,678	204,665	4.6

Table 41. 2017 Sport Dungeness Crab Catch (all gear types)

Marine Area and location		Summer Season (lb. of crab)	Fall/Winter Season (lb. of crab)
4	Neah Bay	1,540	72
5	Seki/Pillar Point	3,777	241
6	Port Angeles Harbor, Dungeness & Sequim Bays, Discovery Bay	134,749	19,245
7	Gulf of Georgia, North of San Juan Islands, Bellingham Bay, Samish Bay, San Juan Islands, Anacortes	467,102	73,401
8-1	Skagit Bay, North Saratoga Passage, Holmes Harbor	360,342	16,683
8-2	South Saratoga Passage, Port Susan, Port Gardner	318,244	22,885
9 ¹	Admiralty Inlet, Port Townsend Bay, Useless Bay	81,455	14,576
10	Seattle/Kingston, Port Orchard	45,340	263
11	Colvos Pass, East Pass	16,332	9
12, 9 ²	Port Ludlow/Port Gamble, Upper Hood Canal, Central Hood Canal, Lower Hood Canal	84,135	101
13	South Puget Sound	4,221	5
Total		1,517,237	147,481

¹ Excluding all waters of Marine Area 9 south of a line from Foulweather Bluff to Olele Point.

² Including all waters of Marine Area 9 south of a line from Foulweather Bluff to Olele Point.



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